

# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



## IMEMR Current Contents

September 2015

Vol. 14 No. 3



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**September 2015**  
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# IMEMR Current Contents

## Rationale

The Index Medicus for the WHO Eastern Mediterranean Region (IMEMR) has sustained its indexing policy, which has made it a vital current awareness information tool, for technical staff of the Regional Office, health care staff, and medical professionals who are able now to access health literature published in the Region as soon as it is published. A document delivery service to support the Index has also been activated which will enable any user to acquire a copy of any article listed in the Index.

The cumulative version of the Index Medicus is available now on the Internet as part of EMRO web site. A CD-ROM version of the same is also being provided upon request.

## Scope and Coverage

The **IMEMR Current Contents** is issued on a quarterly basis including the most recent articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database<sup>1</sup>.

## Indexing Level

Each article has been indexed and assigned to a "Main Heading", plus added headings according to the Medical Subject Headings (MeSH) list of the National Library of Medicine (NLM). Up to five added headings (including the respective country) have been allowed. Subheadings (or qualifiers) are used in indexing to qualify MeSH headings by pinpointing some specific aspects of the concept represented by the heading, e.g. "**LIVER-Drug Effects**" indicates that the article is not about the liver in general, but about the effect of drugs on the liver.

## Organization of the IMEMR

### Subject Index

The Index is organized in alphabetical order, according to the Main Subject Headings (MeSH). In most cases one main subject is assigned to each article. Under the main subject, entries are sorted by Subheading in alphabetical order also. Each entry includes the bibliographic information of the article e.g. title of the article, author(s), first author's affiliation, journal title, year (date of publication), volume number, issue number, page numbers, number of references, subject descriptors and geographic descriptors. Abstracts have been added and are searchable on the database on the Internet. (as shown in Figure 1)

### Author Index

The IMEMR includes the author's index, which also indicates the subjects covered by each author. (Appendix I)

### List of EMR Journals by Country

The IMEMR includes an updated list of EMR Journals, which are indexed in the index. The list is sorted in alphabetical order by the country of publication, which also indicates the number of journals in each country. (Appendix II)

### List of EMR Journals by Title

The IMEMR includes an updated list of EMR Journals, which are indexed in the index. The list is sorted in alphabetical order by journal's title, which also indicates the status of indexing for each journal. (Appendix III)

## Computer facilities

The Current Contents has been produced using the UNESCO WINISIS package. Countries or journals publishers interested in a subset of the database may be provided with data sets in WINISIS format upon request.

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<sup>1</sup> Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen

## Availability of photocopies

Photocopies of articles cited in IMEMR may be obtained from EMRO Library free of charge upon request.

## Availability on the Internet

This issue, as well as all forthcoming issues, will appear in WHO/EMRO web site on the Internet, as part of the complete edition of the Index. Internet address is <http://www.emro.who.int/information-resources/imemr/imemr.html>

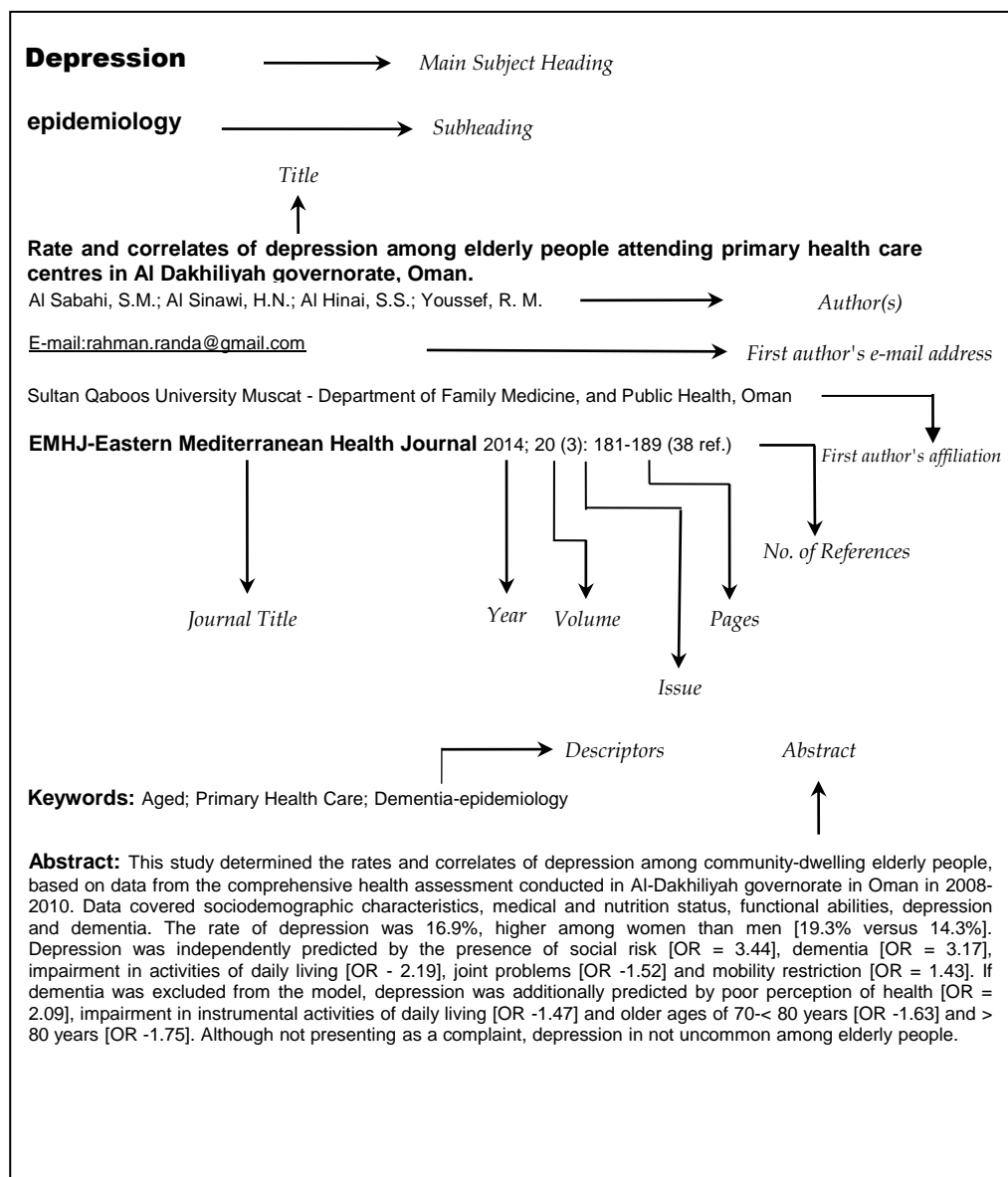


Figure (1): Sample of IMEMR citation

# Subject Index



## Accidents, Traffic

### mortality

#### **Determinant of road traffic crash fatalities in Iran: a longitudinal econometric analysis.**

Rezaei, Satar; Lankarani, Kamran Bagheri; Matin, Behzad Karami; Bazayr, Mohammad; Hamzeh, Behrooz; Najafi, Farid

Kermanshah University of Medical Sciences - Research Center for Environmental Determinants of Health

**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 163-167

**Keywords:** Mortality; Longitudinal Studies

**Abstract:** Background: Injuries and deaths from road traffic crashes are one of the main public health problems throughout the world. This study aimed to identify determinants of fatality traffic accident in Iran for the twenty-span year from 1991 to 2011. Methods: A time series analysis [1991-2011] was used to examine the effects of some of the key explanatory factors [GDP per capita, number of doctors per 10,000 populations, degree of urbanization, unemployment rate and motorization rate] on deaths from road traffic in Iran. In order to examine long- and short-run effects of variables, we employed autoregressive distributed lag [ARDL] approach and error correction method [ECM]. The data for the study was obtained from the Central Bank of Iran [CBI], Iranian Statistical Center [ISC] and Legal medical organizations [LMO]. Results: GDP per capita, doctor per 10,000 populations, degree of urbanization and motorization rate had a significant impact on fatality from road traffic in Iran. We did not observe any short- and long-term effects of the unemployment rate on fatality from road traffic. Conclusion: GDP per capita, doctor per 10,000 populations, degree of urbanization and motorization rate were identified as main determinant of fatality from road traffic accidents in Iran. We hope the results of the current study enable health policy-makers to understand better the factors affecting deaths from road traffic accidents in the country.

## Acidosis, Lactic

#### **Type B lactic acidosis in a patient with gastric adenocarcinoma and extensive hepatic metastases.**

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Louis Stokes Cleveland Veterans Affairs Medical Center - Case Western Reserve University School of Medicine

**Medical Principles and Practice** 2015; 24 (4): 391-393

**Keywords:** Adenocarcinoma; Stomach Neoplasms; Carcinoma, Hepatocellular; Liver Neoplasms; Neoplasm Metastasis

**Abstract:** Objective: We report the second case of gastric adenocarcinoma associated with type B lactic acidosis. Clinical Presentation and Intervention: An 81-year-old man presenting with upper gastrointestinal bleeding was found to have an advanced gastric adenocarcinoma. He had persistently elevated serum lactate attributed to malignancy-associated type B lactic acidosis as a diagnosis of exclusion. As he remained clinically stable with a near-normal pH, his elevated lactate was not specifically treated. Conclusion: This patient had an unusual type B lactic acidosis associated with gastric cancer. In the absence of signs and symptoms of other etiologies of lactic acidosis, physicians should consider malignancy-associated type B lactic acidosis.

## Acinetobacter baumannii

#### **Resistance patterns of multidrug resistant Acinetobacter baumannii in an ICU of a tertiary care hospital, Malaysia.**

Janahiraman, Sivakami; Aziz, Muhammad Nazri; Hoo, Fan Kee; P'ng, Hon Shen; Boo, Yang Liang; Ramachandran, Vasudevan; Shamsuddin, Ahmad Fuad

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Universiti Kebangsaan Malaysia - Faculty of Pharmacy

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1383-1388

**Keywords:** Acinetobacter Infections; Drug Resistance, Multiple, Bacterial; Cross-Sectional Studies; Retrospective Studies; Tertiary Care Centers; Pneumonia, Ventilator-Associated; Intensive Care Units

**Abstract:** Backgrounds and Objective: Antimicrobial resistance is a major health problem worldwide in hospitals. The main contributing factors are exposures to broad-spectrum antimicrobials and cross-infections. Understanding the extent and type of antimicrobial use in tertiary care hospitals will aid in developing national antimicrobial stewardship priorities. Methods: In this study, we have analyzed the antimicrobial agents' usage for acquisition of multidrug resistant using retrospective, cross-sectional, single-centre study in a multidisciplinary ICU at tertiary care hospital. Results: Acinetobacter baumannii [ACB] was isolated in various

specimens from 662 patients. From these, 136 patients who were diagnosed with Ventilator-associated pneumonia [VAP] caused by ACB were included into the study. In our study, MDR strain accounts for 51% of all VAP cases caused by ACB. The development of ACB VAP were 10.5 +6.4 days for MDR strains compared to susceptible organism [7.8 + 4.5 days] and had significantly longer ICU stay. Conclusion: The study concludes that prudent use of antimicrobial agents is important to reduce acquisition of MDR ACB.

## Acne Vulgaris

### therapy

#### Antibiotic susceptibility patterns of propionibacterium acnes isolated from acne vulgaris in Assiut university hospitals, Egypt.

Hassan, Ihsan Abdel Sabour; Hassan, Mona Amin; Embarek, Mona Sallam; Attallah, Dalia A.; El Mokhtar, Mohamed Ahmed; Alaa Eldin, Ghada Mohammed

Assiut University - Faculty of Medicine - Department of Microbiology and Immunology

**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 67-72

**Keywords:** Propionibacterium acnes-isolation and purification; Anti-Bacterial Agents-therapeutic uses; Drug Resistance, Microbial; Levofloxacin; Doxycycline; Tetracycline

**Abstract:** Background: Antibiotics are frequently used to treat acne patients either as bactericidal or anti-inflammatory agents. However, with the increased use of antibiotics, resistant strains of Propionibacterium acnes began to emerge and have been associated with a poor treatment outcome. Objectives: Detection of staphylococcal and Propionibacterium acnes strains in cases of acne vulgaris in Assiut university hospitals, Egypt and antibiotic susceptibility patterns of Propionibacterium acnes isolates. Methodology: Microbiological samples were obtained from one hundred patients with inflammatory acne lesions. Samples were cultured on blood agar and mannitol salt agar media under aerobic conditions at 37[degree]c for isolation of staphylococcal strains, and on blood agar under anaerobic conditions at 37[degree]c for 3 to 7 days for isolation of Propionibacterium acnes. Bacteria were identified by colonial morphology, standard biochemical tests, and API 20A test for identification of Propionibacterium acnes isolates. Antibiotic sensitivity testing of Propionibacterium acnes strains was done against clindamycin, erythromycin, doxycycline, trimethoprim/sulfamethoxazole, tetracycline and levofloxacin. Results: Staphylococcal strains were detected in 55% of acne cases, while Propionibacterium acnes were detected in 35% of cases. Most Propionibacterium acnes isolates were sensitive to levofloxacin [80%], followed by doxycycline [51.4%], tetracycline, trimethoprim/ sulfamethoxazole [20.0% for each] while showed highest resistance rates to clindamycin [85.7%] and erythromycin [82.9%]. Conclusion: Levofloxacin was the most effective antibiotic for Propionibacterium acnes followed by doxycycline, while Erythromycin and clindamycin were the least effective antibiotics for Propionibacterium acnes.

## Acute Kidney Injury

#### Characteristics and outcomes of acute kidney injury resulting in hospital admission in patients with solid tumor: experience of a single center.

Al Faqeer, N.; Hajir, M.; Nazer, L.

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King Hussein Cancer Center - Department of Pharmacy

**GJO-Gulf Journal of Oncology [The]** 2015; (19): 63-66

**Keywords:** Admitting Department, Hospital; Neoplasms; Prospective Studies; Patient Outcome Assessment

**Abstract:** Aim: To describe the characteristics and outcomes of acute kidney injury [AKI] resulting in hospital admission in cancer patients managed at a comprehensive cancer center. Methods: This was a prospective observational study conducted between December 2011 and July 2012. Patients admitted to the solid tumor service were screened to identify those who met the criteria of AKI upon admission. The identified cases were reviewed by two clinicians to determine the cause of AKI and to determine if AKI was the major cause for admission. Patient demographics, past medical and medication history were recorded. In addition, we evaluated patients for resolution of AKI. Results: During the study period, 103 cases were identified, 57.3% were males, mean age was 64 years +/- 11.2 [SD], 24 patients [23.3%] have diabetes, and 55 patients [53.4%] have hypertension. The most common causes of AKI were dehydration, medications, and tumor-related, reported in 40 [38.8%], 34 [33%], and 23 [22.3%] of these cases respectively. The most common medications associated with AKI were chemotherapy [n=13, 42%], mainly cisplatin [76.9%], followed by non-steroidal anti-inflammatory drugs [n=12, 38.7%]. Eleven patients [10.7%] progressed to chronic renal failure and three patients required hemodialysis. In the remaining cases, AKI resolved after a mean of 6.39 days +/- 3.73[SD]. Transfer to the intensive care unit was required for 4 patients and death was reported in 3 patients. Conclusion: AKI in cancer patients was mostly due to dehydration, medications, and the tumor. Measures to reduce the incidence of AKI are necessary to prevent unnecessary admission and the potential for further complications.

## Adaptation, Psychological

### The association between coping method and distress in infertile woman: a cross-sectional study from Turkey.

Dag, Hande; Yigitoglu, Sayime; aksakal, Belgin Iyik; Kavlak, Oya

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Adnan Menderes University - School of Health - Women's Health and Diseases Nursing Department

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1457-1462

**Keywords:** Stress, Psychological; Infertility, Female; Cross-Sectional Studies

**Abstract:** Objectives: To assess the distress level in infertile women and their coping skills. Methods: One hundred and twenty-seven infertile women who had been referred to the Family Planning and Infertility Research and Practice Center [IRPC] of a university hospital to receive therapy between June 2012-2013 were enrolled in this study. Several surveys, including the "Infertile Woman Identification Form", the "Infertility Distress Scale [IDS]" and the "Ways of Coping Inventory [WCI]," were used as data collection tools. Results: The mean age of the women who participated in the study was 32.34 +/- 5.44. They had been on therapy for 3.95 +/- 3.21 years and had been referred for therapy 2.73 +/- 1.76 times. The mean score of the IDS was determined to be 37.0 +/- 9.7 [23-66], and the mean score of the WCI subscale was 1.86 +/-0.55 [0.5-3.0]. In the IDS and WCI subscales, statistically significant negative relationships were detected between "Optimism" [r=-0.327], "Seeking Social Support" [r=-0.255], and "Self-Confidence" [r=-0.305], whereas there were statistically significant positive relationships between "Helplessness" [r=0.376] and "Submissiveness" [r=0.278] [p<0.01]. Conclusion: The women who developed negative coping strategies had higher infertility distress scores than other women.

## Alzheimer Disease

### genetics

### Association study of the TREM2 gene and identification of a novel variant in Exon 2 in Iranian patients with Late-Onset Alzheimer's disease.

Mehrjoo, Zohreh; Najmabadi, Amin; Abedini, Seyedeh Sedigheh; Mohseni, Marzieh; Kamali, Koorosh; Najmabadi, Hossein; Khorshid, Hamid Reza Khorram

University of Social Welfare and Rehabilitation Sciences - Genetic Research Center

**Medical Principles and Practice** 2015; 24 (4): 351-354

**Keywords:** Membrane Glycoproteins; Receptors, Immunologic; Exons

**Abstract:** Objective: To analyze the association between TREM2 exon 2 variants and late-onset [sporadic] Alzheimer's disease [AD] in an elderly Iranian population. Materials and Methods: Exon 2 of TREM2 in a total of 131 AD patients and 157 controls was genotyped using polymerase chain reaction and Sanger sequencing. Fisher's exact test was used to compare the allele and genotype frequency between the 2 study groups. Results: One homozygous and 2 heterozygous carriers of rs75932628-T in the AD patients and 1 heterozygous carrier in the control group were identified. One novel damaging variant, G55R, was also detected in the AD patient group. The frequency of rs75932628-T as well as the amount of rare variants were higher in the AD patients than in the controls, but this did not reach a statistically significant association with AD [odds ratio: 4.8; 95% confidence interval: 0.54 to 43.6; p = 0.270]. Conclusion: The rs75932628-T allele frequency in the elderly Iranian population [0.86%] was high.

## Amyloidosis

### diagnosis

### Isolated primary amyloidosis of the epiglottis presenting as a long-standing foreign body sensation in throat: a case report.

Swain, Santosh K.; Sahu, Mahesh C.

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Siksha [O] Anusandhan University - IMS and SUM Hospital - Department of ENT

**Journal of Taibah University Medical Sciences** 2015; 10 (4): 488-491

**Keywords:** Epiglottitis; Foreign Bodies; Larynx; Laryngoscopy; Pharynx

**Abstract:** Primary amyloidosis of the larynx is a rare benign disease of unknown aetiology. Isolated epiglottic involvement with amyloidosis is an extremely uncommon benign laryngeal pathology and can present with a foreign body sensation in the throat. This lesion should be kept in mind in cases with a long-standing foreign body sensation in the throat. Observation and endoscopic carbon dioxide laser excision are the main methods of treatment. Long-term follow-up is also required because of the slow progressive nature of this disease.



## Analgesia

### Outcome of pediatric procedural sedation and analgesia in a tertiary care hospital in Pakistan.

Jurair, Humaira; Bhimani, Aamna; Haque, Anwar Ul

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Aga Khan University Hospital - Department of Pediatrics and Child Health

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1554-1557

**Keywords:** Conscious Sedation; Retrospective Studies; Tertiary Care Centers; Pediatrics; Patient Outcome Assessment

**Abstract:** Background and Objective: Procedural sedation and analgesia [PSA] is pharmacologically induced state which allows patients to tolerate painful procedures while maintaining protective reflexes. It is the standard of care but there is limited data from Pakistan. Our objective was to assess the safety of the procedural sedation and analgesia in pediatric population at a tertiary care setting. Methods: A retrospective notes and record review was conducted at the Aga Khan University Hospital, Karachi over 4 years from April 2010 to August 2014. Patients were between ages 6 months to 16 years and were in low risk category. The combination of Ketamine and Propofol were used. Data collected on the standardized hospital PSA form. All procedures were performed by two trained persons. Results: A total of 3489 diagnostic and therapeutic procedures were performed. Satisfactory level of sedation was achieved for 3486 [99%] of procedures. Adverse events occurred in 21 [0.6%] patients including: 12 [0.3%] episodes of hypoxia, 07 [0.2%] episodes of apnea, 02 [0.06%] episodes of post sedation hallucination. No major events were noted. Conclusion: Procedural sedation and analgesia for children using Propofol and Ketamine is found safe and effective in our setting.

## Analgesia, Epidural

### veterinary

### Dorsolumbar epidural analgesia in water buffalo: anaesthetic assessment and anatomical studies.

Sharshar, Ahmed; Abedellaah, Bahaa; Shoghy, Khaled; Rashed, Reda

University of Sadat City - Faculty of Vet. - Department of Surgery, Anesthesiology and Radiology

**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 63-69

**Keywords:** Spinal Nerves; Anatomy; Buffaloes

**Abstract:** Anesthesia of the flank region of ten native buffaloes was accomplished through the dorsolumbar epidural technique by using two different doses [4ml and 5ml] from anesthetic mixture containing xylazine hydrochloride [2%] and lidocaine hydrochloride [2%]. Computed tomography and gross dissection were done for the thoraco-lumbar region to show the special structures in this area. The results showed that, the anaesthetized area and the duration of analgesia in both sides of the flank region were wider and more prolonged at dose 5 ml than at 4 ml from the mixture. The CT showed that the epidural space at the lumbar region is enlarged and the widest part found at the third and fourth lumbar vertebrae. There is no inter-arcuate space between the last two thoracic vertebrae while the space was found between the last thoracic and the first lumbar vertebrae and continues between all lumbar vertebrae. Grossly, the last thoracic and first lumbar spinal nerve rootlets are nearly centered on the intervertebral discs between the last thoracic and the first lumbar vertebrae and between the first and the second lumbar vertebrae respectively. The second, the third, the fourth and the fifth lumbar spinal nerve rootlets are displaced cranially to extent, which the rootlets of the second and third lumbar spinal nerves are nearly located in the caudal portion of the canal of the second and third lumbar vertebrae respectively. Furthermore, the fourth lumbar spinal nerve rootlets are nearly located in the central part of the canal of the fourth lumbar vertebra, while the fifth lumbar spinal nerve rootlets appeared in the cranial portion of the canal of the fifth lumbar vertebra. The study illustrated that dorsolumbar epidural anesthesia was easy to perform in buffaloes and consume low dose from anesthetic drug which save cost, time and effort. Moreover, adding of xylazine hydrochloride to the local anesthetic will promote its anesthetic properties in addition to the sedative effect needed in such conditions.

## Anemia, Iron-Deficiency

### Disorders associated with malabsorption of iron: a critical review.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1549-1553

**Keywords:** Malabsorption Syndromes; Gastrointestinal Tract; Iron

**Abstract:** Malabsorption is a disorder of the gastrointestinal tract that leads to defective digestion, absorption and transport of important nutrients across the intestinal wall. Small intestine is the major site where most of the nutrients are absorbed. There are three main mechanisms of malabsorption; pre-mucosal, mucosal and post-mucosal. Pre-mucosal malabsorption is the inadequate digestion due to improper mixing of gastrointestinal enzymes and bile with chyme. This could be because of surgical resection of the small intestine or a congenital deficiency of the enzymes and bile responsible for digestion e.g. post-gastrectomy, chronic pancreatitis, pancreatic cancer, cystic fibrosis, gallstones, cholangitis etc. Mucosal malabsorption occurs in celiac disease, tropical sprue, Crohn's disease etc. Post-mucosal condition arises due to impaired nutrients transport e.g. intestinal lymphangiectasia, macroglobulinemia etc. Disorders of malabsorption lead to decreased iron absorption and produce iron deficiency anemia. Using the index terms malabsorption, post-gastrectomy, chronic pancreatitis, pancreatic cancer, cystic fibrosis, gallstones, cholangitis, celiac disease, tropical sprue, Crohn's disease intestinal lymphangiectasia, macroglobulinemia and iron deficiency anemia the MEDLINE and EMBASE databases were searched. Additional data sources included bibliographies and references of identified articles.

## **Anemia, Sickle Cell**

### **Orbital compression syndrome in sickle cell disease.**

Yateem, Mada A.; Arishi, Haider M.; Wasli, Mustafa A.; Sallam, Thikra A.; Haqawi, Ibrahim A.  
King Fahd Central Hospital - Department of Pediatrics

**Journal of Taibah University Medical Sciences** 2015; 10 (4): 496-500

**Keywords:** Orbital Diseases-complications

**Abstract:** Orbital complications in sickle cell disease are uncommon, but can be severe enough to result in significant morbidity. We report a 10-year-old boy with sickle cell disease who presented with fever, bilateral eyelid edema, proptosis, and diminished vision with left eye involvement more than the right eye. Investigations revealed anemia, thrombocytopenia, and derangement of coagulation profile consistent with disseminated intravascular coagulopathy, and salmonella species was recovered from blood culture. MRI of the orbits showed bilateral large subperiosteal hematomas. The treatment included intravenous antibiotics, pulse methylprednisolone and bilateral canthotomy with surgical drainage of the hematomas. Postoperative visual assessment revealed complete loss of vision in the left eye with normal vision in right eye. This case highlights the importance of the early evaluation and consideration of surgical intervention in sickle cell disease with this rare complication.

## **Aneurysm, False**

### **diagnosis**

### **Left ventricular outflow tract pseudoaneurysm formation following three aortic valve replacement surgeries.**

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**Heart Views** 2015; 16 (4): 161-163

**Keywords:** Heart Ventricles-pathology; Heart Valve Prosthesis; Heart Valve Prosthesis Implantation; Aortic Valve-surgery; Bioprosthesis; Echocardiography

**Abstract:** We present a case of a pseudoaneurysm arising from the left ventricular outflow tract/aortic root as a complication of aortic valve surgery. A 45-year-old Nigerian female presented to our institution's emergency department with chest discomfort. She had three bioprosthetic aortic valve replacements in the preceding year at an outside institution for aortic regurgitation and wanted a second opinion on remaining surgical options. The learning points relevant to this case are as follows: [1] Recognizing potential complications post-multiple valve surgeries, [2] screening patients for chronic infections and rheumatologic conditions that can contribute to failed valve surgeries.

## Animals, Zoo

### microbiology

#### Prevalence in some pathogens in a population of zoo animals.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 139-145

**Keywords:** Animals, Zoo-parasitology; Veterinarians; Animal Diseases-epidemiology; Animal Diseases-prevention and control; Prevalence; Trichuris

**Abstract:** Zoos unintentionally provide pathogens with a high diversity of species of different origins. Zoopractices of mixing reservoir species with other susceptible species can provide opportunities for pathogens to spread beyond normal hosts. This paper describes some pathogens of bacterial, parasitological and viral origin that were identified in some bovines [five species], caprines [two species], cervids [two species], primates [two species] and felines [two species] groups. Bacterial examination of fecal samples revealed the detection of *E.coli*, *Salmonella* spp., *Pasteurella* spp., *Klebsiella* spp., *Campylobacter* spp. *Streptococci* spp., and *Staphylococci* spp., with 52% overall prevalence of infection. Parasitological investigation using floatation and sedimentation technique of fecal samples indicated the occurrence of *Isopora* spp., *Trichuris* spp., *Ascarids* spp., *Toxocara* spp., *Trichostrongyloid* spp., and *Nematodirus* spp. with 19% prevalence of infection of the examined samples. Sarcoptic mange was only identified in olive baboon, *Papio anubis* through examination of skin scrapings. Antibodies against bovine viral diarrhoea [BVD] and bovine herpes virus-1 [BHV-1] in antelopes and feline corona virus [FCoV] in felines were detected using specific Enzyme-linked immune assay [ELISA test]. The seroprevalence of BVD and BHV-1 in the examined antelopes was 5.3% and 6.7%, respectively. Antibodies against FCoV were detected in both lions and cheetahs where cheetahs had higher seroprevalence rate [100%] than lions [50%]. There is a need for zoo veterinarians to review and update the current preventive and management policies to identify sources of infection and control diseases of exotic species in future.

## Ankle Injuries

### therapy

#### Comparison of two main treatment modalities for acute ankle sprain.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1496-1499

**Keywords:** Splints; Compression Bandages; Prospective Studies; Emergency Service, Hospital; Sprains and Strains; Acute Disease

**Abstract:** Objective: Acute ankle sprains are one of the most common injuries in emergency departments. Immobilization is widely accepted as the basic treatment modality for acute ankle sprains; however, immobilization method remains controversial. In this study, we aimed to compare two treatment modalities: splint and elastic bandage for the management of acute ankle sprains. Methods: This prospective study was conducted in the emergency department. Fifty-one consecutive patients who were admitted to the emergency department owing to the complaint of ankle sprain and who were treated with an elastic bandage or a splint were included in the study. After bone injury was ruled out, treatment choice was left to the on-shift physicians' discretion. The extent of edema was evaluated before and after the treatment by using a small, graduated container filled with warm water. Volume differences were calculated by immersing both lower extremities in a container filled to a constant level. Pain was evaluated using the visual analogue scale. Results: There were 25 patients in the elastic bandage group and 26 patients in the splint group. VAS scores of these groups before and after the treatment were similar. Although edema size before and after the treatment were similar between the groups, edema size reduction was significantly more in the elastic bandage group [ $p=0.025$ ]. Conclusions: This study showed that treatment of acute ankle sprains with an elastic bandage was more effective than splint in reducing edema. Therefore, an elastic bandage could be preferred over a splint for the treatment of acute ankle sprains.

## Anorexia Nervosa

### epidemiology

#### **Anorexia nervosa among teenage girls: emerging or prevalent?**

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1290-1294

**Keywords:** Prevalence; Cross-Sectional Studies; Knowledge; Surveys and Questionnaires; Adolescent

**Abstract:** Objectives: To find out frequency of anorexia nervosa [AN] among teenage girls [TG] and to find out the knowledge and practice regarding anorexia nervosa among teenage girls. Methods: A cross sectional study was conducted at higher secondary public school, Rawalpindi from June 2013 till December 2013. A sample of 100 female students of the age group 13-19 years were inducted by systematic sampling technique. Mixed pretested questionnaire was filled after informed verbal consent. Data was entered and analysed using SPSS version 20. Results: Participants mean age was 15.81 +/- 1.323 years. Mean weight, mean height and mean body mass index were found to be 50.34 +/- 10.445 kg, 160.14 +/- 7.846 cm and 19.675 +/- 4.1477 kg/m<sup>2</sup> respectively. Anorexia nervosa was found in 42 [42%] teenage girls while 58 [58%] were not having anorexia nervosa. Sufficient knowledge and positive practice were found to be present in 57 [57%] and 49 [49%] respectively. Statistically no significant association was found between KP and AN [p=0.73]. Conclusion: Anorexia nervosa is an emerging health concern in Pakistan. Anorexia prevalent behaviour was observed in almost half of the teenage girls.

## Anticonvulsants

#### **Synthesis and anticonvulsant activity of some newer dihydro-pyrimidine-5-carbonitrile derivatives: part II.**

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 437-443

**Keywords:** Pyrimidines; Epilepsy; Infrared Rays; Magnetic Resonance Spectroscopy

**Abstract:** Objectives: To synthesize dihydro-pyrimidine-5-carbonitrile derivatives [5-23], as an extension of the previous series, and to evaluate their anticonvulsant potential. Methods: The designed compounds were synthesized and characterized using infrared [IR], nuclear magnetic resonance [NMR] and mass spectroscopy and were evaluated for anticonvulsant activity using the maximal electroshock seizure [MES] and subcutaneous pentylenetetrazole [scPTZ] methods. Compounds with appreciable activity were investigated for their neurotoxicity using the rotarod test. Results: Compounds 17 and 23 were found to be most active at a dose of 30 mg kg<sup>-1</sup> at 0.5 h and 4 h in both models and did not exhibit motor impairment activity, even at higher doses. Conclusion: The newer designed compounds were found to be better than previously reported compounds. This study also shows that increased lipophilicity is directly related to the anticonvulsant activity.

## Antiparasitic Agents

#### **Antiparasitic activity of silver and copper oxide nanoparticles against Entamoeba Histolytica and Cryptosporidium Parvum cysts.**

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 593-602

**Keywords:** Silver; Copper; Entamoeba histolytica; Cryptosporidium parvum; Cryptosporidiosis; Nanoparticles

**Abstract:** Nanoparticles [NPs] have received more attention as antiparasitic agents. In the present study, silver and copper nanoparticles were synthesized and characterized using scanning electron microscopy [SEM], transmission electron microscope [TEM] and X-ray fluorescence [XRF]. The antiparasitic activity of Ag and CuO nanoparticles were tested against two of the most environmentally spread parasites in Egypt [Entamoeba histolytica and Cryptosporidium parvum]. The average sizes of synthesized Ag NPs and CuO NPs were 9 and 29 nm respectively and a significant reduction for cysts viability [p > 0.05] was observed for CuO NPs against E. histolytica cysts and Ag NPs against C. parvum oocysts. Moreover, LC<sub>50</sub>-3h of CuO NPs for E. histolytica and C. parvum were 0.13 and 0.72 mg/l, while Ag NPs recorded 0.34 and 0.54 mg/l respectively. Accordingly, these NPs could be suggested as a new nanoform agent for safe and effective treatment of E. histolytica and C. parvum parasites.

## Anxiety

### Feasibility of using Arabic Hospital Anxiety and Depression Scale (HADS) to assess anxiety and depression among patients attending accident and emergency at a University Hospital setting in Riyadh, Saudi Arabia.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1366-1371

**Keywords:** Depression; Emergency Service, Hospital; Surveys and Questionnaires; Prospective Studies; Hospitals, University

**Abstract:** Objective: To evaluate the feasibility of using Arabic Hospital Anxiety and Depression Scale [HADS] to assess depression and anxiety among patients attending accident and emergency [A and E] at a University Hospital setting in Riyadh, Saudi Arabia. Methods: In this prospective observational study translated questionnaire of HADS was used for patients aged 18 years or above who presented to A and E at King Khalid University Hospital in Riyadh, Saudi Arabia. The study included 257 patients as per an agreed inclusion criteria. The study quantified depression and anxiety and its association with demographic and or illness related variables using SPSS. Results: Out of 257 participants, the dominant age group, ranged between 18-30 years [40.9%] with female participants [55.3%] outweigh the male among all. The overall occurrence of depression was 27.2% [95% Confidence Interval [CI]: 21.8% to 32.6%] and anxiety was 23% [17.8% to 28.2%CI]. Marital, educational and economic status of participants, were statistically significantly associated [ $p < 0.05$ ] with the levels of anxiety whereas age, marital, education, economic and employment status were associated [ $p < 0.05$ ] with the levels of depression. Conclusion: In the A and E setting at University Hospital in Saudi Arabia, comorbid depression and anxiety is not uncommon as enumerated by using HADS. The identified cases could then be sent for appropriate psychiatric treatment promptly not only to improve quality of individual care but also to reduce the overall health care costs in local context.

### Self-reported anxiety of dental procedures among dental students and its relation to gender and level of education.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 449-453

**Keywords:** Gender Identity; Cross-Sectional Studies; Fear; Education, Dental; Students, Dental

**Abstract:** Objectives: The study aimed to identify the dental procedures that elicit the highest level of anxiety by various dental procedures and to determine the correlation of anxiety with students' gender and varying perceptions of anxiety across years of dental education. Methods: This cross-sectional study was conducted at Sardar Begum Dental College, Peshawar, Pakistan during June 2014. The Corah's Dental Anxiety Scale [DAS] was distributed to all students. This instrument had 26 items examining the anxiety levels experienced for different dental procedures. Options ranging from 1 to 4 were provided for every item, where 1 represented low anxiety and 4 represented the highest anxiety. Results: The overall response rate was 67.3% [n = 101; 64 females and 37 males]. Among the top five dental procedures eliciting the highest anxiety levels, females were found to be more anxious than males for all procedures [fear of injection/needle, root canal treatment, extraction, and application of cold air] except the need for further treatment. Pre-clinical students [1[st] and 2[nd] year] were found to be more anxious than clinical students [3[rd] and 4[th] year]. Significant differences [ $p < 0.05$ ] were found for three procedures: rubber dam placement, inability to stop dentist, and impression taking. Clinical students reported high anxiety for the latter, and pre-clinical students reported higher anxiety for the former two procedures. Conclusions: Higher anxiety levels were reported by females and pre-clinical students than their respective counterparts. Educational sessions and graded exposure therapy at an initial stage of dental educational training may decrease the anxiety associated with dental procedures.

## Aortic Diseases

### New modification of modified bentall procedure [a single centre experience].

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1318-1321

**Keywords:** Hemostasis; Retrospective Studies; Cardiovascular Surgical Procedures; Hemorrhage

**Abstract:** Background and Objectives: Modified Bentall procedure has become a gold standard in the treatment of combined aortic root and aortic valve diseases. Bleeding is an important predictor of morbidity and mortality after the Bentall operation. Our objective was to evaluate the early outcomes of Modified Button-Bentall procedure with cuff technique for aortic root replacement surgery regarding hemostasis. Methods: A total number of 32 patients who underwent elective Bentall operation from January 2008 to December 2014 were included in the study. In 18 patients [Group I] modified Button-Bentall procedure with formation of cuff was used and in 14 patients [Group II] Modified Button technique without cuff formation was used for aortic root

replacement. Data was analyzed using SPSS V16. Chi-square test, Fisher's Exact test and independent sample t-test was used to analyze Qualitative and Quantitative variables. Results: Three patients in Group II and two patients in group I was in congestive cardiac failure pre-operatively. Out of thirty two patients two patients were having Aortic root dissection one in each group. Total bypass time and cross-clamp time were significantly high in Group I. There was no significant difference regarding duration of inotropic support, ventilation time, ICU stay and hospital stay time in patients of Group I and Group II. But post-op Chest drainage was very high in Group II 1158+451.25 ml versus 488.89+168.27 ml in group I [p-value <0.0001]. There was one in hospital death in Group II. Conclusions: Formation of cuff of remnant of aorta during proximal anastomosis results in significant reduction in post-operative bleeding and was better in hospital outcomes.

## Appendicitis

### diagnosis

#### Evaluation of clinical diagnosis of children with acute appendicitis at Rapareen teaching hospital.

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**Zanco Journal of Medical Sciences** 2015; 19 (1): 886-893

**Keywords:** Acute Disease; Child; Hospitals, Teaching; Cross-Sectional Studies; Appendicitis-ultrasonography

**Abstract:** Background and objective: Appendicitis is the most common acute surgical emergency of childhood. Decision-making in patients with acute appendicitis poses a diagnostic challenge worldwide. Among the reported diagnostic criteria, modified Alvarado score system and ultrasound findings were used to support diagnosis and even exclude complicated cases. The aim of this study was to detect clinical and sonographic features that distinguish children visited the emergency department with acute simple appendicitis and identify factors related to complicated cases. Methods: This cross-sectional study included 76 children with the provisional diagnosis of acute appendicitis according to clinical findings attending the Emergency Department at Rapareen Teaching Hospital in Erbil between January and December 2012. Results: Of 76 patients included in this study, 75 patients [99.7%] had appendicitis whether inflamed [63 patients, 82.9%] or complicated [13 patients, 15.8%] and only one patient had normal operative [non-inflamed appendix] findings. Delay of admission, high temperature at time of presentation, localized tenderness and MASS of  $\geq 7$  increased the risk of complicated appendicitis as do leukocytosis and positive ultrasound findings. Conclusion: The study shows that use of certain clinical data [like duration of manifestations] with the modified Alvarado score system supported by leukocytosis and positive ultrasound findings in children suspected to have acute appendicitis provides a high degree of diagnostic accuracy of complicated cases rather than simple acute appendicitis.

## Asthma

### genetics

#### Polymorphism of toll like receptors 2 and 4 genes and the risk of bronchial asthma.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 129-134

**Keywords:** Toll-Like Receptor 2; Toll-Like Receptor 4; Polymorphism, Genetic; Polymerase Chain Reaction; Polymorphism, Restriction Fragment Length

**Abstract:** Background: Bronchial asthma is one of the most common chronic inflammatory respiratory disorders affecting many people all over the world. Objectives: To study the association between single nucleotide polymorphism in genes of TLR2 and TLR4 and the risk of bronchial asthma. Methodology: This study was carried out on 40 patients suffering from bronchial asthma and 20 healthy subjects as a control group during the period from May 2014 to March 2015. The patients were chosen from the Chest Department of Benha University Hospital. Skin prick test [SPT] was done to assess atopic state. Blood samples were taken for detection of TLR gene polymorphism by Polymerase chain reaction –Restriction Fragment Length Polymorphism [PCR-RFLP]. Results: Statistical data for the genotypic frequencies in TLR2Arg753Gln revealed that the homozygous [GG] genotype has increased frequency among the controls [80%] as compared to the asthmatic patients [30%]. The heterozygous [AG] genotype was more prevalent among the asthmatic patients [62.5%] as compared to the controls [15%] with OR =9.4, 95% CI [2.4-37.7] and significant P-value. Also, the homozygous mutant [AA] genotype has increased trend in the asthmatic patients [7.5%] than in the control subjects [5%], with OR = 0. 6, 95% CI [0.1-6.7] and non-significant P-value. Statistical data for the genotypic frequencies in TLR4Asp299Gly revealed that the homozygous [AA] genotype has increased frequency among the controls [70%] as compared to the asthmatics [20%]. The heterozygous [AG] genotype was more prevalent among the asthmatic patients [65%] as compared to the controls [30%] with OR =4.3, 95% CI [1.4-13.8] and significant P-value. Conclusion: The major allele in TLR 2 and 4 polymorphisms [GG genotype of TLR2 and AA genotype of TLR4] might be generally associated with a protective effect against bronchial asthma.

## Babesiosis

### Human babesiosis: a general review with special reference to Egypt.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 493-510

**Keywords:** Risk Factors; Ticks; Blood Transfusion

**Abstract:** Babesiosis is a tick-borne malaria-like illness caused by species of the intra-erythrocytic protozoan *Babesia*. Humans are opportunistic hosts for *Babesia* when bitten by nymph or adult ticks. Currently, *Babesia* infection is transmitted by various tick vectors in Europe, Asia, Africa and the northwestern and northeastern United States. Human babesiosis was first described in 1957 but is now known to have worldwide distribution. The increase in reported cases is likely due to increases in actual incidence as well as increased awareness of the disease. Despite the diagnostic and preventive advances resulting from extensive research and a greater understanding of the disease, babesiosis continues to have significant medical impact as a confounding variable in the diagnosis and treatment of Lyme disease and as a potential threat to the blood supply, especially in the United States. Diagnostic advances, like the development of PCR assays, have resulted in increased sensitivity for detection as well as the discovery and characterization of new babesial species. Further studies using the molecular tools now available and those to be developed will lead to a better understanding of the natural history of these organisms, including the transmission cycle and the potential role of *Babesia* parasites themselves as immunomodulator. Human babesiosis is usually an asymptomatic infection in healthy individuals. Several patients become symptomatic, and, within these subpopulations, significant morbidity and mortality occur, especially in elderly, immunocompromised, or asplenic patients. It is difficult to diagnose. Although the index of suspicion should be high in rural *Babesia* endemic areas, patients with babesiosis have few, if any, localizing signs to suggest the disease. Diagnosis confirmation depends on the parasitemia degree, the expertise and well trained laboratory personnel. Most patients infected by *B. microti* who are otherwise healthy appear to have a mild illness and typically recover without specific chemotherapy, however, treatment is recommended for all diagnosed cases to prevent sequelae and potential transmission through blood donation. In addition, patients should be advised to take precautions against tick exposure and to refrain from donating blood until completely cured of babesiosis.

## Bassia scoparia

### Blanching alters the phenolic constituents and in vitro antioxidant and anticholinesterases properties of fireweed [*Crassocephalum crepidioides*]

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 419-426

**Keywords:** Antioxidants; In Vitro Techniques; Cholinesterase Inhibitors

**Abstract:** Objective: This research investigated the effect of blanching on the phenolic distribution and in vitro antioxidant and anticholinesterase properties of the HCl-methanolic extracts from fireweed. Methods: Phenolic-rich extracts were prepared by extracting the powdered blanched and unblanched fireweed leaves with a mixture of absolute 1 M HCl and methanol [1:1 v/v]. The phenolic constituents were analysed using high-performance chromatography coupled to a diode array detector [HPLC-DAD]. Furthermore, the extracts' in vitro antioxidant [1,1-diphenyl-2-picrylhydrazyl (DPPH), 2,2-azino-bis(3-ethylbenzo-thiazoline-6-sulfonate) [ABTS] radical scavenging and Fe[2+] chelating abilities and inhibition of Fe[2+]-induced lipid peroxidation in isolated rat brain] properties and inhibitory effects against acetylcholinesterase [AChE] and butyrylcholinesterase [BChE] were determined in vitro. Results: The HPLC-DAD analysis detected four phenolic acids [gallic, chlorogenic, caffeic and ellagic acids] and three flavonoids [catechin, rutin and quercetin] that were abundant in the unblanched fireweed extract. The findings further showed that the unblanched fireweed extract had higher antioxidant and AChE and BChE inhibitory properties compared to the blanched fireweed extract. Conclusion: The increased antioxidant and anticholinesterase properties of the unblanched fireweed extract could be linked to its higher concentrations of the phenolic constituents compared to the blanched fireweed. Therefore, blanching leads to a decrease in the antioxidant and anticholinesterase properties of fireweed, as evidenced by a reduction/loss in the polyphenolic content from the blanched fireweed.

## Bevacizumab

### adverse effects

#### Bevacizumab in clinical practice.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 33-37

**Keywords:** Bevacizumab-therapeutic uses; Angiogenesis Inhibitors; Hypertension

**Abstract:** The development of targeted therapies and especially angiogenesis inhibitor drugs is undoubtedly a major advancement in the treatment of cancer in the 21st century. Bevacizumab is arecombinant humanized monoclonal antibody directed against vascular endothelial growth factor that was approved for the treatment of multiple solid tumors, we have reviewed the side effects cited in clinical trials of bevacizumab and the guidelines for their management and we can conclude that bevacizumab, is generally well tolerated but is associated with increase in some adverse side effects for which monitoring is required particularly vascular and renal side effects including hypertension, proteinuria, thromboembolic events and hemorrhage. The better understanding of bevacizumab toxicity profile and the guidelines for their optimal management as well as the education of patients may allow prolonged therapy and thus improved clinical outcomes.

## Biomedical Research

#### What ails medical research in Pakistan? role of institutions.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1287-1289

**Keywords:** Curriculum

## Body Mass Index

#### Physical activity and BMI of medical students at Rehman Medical College, Peshawar.

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**Journal of Medical Students** 2015; 1 (1): 36-40

**Keywords:** Motor Activity; Obesity; Students, Medical; Surveys and Questionnaires

**Abstract:** Introduction: Individuals are predisposed to obesity and overweight by sedentary life styles and lack of physical activity. The deskbound life style is also known to track from childhood into adulthood with consequent cardiovascular and metabolic problems. This study aimed to describe the frequency of physical activity and the relationship between physical activity and body mass index of first year MBBS students at Rehman Medical College, Peshawar Pakistan. Material and Methods: A descriptive study was conducted in 2011 to collect data of first year MBBS students regarding their body mass index and habitual physical activities. A total number of 54 students participated in the study. Data were collected on a self-reporting questionnaire regarding their physical activity while heights and weights were measured using weight machine and measuring tape. Finally correlation was obtained for students BMI and regular physical activity. Results: Out of 54 students, 9[17%] were involved in vigorous activities on regular basis. About 50% of them were using bicycle or walking for at least 10 minutes continuously to get to and from places. Overweight and grade 1 obesity was seen in 13% [75% of male and 25% of female], and 8% [86% of male and 14% of female], respectively. Leisure time, physical activity [duration of typical working day, walking, cycling etc] were inversely associated with body mass index. A steady increase in BMI was noticed among students whose recreation, sport or leisure time involved mostly sitting, reclining, or standing, with no physical activity [ $r = 0.5$ ,  $p = 0.001$ ]. Conclusion: A physically active life style and regular involvement in moderate physical activities like cycling and walking maximizes the chances of having normal body weight, while sedentary life style with less physical activities may result in increased body weight of medical students.



## Breast Neoplasms

### Apoptosis/necrosis induction by ultraviolet, in ER positive and ER negative breast cancer cell lines.

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*Iranian Journal of Cancer Prevention* 2015; 8 (6): 29-34

**Keywords:** Apoptosis; Necrosis; Ultraviolet Rays; Receptors, Estrogen; Cell Line, Tumor; DNA Fragmentation

**Abstract:** Background: Ultraviolet [UV] light exposure has been one of the major inducers of apoptosis. UV exposure has caused pyrimidine dimers and DNA fragmentation which might lead to cell cycle arrest and apoptosis signals activation. UV induced apoptosis has investigated in MDA-MB 468 as an ER negative breast adenocarcinoma and MCF-7 as an ER positive breast cancer cell line. Apoptosis induction rate by UV might be different in these two types of cells due to different biological characteristics of the cell. Objectives: In this paper we have evaluated serial dose of UV-B exposure on ER positive and ER negative breast cancer cell lines and its effect on apoptosis or necrosis induction in these cells. Materials and Methods: MDA-MB468 and MCF-7 cell lines have cultured for 24 hours and UV exposure has carried out at 290 nm at dose of 154 J/m<sup>2</sup> to 18 KJ/m<sup>2</sup> using UV lamp. UV exposed cells have incubated in cell culture condition for 24 or 48 hours following UV exposure and the cells have stained and analyzed by flow cytometry for apoptosis evaluation by Annexin V/PI method. Results: Apoptosis rate [PI and Annexin V double positive cells] after 24 hours incubation was higher in 24 hours in comparison with 48 hours incubation in both cell lines. The frequency of PI positive MDA-MB 468 cells was higher than PI and Annexin V double positive cells after 48 hours. PI positive MDA-MB 468 cells were significantly higher than MCF-7 cells in 24 hours incubation time. Conclusions: The results have shown that MDA-MB 468 cells were more sensitive to UV exposure and DNA fragmentation and necrosis pathway was dominant in these cells.

### Breast cancer recurrence after sentinel lymph node biopsy.

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*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1426-1431

**Keywords:** Neoplasm Recurrence, Local; Sentinel Lymph Node Biopsy; Mastectomy

**Abstract:** Objective: To look into the pattern of breast cancer recurrence following mastectomy, breast conservative surgery and radiotherapy or chemotherapy after SLNB at our institution. Methods: Between January 2005 and December 2014, all patients diagnosed with breast cancer with clinically negative axilla, underwent SLNB. We reviewed their medical records to identify pattern of cancer recurrence. Results: The median follow-up was 35.5 months. Eighty five patients [70.8%] had a negative sentinel lymph node [SLN] and subsequently had no further axillary treatment, one of them [1.2%] developed axillary recurrence 25 months postoperatively. Twenty five patients [20.8%] had a positive SLN [macrometastases] and subsequently had immediate axillary lymph node dissection [ALND]. Ten patients [8.3%] had a positive SLN [micrometastases]. In the positive SLN patients [macrometastases and micrometastases], there were two ipsilateral breast recurrences [5.7%], seen three and four years postoperatively. Also in this group, there was one [2.9%] distant metastasis to bone three years postoperatively. Conclusion: In this series, the clinical axillary false negative rate for SLNB was 1.2% which is in accordance with the published literature. This supports the use of SLNB as the sole axillary staging procedure in breast cancer patients with negative SLNB. Axillary lymph node dissection can be safely omitted in patients with micrometastases in their sentinel lymph node[s].

### Individually and combined water-based exercise with ginger supplement, on systemic inflammation and metabolic syndrome indices, among the obese women with breast neoplasms.

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*Iranian Journal of Cancer Prevention* 2015; 8 (6): 23-28

**Keywords:** Exercise; Water; Ginger; Inflammation; Metabolic Syndrome X; Obesity

**Abstract:** Background: Breast neoplasms has known as the most common cancer among the women worldwide, and relationship between obesity, metabolic syndrome, inflammation and cancer has been recognized since many years ago. Objectives: The aim of this study was to determine the individual and concomitant effect of 6-weeks water-based exercise and oral ginger supplement on markers that have related to metabolic syndrome and systemic inflammation in obese women with breast neoplasms. Patients and Methods: Forty women whose have diagnosed with breast neoplasms have volunteered to participate in the study. Subjects have randomly assigned into four groups; placebo, exercise training, ginger supplement and exercise training+ ginger supplement groups. Subjects in the ginger supplement group and the exercise training+ ginger supplement group have orally received 4 capsules, 7 days a week and for 6weeks. The water-based exercise training program have collected at a progressive intensity and time, have ranged from 50% to 75% of heart rate reserve, in a pool, 4 times a week for 6 weeks. Fasting blood sampling has collected at the pretest and post-test. Results: The ginger supplementation and the water-base exercise have resulted in a

reduction of hs-CRP, IL-10, insulin, glucose, insulin resistance, LDL-C, TG; but an increase in HDL-C and HDL-C/LDL-C. The water-base exercise and ginger supplement group have significantly shown larger positive effect in all outcomes, in comparison with the water-base exercise or ginger supplement alone groups. Conclusions: Findings have suggested that obese breast neoplasms survivors have commonly shown metabolic syndrome and elevated inflammation, which placed them at an increased risk for cardiovascular diseases. Moreover, data has indicated a protective effect of the nondrug strategies, such as water-base exercise and ginger supplementation have played an important role in pathogenesis of inflammatory and metabolic responses, among diagnosed breast neoplasms.

### **Magnetic resonance imaging of the breast: a problem solving tool.**

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 43-48

**Keywords:** Magnetic Resonance Imaging; Mammography; Magnetic Resonance Spectroscopy; Surveys and Questionnaires

**Abstract:** Approximately one in every nine Pakistani women is likely to suffer from breast cancer. This is one of the highest incidence rates in Asia. Mammography and ultrasound are the basic imaging techniques for the detection and localization of breast tumors. Breast magnetic resonance imaging [MRI] has become increasingly important in the detection and delineation of breast cancer in daily practice. The utility of diagnostic value of MRI is mainly on specific situations such as detecting multifocal, multicentric or contralateral disease unrecognized on conventional imaging, assessing for the response to neoadjuvant chemotherapy, detection of cancer in dense breast tissue, recognition of an occult primary breast cancer. The standard breast MRI protocol includes T2 sequences [anatomy and signal analysis], T1 gradient-echo sequences which can detect markers placed after biopsy, and injected dynamic 3D sequences for performing volume and multiplanar reconstructions, which are particularly useful for locating lesions. Good patient positioning is essential. These aspects limit movement artefacts which alter subtraction sequences; it must be compared with the native sequences. New functional imaging sequences are now appearing in an attempt to increase the specificity of MRI, which is one of its main limitations. Of these, magnetic resonance spectroscopy appears to be the most promising.

### **Outcome of HER2 positive luminal operable breast cancer in comparison with outcome of other operable luminal breast cancer patients: long follow-up of single center randomized study.**

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 67-75

**Keywords:** Receptor, ErbB-2; Risk Factors; Disease-Free Survival; Patient Outcome Assessment

**Abstract:** Introduction: In clinical practice, there is increasing recognition that HER2-positive breast cancer patients are not a homogeneous group. Especially patients with luminal B breast cancers which are now subdivided to more than two groups. Aim of the study: The aim of this study is to know the effect of HER2 positivity on luminal breast cancer patients by comparing disease free survival DFS luminal of HER2 positive breast cancer patients with other luminal cases with HER2 negative disease. Also we explored the effect of HER2 positivity on different risk factors for breast cancer. Patients and methods: We compared the outcome of 25 HER2 positive luminal breast cancer patients with a control group of other luminal operable breast cancer at the same period of time with the same eligibility and exclusive criteria. Results: Total of 59 operable luminal breast cancer patients were eligible for the study, 25 of them were luminal HER2 positive and the 34 were control group of luminal HER2 negative. We found that HER2 positive luminal breast cancer patients were having more unfavorable risk factors and have more incidence of relapse mainly after 48 months follow-up than other luminal patients: after 24 months follow-up period HER2 positive luminal patients have cumulative DFS of 91% compared with 93% in luminal HER2 negative patients but after 48 months follow-up the difference between the two groups became more obvious as it was 66% for luminal HER2 positive group and 90% for the control group. High risk patients for luminal HER2 positive breast cancer patients have higher risk of relapse [60% compared with 86%], and this appeared also in other subgroups. Conclusion: HER2 positive luminal breast cancer patients have a higher incidence of relapse compared with other luminal breast cancer, and this difference appear mainly after 48 months of follow-up. High risk patients for luminal HER2 positive breast cancer have higher risk of relapse than high risk patients of other luminal patients.

### **Substrate-dependent activity of ERK and MEK proteins in breast cancer [MCF7], and kidney embryonic [Hek-293] cell lines, cultured on different substrates.**

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 35-40

**Keywords:** MCF-7 Cells; Extracellular Signal-Regulated MAP Kinases; Mitogen-Activated Protein Kinases; HEK293 Cells; Cells, Cultured; Cell Culture Techniques

**Abstract:** Background: Breast cancer has been one of the most common types of cancer, as the leading cause of women death in world. Breast cancer has known as a heterogenic disease that the clinical path in different patients would be very different. Since the current classification has not covered the diverse clinical course of breast cancer, lots of efforts has done to find new biological markers. Integrins are hetero dimmer

proteins of alpha and beta subunits on cell membrane. After binding to extra cellular matrix [ECM], integrins activate MAPK pathway that regulated different activities like survival, differentiation, migration, immunologic response. The interaction of integrins and ECM have a key role in cancer cell activities like survival and metastasis. Objectives: In this study the expression alpha $\beta$ 3 integrin, substrate-dependent morphology and ERK and p-ERK activation was compared in MCF7 and Hek-293 cells lines. Materials and Methods: The expression alpha $\beta$ 3 integrin was assayed by flow cytometry. These cell lines were cultured on pre-covered plates with fibronectin [FN], fibrinogen [Fg] or collagen [Col] and the expression of ERK and p-ERK proteins was assessed in attached and free cells for each substrate after 1 hour incubation. The morphology of the cells have examined under an inverted phase contrast microscope at 15 min, 1 hour, 3 hours, 5 hours and 1 day of incubation. Results: Different substrate induced the expression ERK or p-ERK differently in the two cell lines. In MCF7 cells, substrates induced the expression of ERK in all the attached cells but free cells in BSA, collagen and Fg showed a lower expression of ERK. In comparison with Hek-293 cells although all the attached cells have expressed ERK protein but only free cells in collagen plates showed the expression of ERK. None of the cell lines has shown any expression of ERK and p-ERK in attached or free cells except for the Hek-293 free cells in collagen plates that have shown a weak signal for p-ERK. Conclusions: Overall the breast cancer cell lines MCF7 and Hek-293 cells have differently responded on similar substrates regarding morphology or ERK and MEK expressions.

### **Ultrasound accuracy in determining the tumor depth for boost field radiotherapy in breast cancer in comparison with CT scan plus clips.**

Aghili, Mahdi; Tahmtan, Mohammad Reza Barzegar; Samiee, Farhad; Haddad, Peyman; Hashemi, Farnaz Amouzgar; Maddah, Afsane; Farhan, Farshid; Alikhasi, Afsane; Omranipour, Ramesh; Nedae, Hasnali; Kaviani, Ahmad

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 11-14

**Keywords:** Radiotherapy; Surgical Instruments; Tomography, X-Ray Computed; Ultrasonography

**Abstract:** Background: There are miscellaneous methods of boost field determination with different levels of accuracy. One of the important parameters in boost field planning is the tumor bed depth, as it is important for determining electron energy. Objectives: The purpose of present research was the determination of ultrasound accuracy to estimate the appropriate depth for the tumor bed. Patients and Methods: Patients who were undergone breast conservative surgery with placing of 5 clips in the tumor bed [lower, upper, medial, lateral, and posterior] were included. The depth and location of the tumor bed were determined using ultrasonography. The optimum field boost was planned with an appropriate 2.5 cm margin. After putting the marker on the field boost, the CT simulation was done and then the obtained depth of the ultrasound report and that of the CT scan-clips were compared. Results: Twenty five patients were included. The average depth reported by the ultrasound was about 18 mm  $\pm$  3 mm [range 10-26 mm], and the average obtained from the CT scan-clips was about 48 mm  $\pm$  13 mm [range 24-80 mm], [P Value = 0.001]. In almost all cases, the depth obtained from the ultrasound was less than that obtained from the CT scan-clips. Conclusions: Ultrasound is not an accurate method to determine the appropriate depth and field for determination of breast field boost. Thus, it is better not to use ultrasound to estimate the tumor cavity depth; the CT scan images with surgical clips should be used instead.

### **diagnosis**

### **Non invasive XRF analysis of human hair for health state determination of breast tissue.**

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**Iranian Journal of Cancer Prevention** 2015; 8 (6): 19-22

**Keywords:** Hair; Breast; Spectrometry, X-Ray Emission; Mammography

**Abstract:** Background: Using hair samples to analyze the trace element concentrations is of interest among many researchers. X-ray fluorescence [XRF] and X-ray diffraction [XRD] are the most common methods in studying the structure and concentration of elements of tissues and also crystalline materials, using low energy X-ray. Objectives: In the present study, the detection ability of Wave Length X-ray Fluorescence [WLXRF] of breast cancer at early stages was evaluated and the results were compared with other routine modalities such as mammography. Materials and Methods: Hair samples of 54 women [including 27 healthy and 27 patients] with average age of 52.03  $\pm$  11.44 years were analyzed. All the sample donors were Iranian women. For the measurements Wave Length X-ray Fluorescence [WLXRF] method was used. Results: Trace elements in healthy individuals were higher than those in cancer patients. In addition, sensitivity of the used method [WLXRF] was 96% compared to mammography [77%] as a gold standard for breast cancer detection. Conclusions: Trace elements in healthy individuals were higher than cancer patients and it seems that WLXRF may be used as a safe, low cost and reliable method with sensitivity higher than those of the other two relevant methods, XRD and mammography.

## drug therapy

### Targeted therapies in the management of breast cancer.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 38-43

**Keywords:** Disease Management; Receptor, ErbB-2; Genes, BRCA1; Genes, BRCA2; Drug Delivery Systems

**Abstract:** The incidence of cancer is increasing in the United Kingdom. Breast cancer is the most commonly diagnosed cancer among women in the UK with an age standardised rate of 124 per 100,000 women. It accounts for almost one-third of all female cases of cancer in the UK and it is the most common form of cancer among women in both developing and developed countries. There are many management options for cancer such as surgery, chemotherapy and radiotherapy. Surgery has been the main treatment option for many solid tumours for several decades. However, research has shown that attacking specific targets within tumours such as receptors, intracellular proteins and genes could result in better clinical outcome. Promising therapeutic targets that have been identified include Raf kinase, Src, HER2, epidermal growth factor receptor and vascular endothelial growth factor receptor. After several decades of intensive research, it appears that we are finally hitting cancer where it hurts. It is very likely that in the near future, more targets for potential therapies would be identified and ultimately, there would be significant reduction in morbidity and mortality from cancers, including breast cancer.

## pathology

### Spinal metastasis of breast cancer presenting after 25 years:an extremely rare presentation.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 24-27

**Keywords:** Neoplasm Metastasis; Rare Diseases; Developing Countries; Radiotherapy; Spinal Neoplasms

**Abstract:** Breast cancer is the most frequently diagnosed cancer in females of the developed world and is gradually becoming the leading cause in the developing world as well. The innate biology of breast cancer is marked by varied presentations, characteristics, response, recurrence and metastatic phenomenon. Even an early stage breast cancer has the potential to recur and/or metastasize after extremely long duration and this possibility should be borne in the clinician's mind.

## radiotherapy

### A literature survey on cost-effectiveness of proton beam therapy in the management of breast cancer patients.

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**Iranian Journal of Cancer Prevention** 2015; 8 (6): 1-4

**Keywords:** Proton Therapy; Cost-Benefit Analysis; Disease Management; Heart Diseases; Brain Neoplasms; Prostatic Neoplasms

**Abstract:** Context: Proton therapy has currently used to treat brain, spinal and prostate cancers, as well as Breast cancer. Proponents have cited the modality's ability to spare healthy tissue, but critics have claimed the benefit gained from its use has not validated its cost in comparison with photon therapy. The aim of this study was evaluation of proton therapy cost effectiveness versus photon therapy, in the Breast Cancer management through a literature survey Evidence Acquisition: Standard search strategies covering the querying of available online databases [MEDLINE[registered], PubMed, EMBASE and Cochrane] have been applied. Database searches have conducted in an iterative manner during June-September 2015 to retrieve articles related to our policy. No specific key words have required as inclusion criteria; a relatively small number of studies exist on this topic, so a "bottom-up" search strategy has required. Results: Three studies have modeled the costs and cost-effectiveness of PBT in breast cancer. The ICER has lied below the threshold for women at high risk of cardiac disease and so it could be judged cost-effective whereas it was above this threshold for other patients. The cost per QALY has gained would, however, be considerably lower if a population with high-risk of developing cardiac disease has treated. Conclusions: It has concluded that proton therapy for breast cancer could be cost-effective if appropriate risk groups have chosen as targets for the therapy. Also the number of patient whose radiation therapy has considered in their treatment schedule, was other important factor which could affect the decision on PBT cost effectiveness.

## Budd-Chiari Syndrome

### Inferior vena cava web causing Budd-Chiari syndrome.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 148-149

**Keywords:** Vena Cava, Inferior; Ultrasonography; Magnetic Resonance Imaging

## Bundle-Branch Block

### Right bundle branch block and electromechanical coupling of the right ventricle: an echocardiographic study.

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**Heart Views** 2015; 16 (4): 137-143

**Keywords:** Heart Ventricles; Ventricular Function; Echocardiography; Hypertension, Pulmonary; Retrospective Studies; Systole

**Abstract:** Background: A growing body of evidence suggests that the presence of a right bundle branchblock [RBBB] is a negative prognostic indicator in patients with and without preexisting heart disease. Even though electromechanical activation of the right ventricle [RV] in patients with RBBB and pulmonary hypertension [PH] has been investigated; a direct comparison of the presence of RBBB, on the duration of RV mechanical systole using echocardiography has not been studied. Materials and Methods: In this retrospective study, we analyzed the echocardiograms of 40 patients by measuring the magnitude and timing of tricuspid annulus plane systolic excursion [TAPSE] and tricuspid annulus systolic velocity [TA S']. Patients were selected to form four groups of ten patients based on the presence or absence of RBBB and PH to determine if RBBB has any effect on the time-to-peak of TAPSE or TA S', which for our purposes serves as a measure of duration of RV mechanical systole. Results: Our results demonstrate that RBBB leads to a measurable prolongation of TAPSE and TA S' in patients without PH. Time-to-peak of TAPSE or TA S' was not significantly prolonged in patients with PH. Conclusions: The results of this pilot study show that RV mechanical systole is prolonged in patients with RBBB, and the addition of PH attenuates this change. Additional prospective studies are now required to elucidate further the electrical and mechanical dyssynchrony that occurs as a result of RBBB, and how these new echocardiographic measurements can be applied clinically to risk stratify patients with RBBB and PH.

## Burns

### Beneficial effects of silver foam dressing on healing of wounds with ulcers and infection control of burn patients.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1334-1339

**Keywords:** Wound Healing; Ulcer; Silver; Bandages; Infection Control

**Abstract:** Objective: To assess the beneficial effects of silver foam dressing on the healing of wounds with ulcers and infection control of burn patients. Methods: Eighty-four second-degree burn patients were selected and divided into a study group and a control group [n=42]. After disinfection and cleaning, wound beds of the study group were covered with silver-containing soft-silicone foam dressing, and wound surfaces of the control group were wiped with 1% silver sulfadiazine cream [60 g/100 cm<sup>2</sup>]. The two groups were checked weekly to observe wound healing progress and adverse reactions of the skin around wounds. Wound secretions were collected and subjected to bacterial culture. Related indices were recorded and quantified. Results: Thirty seven cases of the study group [88.1%] and 36 cases of the control group [85.7%] recovered to normal, and 3 [7.1%] and 2 cases [4.8%] in the two groups failed to recover. The recovery rates of the two groups were similar [P>0.05], but unrecovered patients in the study group had significantly higher proportions of repaired wounds [P<0.05]. Wounds of the study group were healed significantly more rapidly than those of the control group [22.3+/-3.1 vs. 25.1+/-4.4, P<0.05]. The study group had significantly higher proportions of repaired wounds from Day 7 to Day 21 [P<0.05], but the difference became less obvious with extended time to Day 28. The bacterial culture-positive [exceeding 10<sup>5</sup>] organisms per gram of tissue] rates of both groups significantly reduced after treatment [Day 7 for the study group and Day 14 for the control group], and the rate of the study group was significantly lower at last [P<0.05]. The study and control groups were observed 134 and 149 person-times respectively, with the normal wound-surrounding skin rates of 96.3% [129/134] and 88.6% [132/149] [P>0.05 except for on Day 14]. Except for on Day 28, the study group had significantly lower pain scores than those of the control group [P<0.05], especially on Day 7 and Day 14 [P<0.01]. From Day 7 to Day 28, the study group was significantly less prone to burning sensation than the control group [P<0.05], but both groups felt anxious during dressing change [P>0.05]. Dressing of the study group was changed significantly more easily [P<0.05], but the fixing outcomes were similar [P>0.05]. Conclusion: Silver foam dressing rapidly, easily and safely resisted wound bacteria, promoted wound healing and shortened recovery time, effectively relieving the pain of patients.

## veterinary

### **The effects of topical dimethyle sulfoxide on second-degree burn wound healing in dogs.**

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 6-12

**Keywords:** Dimethyl Sulfoxide-administration and dosage; Dimethyl Sulfoxide-therapeutic uses; Wound Healing; Dogs

**Abstract:** Burn injury is a major cause of death and disability worldwide. Healing of burn wounds still remains a challenge to modern medicine. The aim of this study was to investigate the effects of Dimethyl sulfoxide [DMSO] on a second-degree burn wounds and compare it with that of silver sulfadiazine [SSD] 1% cream in dogs. A standard deep second-degree burn wound was produced, five dogs, each dog have three groups, DMSO, SSD and control [untreated]. The efficacy of treatment was assessed based on the healing percentage of the wound, time to complete wound healing and the degree of inflammation. Wound contraction was higher in the DMSO group than both SSD and the control group. It was significantly higher in the DMSO group than the control group on days 21 and 24 [P < 0.05]. The mean times for wound complete closure were 24.4 +/- 2.23 and 25.7 +/- 2.31 days for DMSO and SSD, respectively, being shorter for DMSO but not significantly [P > 0.05]. Clinically, inflammatory reaction was less in DMSO group than the control group. Topical application of DMSO has significant positive effects on the healing of burn wounds in a dog model.

## Bursitis

### therapy

### **Comparison for efficacy of general exercises with and without mobilization therapy for the management of adhesive capsulitis of shoulder - an interventional study.**

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1372-1376

**Keywords:** Shoulder; Exercise; Musculoskeletal Manipulations

**Abstract:** Objective: The aim of this work was to evaluate the effectiveness of exercise with manual therapy and exercise alone in adhesive capsulitis of the shoulder. Method: This randomized study was conducted at institute of physical medicine and rehabilitation Dow University of Health Sciences, Karachi between January, 2014 and July, 2014. Forty four participant age between 25-40 years were recruited. Twenty two participants were allocated to exercise and manual therapy group and 22 participants were allocated to exercise only group. Exercise and manual therapy group received general exercises and Maitland mobilization on shoulder joint whereas exercise group only received general exercises. Both interventions were carried out 3 times a week for 5 consecutive weeks. Pre and post intervention scores of Visual analogue scale [VAS], range of movement and Shoulder Pain and Disability Index [SPDI] were recorded. Paired sample t-test was used to analyze the results within groups. Results: After 5 weeks of intervention both groups made significant improvements in all outcome measures [p < 0.001]. Intra group analysis showed no significant difference between two groups [p > 0.05]. Mean VAS and SPADI difference was 2.23 and 22 in General exercise and manual therapy group and 2.33 and 23 in General exercise group respectively. Conclusion: Both exercises with manual therapy and exercises alone are equally effective in the management of adhesive capsulitis of the shoulder joint.

## Candida

### isolation and purification

### **Species identification and antifungal susceptibility profile of candida isolates from ICU patients in Sohag University hospital, Upper Egypt.**

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 89-97

**Keywords:** Intensive Care Units; Candida-genetics; Candidiasis-etiology; Chromatography, Agarose; Polymerase Chain Reaction; Polymorphism, Restriction Fragment Length

**Abstract:** Background: Candida species are among the most common fungal pathogens in ICU patients. Candida albicans was the predominant species, but a shift toward non-albicans Candida species has been recently observed. Objectives: To detect the prevalence of different Candida species and determine their antifungal susceptibility profile in ICU patients using phenotypic methods, the Vitek 2 system compared with CHROMagar Candida agar and a genotypic method; PCR-RFLP. Methodology: Various clinical samples were collected from 248 ICU patients in Sohag University Hospital from the period between September 2014 and May 2015. Samples were cultured on CHROMagar Candida agar. Results were compared with those of Vitek 2 system and confirmed by PCR- RFLP method and antifungal susceptibility profiles were analyzed by disc diffusion and Vitek 2 antifungal susceptibility tests. Results: The study revealed an overall isolation rate of Candida species among ICU patients was 29% by PCR-RFLP. Candida albicans was the most frequent species isolated [40.3%]. Non- albicans Candida species including Candida tropicalis [22.2%], Candida glabrata [18%], Candida krusei [12.5%], C. parapsilosis [4.2%], C. dubliniensis [1.4%] and Candida guilliermondii [1.4%] were also isolated. The sensitivity of vitek 2 with regard to correct identification of Candida species was 96%; the specificity was 100%, also CHRO Magar Candida agar enable the correct identification with sensitivity 89%, specificity 100%. Vitek 2 antifungal susceptibility tests results were found to be an accurate method as it was compared with the disc diffusion method for fluconazole, voriconazole and amphotericin B. Conclusion: CHROMagar Candida agar supported by Vitek 2 system is a valuable method for identification of common Candida species, these methods are easy to interpret and give rapid results in comparison with the expensive PCR-RFLP method. Although amphotericin B and fluconazole are widely used in clinical practice, there was no evidence of enhanced resistance. Moreover, voriconazole could be used in treatment of fluconazole-resistant Candida species.

## Candida albicans

### pathogenicity

#### Effect of artificial milk formula on germination and biofilm formation of Candida albicans.

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**JMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 25-33

**Keywords:** Candidiasis-etiology; Milk Substitutes; Biofilms; Infant

**Abstract:** Background: Bottle fed infants are prone to increased incidence of candidal colonization and infection. Objectives: The current study aimed at testing the effect of an artificial milk formula used in bottle feeding on Candida albicans germination and biofilm formation. Methodology: C. albicans ATCC 10231 was submitted for germination and biofilm formation tests under the effect of different concentrations of one of the common artificial milk formulas available in the market [AMF-A] which is both cow's milk and soy based. Germination was tested under 0.25%, 0.5% and 1% [vol/vol] of AMF-A in phosphate buffered saline [PBS], while concentrations in biofilm tests were 1%, 5%, 10%, 15% [vol/vol] of AMF-A in yeast nitrogen base [YNB] broth. Biofilms were grown on silicone discs and quantified by crystal violet staining with determination of the optical densities [ODs] and colony forming units [CFUs] counting. The structure of the biofilms was studied by light microscopic examination after crystal violet staining. Results: All tested concentrations of AMF induced germination of the tested strain, as the germination percentages after 4 hours were 40%, 53% and 60% for AMF 0.25%, 0.5% and 1%, respectively. Both ODs and CFUs revealed that the adding of AMF to YNB has synergistic effect on biofilm formation. Microscopically, most of the formed biofilms were of low density but the density was increasing with increasing incubation time. Conclusion: The tested AMF enhanced germination and biofilm formation of C. albicans, and consequently its virulence, and although the biofilms were weak, they still can provide sources for continuous oral candidal colonization in the bottle fed infants.

## Cardiomyopathy, Dilated

### diagnosis

#### Noncompaction cardiomyopathy: case presentation with cardiac magnetic resonance imaging findings and literature review.

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**Heart Views** 2015; 16 (4): 164-167

**Keywords:** Isolated Noncompaction of the Ventricular Myocardium-diagnosis; Magnetic Resonance Imaging; Review Literature as Topic; Echocardiography

**Abstract:** Left ventricular noncompaction cardiomyopathy is a very rare condition, yet believed to be often overlooked. It is thought to be caused by the developmental arrest in embryogenesis and characterized by an increase in the noncompacted, trabeculated myocardium adjacent to compacted myocardium in the left ventricular. The clinical presentations of this type of cardiomyopathy are of variable severity. Echocardiography used to be the diagnostic modality, but recent reports suggest that cardiac magnetic resonance imaging has higher sensitivity and specificity by showing a ratio of the noncompacted myocardium to compacted myocardium of > 2.3.

## Cardiomyopathy, Hypertrophic

### Schwarz type C myocardial bridge unraveled post-thrombus aspiration in a patient with hypertrophic cardiomyopathy.

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**Heart Views** 2015; 16 (4): 144-150

**Keywords:** Myocardial Bridging; Percutaneous Coronary Intervention; Thrombosis; Thrombectomy; Suction; Myocardial Infarction

**Abstract:** Hypertrophic cardiomyopathy [HCM], a heterogenous disease with diverse pathology and variable clinical course has a high prevalence of myocardial bridging. Despite the high prevalence of myocardial bridging in HCM patients, acute ST-elevation myocardial infarction [STEMI] due to concomitant atherothrombosis proximal to Schwarz type C myocardial bridge unraveled during trans-radial primary percutaneous intervention has rarely been reported in medical literature. Herein, we report a case of Schwarz type C myocardial bridge unmasked postthrombosuction in a patient with HCM presenting with acute STEMI. He had atherothrombosis proximal to the tunneled left anterior descending artery which was successfully stented with drug-eluting stent without the aid of intravascular ultrasound.

## Cardiovascular Diseases

### epidemiology

### A community-based cross-sectional study of cardiovascular risk in a rural community of Puducherry.

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**Heart Views** 2015; 16 (4):131-136

**Keywords:** Risk Factors; Rural Population; Cross-Sectional Studies; Prevalence; Surveys and Questionnaires

**Abstract:** Background: The World Health Organization [WHO] / International Society of Hypertension [ISH] risk prediction chart can predict the risk of cardiovascular events in any population. Aim: To assess the prevalence of cardiovascular risk factors and to estimate the cardiovascular risk using the WHO/ISH risk charts. Materials and Methods: A cross-sectional study was done from November 2011 to January 2012 in a rural area of Puducherry. Method of sampling was a single stage cluster random sampling, and subjects were enrolled depending on their suitability with the inclusion and exclusion criteria. The data collection tool was a piloted and semi-structured questionnaire, while WHO/ISH cardiovascular risk prediction charts for the South-East Asian region was used to predict the cardiovascular risk. Institutional Ethics committee permission was obtained before the start of the study. Statistical analysis was done using SPSS version 16 and appropriate statistical tests were applied. Results: The mean age in years was 54.2 +/- [ 11.1] years with 46.7% of the participants being male. On application of the WHO/ISH risk prediction charts, almost 17% of the study subjects had moderate or high risk for a cardiovascular event. Additionally, high salt diet, alcohol use and low HDL levels, were identified as the major CVD risk factors. Conclusion: To conclude, stratification of people on the basis of risk prediction chart is a major step to have a clear idea about the magnitude of the problem. The findings of the current study revealed that there is a high burden of CVD risk in the rural Puducherry.



## Catheterization, Peripheral

### adverse effects

#### Retrieval of embolized intracardiac peripherally inserted central catheter line: Novel percutaneous technique by utilizing a flexible biopsy forceps.

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*Heart Views* 2015; 16 (4): 154-157

**Keywords:** Embolism; Surgical Instruments; Biopsy; Heart

**Abstract:** Peripheral catheter embolization to the heart is common but infrequently reported. In view of the hazardous complications of thrombosis, embolism, infection, arrhythmia and even death, percutaneous retrieval of such foreign bodies is usually attempted. Previously reported percutaneous technique of retrieval mainly involved the snaring technique. Herein, we report a novel nonsurgical retrieval technique for successful removal of a 46 cm long embolized intracardiac peripherally inserted central catheter by utilizing a flexible biopsy forceps. To the best of our knowledge, the use of flexible biopsy forceps for retrieval has hitherto been unreported and this case report therefore adds to the repertoire of percutaneous retrieval techniques for safe and easy removal of embolized catheters to the heart.

## Cholangiopancreatography, Endoscopic Retrograde

#### A novel guide-wire technique for repositioning a nasobiliary catheter from mouth to nostril without using a Nelaton tube.

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*Medical Principles and Practice* 2015; 24 (4): 339-343

**Keywords:** Catheters; Prospective Studies; Single-Blind Method; Pilot Projects; Suction

**Abstract:** Objective: We aimed to assess the usefulness of a novel guide-wire technique for repositioning without the use of a Nelaton tube and to compare this to the conventional technique. Subjects and Methods: A total of 50 patients who underwent endoscopic nasobiliary drainage [ENBD] at the Yachiyo Medical Center, Chiba, Japan, were enrolled into the study. The patients were randomly divided into 2 groups according to the use of a novel guide-wire technique [n = 28] or the conventional technique [n = 22]. The ENBD catheters were repositioned from the mouth to the nose. The primary end point was the procedural time from the insertion of the Nelaton tube or guide wire into the nostril until the ENBD catheter had been repositioned in the nose. The secondary end point was the success rate of the procedure. Results: The mean procedure time of our technique [120.8 s] was shorter than the traditional technique [131.9 s], but this difference was not statistically significant [p = 0.56]. Our technique did not involve the use of the Nelaton tube, and so could save the cost of USD 1.17 per patient. The novel technique did not require the removal of the mouthpiece with a laryngoscope or the use of a Nelaton tube, and no postural change was necessary. A single operator performed the novel procedure unassisted. No adverse events were observed relating to either the novel or the traditional technique. Conclusions: The novel guide-wire technique for repositioning ENBD catheters was effective and is recommended for use.

## Cholecystectomy

#### Frequency of difficult cholecystectomy in patients with thick walled gall bladder.

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*Pakistan Journal of Medicine and Dentistry* 2015; 4 (2): 10-14

**Keywords:** Cholecystectomy, Laparoscopic; Gallbladder; Cholecystitis

**Abstract:** Background: Laparoscopic cholecystectomy is the procedure of choice for cholecystitis. There are variable rates of conversion of laparoscopic cholecystectomy to open cholecystectomy. Various studies have highlighted gall bladder wall thickness and age as independent risk factors for conversion from laparoscopic to open procedure. This study was done to determine the frequency of conversion of laparoscopic cholecystectomy to open cholecystectomy in patients undergoing laparoscopic cholecystectomy with a gall bladder wall thickness of more than 3mm as determined on pre-operative ultrasound. Objective: To find frequency of conversion to open procedure in patients undergoing laparoscopic cholecystectomy with a gall bladder wall thickness of more than 3mm as determined on pre-operative Ultrasound. Methods: This Case series was conducted at the Surgical Unit IV Civil Hospital Karachi, Pakistan from 15th July 2012 to 15th January 2013. A total of 129 patients were included in the study with gall bladder wall thickness of more than 3mm on Ultrasound. Patients were stratified according to age, sex, gall bladder wall thickness, frequency of

difficult cholecystectomy and duration of disease. Results: A total of 129 patients were included in the study. Female to male ratio is 5.7:1. The mean age of patients was 43.33 +/- 11.5 years. The average gall bladder wall thickness was 4.07 +/- 0.63 mm and duration of disease was 4.53 +/- 4.67 years. Regarding preoperative findings, bleeding during separation from liver bed was the commonest finding in general i.e. 35.7% followed by local adhesions 33.3% and perforation of gall bladder was observed in 7.8% cases. All [n=13] patients who had conversion to an open procedure had wall thickness between 4.1 to 6 mm. Similarly rate of conversion was found to be higher in patients with symptoms for more than 5 years [i.e. 9 out of 24]. Conclusion: Ultrasound for gall bladder wall thickness is a good predictor for difficult cholecystectomy. It should be used as anticipative measure for difficult cases and patient should be properly counseled regarding chances of conversion.

## Cholera

### epidemiology

#### Cholera outbreak in Iraq.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (48): 1

**Keywords:** Cholera-prevention and control; Disease Outbreaks; Vibrio cholerae 01

**Abstract:** Between 15 September to 19 November 2015, the Ministry of Health of Iraq reported to WHO a total of 4,864 labor-atory-confirmed cases of cholera. How-ever, when re-tested at the Central Public Health Laboratory [CPHL] in Baghdad, a total of 2,847 stool samples were found positive for Vibrio cholera 01 Inaba.

### prevention and control

#### Cholera elimination in the Eastern Mediterranean Region.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (30-31): 1

**Keywords:** Disease Eradication; Mediterranean Region; Cholera Vaccines; Cholera-epidemiology

**Abstract:** Cholera continued to threaten public health and claim lives in the countries of Eastern Mediterranean Region [EMR]. During this year, a total of 49,519 suspected cases of cholera including 12 related deaths [CFR: 0.02%] were officially reported to WHO by three Member States in the EMR.

## Cichlids

### growth and development

#### Hygienic effect of supplementing *Oreochromis niloticus* farm with fresh or fermented chicken manure on: water, fish quality and performance.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 79-90

**Keywords:** Fishes; Manure; Chickens; Water Quality; Metals, Heavy

**Abstract:** Nile tilapia [*Oreochromis niloticus*] as an experimental fish were stocked into 7 groups [G] with duplicate treatment. Each group received different mixture of CM or FCM with fish ration [FR], 0: 100, 25: 75, 50: 50 and 100: 0 [% CM or FCM% FR]. Physico-chemical character of water and heavy metal load [Cu, Pb and Zn] of water and fish, as well as fish performance were measured and compared with control group received only fish ration [FR]. Total volatile base nitrogen [TVB-N] was also used for determining fish quality. Unionized ammonia [UIA] was significantly high [P<0.05] at groups received FCM resulted in 100% mortality in such groups. TVB-N values were significantly [P<0.05] higher in group received 100% FCM compared to the control group. Heavy metals load [zinc, copper, lead] at water samples showed no significant difference among the examined groups, however slight decrease were observed at groups received FCM. While in fish flesh zinc only was detected above permissible limits in G4 [100%CM] and G7 [100%FCM]. Specific growth rate [SGR] percentage were lower at groups received CM and FCM.

## Cleft Lip

### Evaluation of cleft lip and palate management in Erbil.

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**Zanco Journal of Medical Sciences** 2015; 19 (1): 866-873

**Keywords:** Cleft Palate; Disease Management; Prospective Studies; Consanguinity; Child

**Abstract:** Background and Objectives: Cleft lip and palate are congenital deformities that affect the primary and secondary palates during embryogenesis. The objectives of this study was to record the pattern of presentation of cleft lip and palate in Erbil, the types of surgical procedures, the outcome and complications, hence making recommendations to ensure improved care. Methods: This is a prospective study conducted in Erbil city, in the Department of Plastic Surgery at Rezgary Teaching Hospital and Rapareen Pediatric Hospital from March 2009 to May 2013. A total of 164 patients with cleft lip/palate were included in this study. Statistical package for the social sciences [version 18] was used for data entry and analysis. Results: The age ranged from birth to 24 years. The ratio of male to female was 1.4: 1. The combined cleft lip and palate was the commonest type [87 cases, 53%]. The commonest risk factor was poor family [105 cases, 64%], followed by consanguinity [97 cases, 59%]. The commonest procedure for cleft lip repair was Millard [67 cases] and that for cleft palate repair was Furlow palatoplasty [57 cases]. The commonest complication of cleft lip repair was wide scar [9 cases, 7.5%] mostly below one year of age. Ninety-one percent of the parents were satisfied with the children's appearance of the lip and 86% of parents were satisfied with palatoplasty result. Conclusion: The high degree of association of consanguinity with the cleft lip and palate emphasizes the importance of education about discouraging consanguineous marriage. Millard repair is still the commonest procedure for cleft lip repair.

## Clubfoot

### Factors predicting brace noncompliance among idiopathic clubfoot patients treated with the Ponseti method.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 444-448

**Keywords:** Braces; Patient Compliance

**Abstract:** Objectives: The purpose of this study was to determine the compliance of parents of children with clubfeet treated with the Ponseti method and to identify factors that may predict brace non-compliance. Methods: A myriad of factors affecting families' compliance were assessed by administering questionnaires to 108 patients with clubfoot from December 2009 to January 2012. The family's demographic data, including monthly income, educational level of the parents, number of children in the family, and other factors, were studied and statistically analysed. Results: All 108 patients had severe clubfoot. The parents of 72 [66.7%] patients complied with the use of the brace compared to 36 [33.3%] parents who did not comply. Unilateral clubfoot was a significant risk factor for non-compliant parents compared to bilateral clubfoot [ $p = 0.05$ ]. Parents with 3 or more children had more non-compliance [66.7%] compared to those with less than 3 children [38.9%]. All non-compliant parents reported that their babies cried during the application of the brace in contrast to 25% of the compliant parents [ $p < 0.0001$ ]. The majority of non-compliant parents [94.4%] reported being "fed up" with using the brace compared to 2.8% of the compliant parents. No significant correlation was found between brace use and parents' monthly income or their level of education. Conclusion: More children per family, unilateral clubfoot, and the inability of a single parent alone to apply the brace were found to be major risk factors for brace non-compliance. Families' awareness about the importance of the brace and encouragement might improve brace compliance.

## Colitis, Ulcerative

### Developing a novel risk-scoring system for predicting relapse in patients with ulcerative colitis: a prospective cohort study.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1511-1516

**Keywords:** Prospective Studies; Cohort Studies; Recurrence; Risk Factors

**Abstract:** Objectives: Ulcerative Colitis [UC] follows a natural clinical course of relapses and remissions. The aim of this study was to construct a risk-scoring formula in order to enable predicting relapses in patients with UC. Methods: From October 2012 to October 2013, 157 patients from Shiraz, southern Iran who were diagnosed with UC and in remission were enrolled. At 3-month intervals, multiple risk factors of hemoglobin, complete blood counts, serum iron and albumin, erythrocyte sedimentation rate, and faecal calprotectin levels,

sex, age, cigarette smoking, positive family history of inflammatory bowel diseases, past history of appendectomy, extra-intestinal accompanying diseases, extent of disease at the beginning of study, number of previous relapses, duration of disease and duration of remission before the study were assessed. Univariate and multivariate logistic regression were applied to fit the final model. The newrisk-scoring system accuracy was assessed using receiver-operating-characteristics [ROC] curve analysis. Results: Seventy four patients [48.1%] experienced a relapse. Multivariate analysis revealed that relapses could significantly be predicted by the level of fecal calprotectin [OR=8.1], age [OR=9.2], the Seo activity index [OR=52.7], and the number of previous relapses [OR=4.2]. The risk scoring formula was developed using the regression coefficient values of the aforementioned variables. Conclusion: Four predictor variables were significant in the final model and were used in our risk-scoring formula. It is recommended that patients who achieve high scores are diligently observed, treated, and followed up.

## Colonic Neoplasms

### Comparison of emergency surgeries for obstructed colonic cancer with elective surgeries: a retrospective study.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1322-1327

**Keywords:** Emergency Treatment; Retrospective Studies; Morbidity; Postoperative Complications; Elective Surgical Procedures

**Abstract:** Objective: Colon cancer patients presented with obstruction were known to have worse postoperative morbidity and mortality rates, but conflicting data has been reported in recent years. We aimed to investigate postoperative complication rates, and short and long-term oncological outcomes in patients with colon cancer treated with either emergency surgery due to obstruction or elective surgery. Methods: Two hundred fifty two patients were analyzed. Patients presented with obstruction and underwent an emergency surgery, and patients operated under elective circumstances were compared according to their demographic variables, tumor characteristics, and short and long term treatment outcomes. Results: Distribution of age, gender and comorbidities were similar between both the groups. Need for an end colostomy was significantly higher in obstructed patients [22.7% vs 1.6%, respectively]. Obstructed patients were tending to be at an advanced stage. Postoperative morbidity and mortality, and prognosis of colon cancer patients presented with obstruction is worse than patients operated under elective circumstances. Conclusions: Colon cancer patients presented with obstruction constitutes more than one quarter of all patients. These patients have significantly higher morbidity and mortality rates. Obstructed colon cancer usually appears at advanced stage. Primary resection and anastomosis is safe in most of the cases.

### Incidental splenic littoral cell angioma complicating a case of colon cancer: a case report.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 14-17

**Keywords:** Incidental Findings; Hemangioma; Splenic Neoplasms

**Abstract:** Littoral cell angioma [LCA] is a recently described rare generally benign primary vascular neoplasm of the spleen originating from the lining cells of the splenic red pulp sinuses that is usually discovered incidentally. LCA may be associated with epithelial malignancies and may itself also have malignant potential. We report the case of a 71-year-old woman who presented with intraoperative bleeding from the spleen during sigmoidectomy for colonic adenocarcinoma. Histopathological examination of the removed spleen revealed multiple haemorrhagic lesions diagnosed as littoral cell angioma. This case has been reported due to its rarity and to highlight how its accidental detection, unique and unexpected presentation complicated a case of colonic carcinoma. Individuals diagnosed with this tumour must be carefully evaluated to exclude primary, secondary and synchronous malignancies.

### Verification of ALDH activity as a biomarker in colon cancer stem cells-derived HT-29 cell line.

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 27-34

**Keywords:** Aldehyde Dehydrogenase; Isoenzymes; Retinal Dehydrogenase; Biomarkers, Tumor; Neoplastic Stem Cells; HT29 Cells; Antigens, CD44; Antigens, Neoplasm; Cell Adhesion Molecules

**Abstract:** Background: Recent evidence has suggested that epithelial cancers including colorectal cancer [CRC] have driven by a small population of self-renewing, multi-potent cells termed cancer stem cells [CSCs] which could be responsible for recurrence of cancer. Aldehyde dehydrogenase 1 [ALDH1] activity has used as a functional stem cell biomarker to isolate CSCs in different cancers such as colorectal cancer. Objectives: The main aim of this research was to determine the utility of ALDH1 activity along with CD44 and EPCAM in identifying stem cell-like cells in human HT-29 colonic adenocarcinoma cell line. Materials and Methods: In this experimental study, colon CSCs biomarkers including CD44, EPCAM and ALDH1 in colonospheres and parent

cells have analyzed by flow cytometry. The expression levels of stemness genes in spheroid and parental cells have investigated using SYBR Green real-time PCR. In addition, in vivo xenografts assay has performed to determine tumorigenic potential of tumor spheroid cells in nude mice. Results: According to results, over 92% of spheroids were CD44+/EpCAM+, while parent cells only have expressed 38% of CD44/EpCAM biomarkers [P < 0.001]. Controversially, ALDH activity was about 2-fold higher in the parent cells than spheroid cells [P < 0.05]. In comparison with the parental cells, expression levels of "stemness" genes, like Sox2, Oct4, Nanog, C-myc, and Klf4 have significantly increased in colonosphere cells [P < 0.05]. Further, administration of 2500 spheroids could be sufficient to initiate tumor growth in nude mice, while 1x10<sup>6</sup> of parental cells has needed to form tumor. Conclusions: For the first time, we have shown that colonospheres with low ALDH1 activity has indicated increased tumorigenic potential and stemness properties. So, it hasn't seemed that ALDH1 could become a useful biomarker to identify CSCs population in HT-29 cell line.

## Colorectal Neoplasms

### Adherence and barriers to colorectal cancer screening varies among Arab Americans from different countries of origin.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 116-120

**Keywords:** Mass Screening; Arabs

**Abstract:** Background and study aims: Arab-Americans [ArA] in Michigan, USA had the lowest colorectal cancer screening [CRCS] in 2008 compared to the state's general population [45.6% vs. 60.8%]. The adherence rate and barriers to CRCS have been identified in a previous study; however, these differences have been not examined among ArA from different countries of origin. Patients and methods: Community-based study through a survey filled by 130 Arab-Americans aged  $\geq$  50 years. Demographic information and information about CRC screening knowledge were obtained. Responses were compared between the two largest population groups [Lebanese and Yemenis]. Results: The majority of the participants [80%] were from Lebanon [52.3%] and Yemen [27.7%]. Majority of the Yemenis group have never been screened for CRC [72.2% vs. 27.9%, p < 0.001]. Majority of the unscreened Yemenis were males [100% vs. 63.2%, p = 0.002]. Both unscreened groups had similar length of residence in U.S., citizenship status, education level, health insurance and access to primary care physicians. Unscreend Lebanese had a higher family history of CRCS [31.6% vs. 0%, p = 0.002]. The most common reported barrier for both groups was the misconception that CRCS is not necessary [62% for Yemenis and 42% for Lebanese, p = 0.197]. Unscreend Yemenis were more unaware about CRCS [46% vs. 11%, p = 0.002]. Conclusion: CRC screening rates vary among Arab-Americans from different countries of origin. Physicians should consider the country of origin when recommending CRC screening to Arab-Americans.

### Reporting of the circumferential tumour margin involvement and preoperative levels of carcinoembryonic antigen as prognostic risk factors in colorectal cancer patients.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 113-115

**Keywords:** Carcinoembryonic Antigen; Preoperative Period; Risk Factors; Retrospective Studies; Prospective Studies

**Abstract:** Background and study aims: The two very important prognostic risk factors of colorectal cancer are circumferential tumour margin [CTM] involvement and preoperative levels of carcinoembryonic antigen [CEA]. The aim of this study is to monitor the frequency of reporting of the CTM in the postoperative pathology reports after colorectal cancer resection in addition to monitoring the frequency of reporting of preoperative levels of CEA and exploring the possibility of improving the frequency of reporting of both. Patients and methods: Reports of the CTM and preoperative level of CEA were found in 730 [664 retrospective and 66 prospective] patients with colorectal cancer. The possibility of improving the incidence of reporting was estimated by comparing the reporting frequency of both [retrospective and prospective] groups. Results: The percentage of reporting the involvement of the CTM was 46.08% and 81.81% for the retrospective group and the prospective group, respectively. The percentage of reporting the preoperative CEA levels was 40.9% and 68.7% for the retrospective and the prospective groups, respectively. There was a statistically significant difference in reporting both CTMs and the preoperative level of CEA between retrospective and prospective groups to the side of prospective group in which the p-value was <0.0001 for both groups. Conclusion: There was inadequate reporting of both the CTM involvement and preoperative levels of CEA in the retrospective patients with statistically significant improvement of this reporting in patients in the prospective group. This may point to the unawareness of the importance of both in the prognosis of colorectal cancer, which may be because both are not involved in the widely used tumour, node, metastasis [TNM] staging system.

## Communicable Diseases

### epidemiology

#### Emerging Infectious Diseases on the rise in the EMR.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (51): 1

**Keywords:** Communicable Diseases, Emerging; Mediterranean Region; Disease Outbreaks; Middle East Respiratory Syndrome Coronavirus; Influenza A Virus, H5N1 Subtype; Cholera; Hemorrhagic Fevers, Viral

**Abstract:** In 2015, a number of countries in the WHO Eastern Mediterranean Region [EMR] reported emerging infectious diseases [EID]. Some countries reported explosive outbreaks from these EIDs.

## Composite Resins

#### Influence of mouth rinses on the surface hardness of dental resin nano-composite.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1485-1489

**Keywords:** Acrylic Resins; Polyurethanes; Dental Materials; Mouthwashes; Hardness; Microscopy

**Abstract:** Objective: The aim of this research was to assess the effect of mouth rinses with and without alcohol on the hardness of dental nano-filled composite. Methods: The micro-hardness of fifty circular disk shaped specimens of 7 mm x 2 mm were measured after 14 days. Specimens were immersed into alcohol containing [Listerine and Colgate Periogard] and alcohol-free [Prodent and Sensodyne Oral antiseptic] mouth rinse solutions. Artificial saliva served as the control. Vickers Micro-hardness was measured with a 30gram load for 30 seconds dwell time by using a diamond indenter. Significant differences were represented by  $p < 0.05$ , whereas highly significant difference represented by  $p < 0.01$ . The level of significance [p] was calculated with the help of repeated measure ANOVA. For multiple comparisons, Tukey's multiple comparison test was used. Results: Statistical analysis revealed highly significant difference between specimens immersed in artificial saliva [control] and Listerine [ $p < 0.01$ ]. Whereas significant difference were observed between control and Colgate Periogard [ $p < 0.05$ ]. However, no significant difference was observed on comparing Prodent and Sensodyne Oral antiseptic mouth rinses with control group [ $p > 0.05$ ]. Control specimens depicted highest value of micro-hardness [60.5746 +/- 3.2703] compared to the lowest value seen in specimens immersed in Listerine solvent [54.4687 +/- 1.0937]. Conclusion: Alcohol containing mouth rinsing solutions have more deleterious effect on hardness of nano composites as compared to alcohol-free mouth rinses.

## Conflict [Psychology]

#### Ongoing conflict in Yemen: Surveil-lance needs to be stepped up.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (20-21): 1

**Keywords:** Public Health Surveillance; Disease Outbreaks; Referral and Consultation; Health Services; Delivery of Health Care

**Abstract:** The ongoing conflict in Yemen has severely damaged the public health infra-structure in the country. As a result and owing to severe destruction of the public utility services and routine public health services, there is an apprehended risk of major outbreaks in the country as the summer months progress.

## Consanguinity

### The need for population-based studies to estimate the rate of consanguinity in Almadinah Almunawwarah.

Hannan, Mohammed; Basit, Sulman; Almontashiri, Naif A.; Khoshhal, Khalid I.

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Taibah University - Centre for Genetics and Inherited Diseases

*Journal of Taibah University Medical Sciences* 2015; 10 (4): 509-511

**Keywords:** Allied Health Personnel; Education

## Contraception, Postcoital

### Emergency contraception: awareness, attitudes and barriers of Saudi Arabian Women.

Karim, Syed Irfan; Irfan, Farhana; Al Rowais, Norah; Al Zahrani, Basma; Qureshi, Riaz; Al Qadrah, Bedoor Hassan

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King Saud University - King Khalid University Hospital - Department of Family and Community Medicine

*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1500-1505

**Keywords:** Awareness; Attitude; Surveys and Questionnaires; Cross-Sectional Studies; Physicians, Family  
**Abstract:** Objectives: To assess knowledge, attitude, and barriers about emergency contraception [EC] among married women of child bearing age. Methods: A quantitative cross-sectional study was conducted over a 6-month period, commencing in March 2013 at Family Practice Clinics of King Khalid University Hospital [KKUH], Riyadh, Saudi Arabia. Data was collected using a structured pretested questionnaire and analyzed using SPSS version 21.0 statistical software. Result: A total of 242 women were enrolled in the study. Only 6.2% [15/242] had some knowledge of EC and of these only two had ever used it. Health care professionals were the least reported source of EC information [6.6%, n=1]. Majority [73.3%] had negative attitude toward EC being available over-the-counter without a prescription. The most common barriers to using EC were concerns about possible health effects. Only two women [13.3%] considered religious belief as a major hindrance to its use. Conclusion: Awareness of emergency contraception is very low among women of Saudi Arabia. Health care professionals were the least reported source of information, which is a cause for concern. Our findings reveal an urgent need to educate women about EC, keeping in view the social norms and the Islamic values.

## Coronary Vessel Anomalies

### diagnosis

### Incidental spontaneous coronary dissection: an interventionist's dilemma.

Pradhan, Akshyaya; Safal, Safal; Narain, Varun Shankar; Sethi, Rishi

King George's Medical University - Department of Cardiology

*Heart Views* 2015; 16 (4): 158-160

**Keywords:** Vascular Diseases-congenital; Coronary Angiography; Myocardial Infarction; Electrocardiography  
**Abstract:** Spontaneous coronary artery dissection [SCAD] is an uncommon entity, frequently presenting as ST-elevation myocardial infarction [MI] or sudden cardiac death. It is usually reported in association with pregnancy and has a high mortality. We present here a case of asymptomatic dissection of the right coronary artery, incidentally detected, in a young normotensive male when coronary angiography was done following acute anterior wall MI. This patient had none of the risk factors to which SCAD is generally ascribed. While management of the infarct-related artery was clear-cut, whether or not to intervene for this nonocclusive dissection was a difficult decision. A conservative approach was finally adopted for the spontaneous dissection and the patient is faring well till date.

## Coronavirus Infections

### epidemiology

#### Hospital outbreak of MERS-CoV in Saudi Arabia.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (22): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Disease Outbreaks; Hospitals

**Abstract:** In recent time, two concurrent hospital outbreaks from Middle East respiratory syndrome coronavirus [MERS-CoV] infection were reported from Hofuf city of Al-Ahssa region in the Kingdom of Saudi Arabia [KSA].

#### Hospital outbreak of MERS-CoV in Saudi Arabia.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (32-33): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Disease Outbreaks; Hospitals

**Abstract:** Another hospital outbreak from MERS-CoV has been reported from Saudi Arabia in recent time. In this current out-break, two hospitals in Riyadh City have been reported to have been involved. Both these hospitals are not operating under the Ministry of Health of the Kingdom of Saudi Arabia [KSA].

#### Hospital outbreak of MERS-CoV in Saudi Arabia: efforts to contain the transmission continues.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (36): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Disease Outbreaks; Hospitals

**Abstract:** The hospital outbreak from MERS-CoV [reported in the previous issue of Weekly Epidemiological Monitor, vol-8, issue-34 and 35] reported from one of the hospitals in Riyadh city has not yet stopped. As of 31 August 2015, a total of 112 cases of MERS-CoV including 38 deaths were reported to have been linked to this hospital in Riyadh where the hospital outbreak of MERS-CoV is currently ongoing.

#### MERS-CoV in 2015: No major spike.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (18-19): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Disease Outbreaks

**Abstract:** As of 30 April 2015, a total of 1,112 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus [MERS-CoV] were reported to WHO including at-least 422 deaths [CFR: 38%]. So far, 23 countries across the world have reported cases of MERSCoV. Majority of the cases [over 88%] were reported from the countries of the Middle East. In 2015, cases associated with international travel [with direct link to the countries in the Middle East] were reported from Germany and Philippines.

#### MERS-CoV in Oman.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (05-06): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Camels

**Abstract:** In January 2015, the Ministry of Health in Oman, reported to WHO, three new laboratory-confirmed cases of Middle East respiratory syndrome coronavirus [MERS-CoV]. The first reported case died while the two remaining cases were a contact of the first case and survived. The third case did not develop symptoms and was identified during screening of the close contacts of the first case.



**MERS-CoV in Saudi Arabia.**

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (10): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus; Disease Outbreaks; Hospitals

**Abstract:** Since June 2012, Saudi Arabia reported 946 laboratory-confirmed cases of Middle East respiratory syndrome corona-virus [MERS-CoV] including at least 370 related deaths [CFR 39%]. This represent over 88% of all MERS-CoV cases reported globally. During the current year since 01 January tilldate, a total of 117 laboratory-confirmed cases including 48 related deaths [CFR: 41%] were reported from Saudi Arabia. At-least four small scale hospital outbreaks have also been reported from MERS-CoV in Saudi Arabia during the first two months of the current year.

**MERS-CoV spreads to Republic of Korea through international travel.**

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (23-24): 1

**Keywords:** Middle East Respiratory Syndrome Coronavirus

**Abstract:** In recent time, an international traveler with a history of recent visit to four countries in the Eastern Mediterranean Region was laboratory-confirmed as a case of Middle East respiratory syndrome coronavirus [MERS-CoV] infection after the traveler returned back to the Republic of Korea [RoK]. This triggered a wave of unprecedented transmission of the virus in the country and till 14 June, a total of 150 laboratory-confirmed cases of MERS-CoV infection including 15 deaths were reported from RoK. All cases were linked to the index patient which is the international traveler and all cases were reported to have been acquired the infection in hospital settings.

**Cross Infection****etiology****OXA-10 and GES-1 extended-spectrum beta-lactamases play a major role in causing antibiotic resistance of Pseudomonas aeruginosa isolated from nosocomial infections in Ismailia, Egypt.**

Azab, Marwa M.; Shehata, Atef; Mohamed, Mai

Suez Canal University - Faculty of Pharmacy - Department of Microbiology and Immunology

**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 81-88

**Keywords:** Pseudomonas aeruginosa-isolation and purification; Pseudomonas aeruginosa-genetics; Drug Resistance, Microbial; beta-Lactamases; Ampicillin; Cefoxitin

**Abstract:** Background: Pseudomonas aeruginosa causes large percentages of nosocomial infections with high rates of treatment failure due to antibiotic resistance. The production of extended spectrum beta lactamases [ESBLs] is a principal mechanism of antibiotic resistance of this bacterium. Such infections represent a great challenge in our hospitals. Objectives: Application of phenotypic methods and PCR for detection of bla[OXA-10] and bla[GES-1] extended-spectrum beta-lactamases in Pseudomonas aeruginosa isolated from cases of nosocomial infections in Ismailia city, Egypt. Methodology: Forty five isolates of P. aeruginosa isolated from cases of surgical site infection were submitted for antibiotic susceptibility testing, followed by phenotypic screening for both OXA-10 and GES-1 beta lactamases using disc combination method of ceftazidime-clavulanic acid and cefotaxime- clavulanic acid disks. PCR targeting genes of these ESBLs was applied for more accurate detection. Results: The resistance rates were 100% for ampicillin, cefoxitin, cefuroxime, and ceftazolin while for cefotaxime, ceftriaxone, ceftazidime and cefepime, the resistance reached 84.5%, 68.9%, 57.8% and 37.8%, respectively. Imipenem, ciprofloxacin and gentamicin were the most effective antibiotics as they had sensitivity rates of 77.8%, 68.9%, and 73.4%, respectively. Disc combination tests were positive in more than two thirds of isolates. PCR detected blaOXA-10 and blaGES-1 in fifteen and twelve isolates, respectively. Conclusion: ESBLs are still playing major role in marked antibiotic resistance P. aeruginosa against the extended beta lactam antibiotics in Ismailia, Egypt as OXA-10 and GES-1 beta lactamases were isolated at rates of 33.3% and 26.7%, respectively. The current study provides a new report for detection of GES-1 in Egypt.

## Cryptosporidium parvum

### immunology

#### The efficacy of three medicinal plants: garlic, ginger and mirazid and a chemical drug metronidazole against *Cryptosporidium Parvum*. I- immunological response.

Abouel Nour, Mohamed F.; El Shewehy, Dina Magdy M.; Hamada, Shadia F.; Morsy, Tosson A. Mansoura University - Faculty of Science - Department of Zoology

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 559-570

**Keywords:** Cryptosporidium parvum-drug effects; Garlic; Ginger; Resins, Plant; Metronidazole-therapeutic uses; Plants, Medicinal; Phytotherapy

**Abstract:** Cryptosporidiosis parvum is a zoonotic protozoan parasite infects intestinal epithelial cells causing a major health problem for man and animals. Experimentally the immunologic mediated elimination of *C. parvum* requires CD4+ T cells and IFN-Gamma. But, the innate immune responses also have a significant protective role in both man and animals. The mucosal immune response to *C. parvum* in C57BL/6 neonatal and GKO mice shows a concomitant Th1 and Th2 cytokine mRNA expression, with a crucial role for IFN-Gamma in the resolution of the infection. NK cells and IFN-Gamma have been shown to be important components in immunity in T and B cell-deficient mice, but IFN-Gamma-dependent resistance is demonstrated in lymphocytic mice. Epithelial cells may play a vital role in immunity as once infected these cells have increased expression of inflammatory chemokines and cytokines and demonstrate anti-infection killing mechanisms. *C. parvum* immunological response was used to evaluate the efficacy of anti-cryptosporidiosis agents of Garlic, Ginger, Mirazid and Metronidazole in experimentally infected mice.

### Culex

#### Laboratory studies on the possibility of *Culex quinquefasciatus* to Harbor Hepatozoon SP. infecting cerastes cerastes viper in Egypt.

Rashdan, Nagwa A.; Galal, Fatma H.; Gad Allah, Alaa F.

Cairo University - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 521-524

**Keywords:** Viperidae; Viper Venoms; Clinical Laboratory Techniques

**Abstract:** A successful experimental infection of *Culex quinquefasciatus* with *Hepatozoon* sp. Infecting *Cerastes cerastes* viper was carried out under laboratory conditions of 24 +/- 3 C and 60-70% R.H.. The period monitored for complete sporogonic cycle was 21 days. The effect of high parasitemic blood meal was nonsignificant [P>0.05] on preoviposition period and hatchability. Meanwhile a highly significant reduction was observed in oviposition rate, number of deposited eggs, number of hatched larvae and longevity [P<0.01]. On the contrary moderate infection with *Hepatozoon* revealed a great significant increase in fecundity [P<0.01] and a nonsignificant decrease in longevity [P>0.05].

### Culture Media

#### Rate of blood culture contamination in a teaching hospital: a single center study.

Alnami, Abdulaziz Y.; Aljasser, Abdulrahman A.; Almousa, Raed M.; Torchyian, Armen A.; BinSaeed, Abdulaziz A.; Al Hazmi, Ali M.; Somily, Ali M.

King Saud University - College of Medicine

**Journal of Taibah University Medical Sciences** 2015; 10 (4): 432-436

**Keywords:** Retrospective Studies; Blood; Cross-Sectional Studies; Coagulase; Hospitals, Teaching

**Abstract:** Objectives: Contamination of blood samples can lead to serious problems in patient management. The administration of unnecessary antibiotics, wastage of hospital resources, and risks to patient life are some of the known hazards. This study aimed to calculate the rate of blood culture contamination and associated factors at King Khalid University Hospital [KKUH], Riyadh, KSA. Methods: This is a retrospective cross-sectional study. The total study population was calculated based on a review of all of the request sheets for blood cultures submitted to the microbiology laboratory from 1st of January to 31st of December, 2012, at KKUH, Riyadh, KSA. Results: The rate of blood culture contamination [false positive] was 1.9%, while 8.71% of the blood culture samples had true infections [true positive]. Coagulase negative staphylococcus [CoNS] was the most predominant isolate [87%]. The rate of blood culture contamination was significantly higher during the summer season of June [1.38%], July [3.97%] and August [3.72%] compared to other months of the year [p value < 0.05]. The surgical units in this study had the highest rate of blood culture contamination [3.92%], followed by intensive care [2.61%] and medical units [2.48%]. Conclusion: The rate of blood culture contamination at KKUH is within the acceptable international range. The highest rates of blood culture contamination occurred during the summer season and in the surgical units.

## Curriculum

### Developing comprehensive course evaluation guidelines in Tehran University of Medical Sciences.

Gandomkar, Roghayeh; Mirzazadeh, Azim; Jalili, Mohammad; Sadighpour, Leyla  
Tehran University of Medical Sciences - Medical School - Medical Education Department

**Journal of Advances in Medical Education and Professionalism** 2015;3(3): 150-151

**Keywords:** Education-standards; Education, Medical-standards

## Cystic Fibrosis

### Cystic fibrosis from laboratory to bedside: the role of A20 in NF-KB-mediated inflammation.

Bannon, Aidan; Zhang, Shu Dong; Schock, Bettina C.; Ennis, Madeleine  
Queen's University Belfast - School of Medicine, Dentistry and Biomedical Sciences

**Medical Principles and Practice** 2015; 24 (4): 301-310

**Keywords:** Zinc Fingers; DNA-Binding Proteins; Nuclear Proteins; Intracellular Signaling Peptides and Proteins; Interleukin-6; Inflammation

**Abstract:** Cystic fibrosis [CF] is a lifelong, inflammatory multi-organ disease and the most common lethal genetic condition in Caucasian populations, with a median survival rate of 41.5 years. Pulmonary disease, characterized by infective exacerbations, bronchiectasis and increasing airway insufficiency is the most serious manifestation of this disease process, currently responsible for over 80% of CF deaths. Chronic dysregulation of the innate immune and host inflammatory response has been proposed as a mechanism central to this genetic condition, primarily driven by the nuclear factor KB [NF-KB] pathway. Chronic activation of this transcription factor complex leads to the production of pro-inflammatory cytokines and mediators such as IL-6, IL-8 and TNF-alpha. A20 has been described as a central and inducible negative regulator of NF-KB. This intracellular molecule negatively regulates NF-KB-driven pro-inflammatory signalling upon toll-like receptor activation at the level of TRAF6 activation. Silencing of A20 increases cellular levels of p65 and induces a pro-inflammatory state. We have previously shown that A20 expression positively correlates with lung function [FEV<sub>1</sub>1%] in CF. Despite improvement in survival rates in recent years, advancements in available therapies have been incremental. We demonstrate that the experimental use of naturally occurring plant diterpenes such as gibberellin on lipopolysaccharide-stimulated cell lines reduces IL-8 release in an A20-dependent manner. We discuss how the use of a novel bio-informatics gene expression connectivity-mapping technique to identify small molecule compounds that similarly mimic the action of A20 may lead to the development of new therapeutic approaches capable of reducing chronic airway inflammation in CF.

## Dairy Products

### economics

#### Some factors affecting profitability of dairy farms.

Atallah, Sanad T.; Al Shaikh, Ahmed I.; El Ktany, Eman M.

Alexandria University - Faculty of Veterinary Medicine - Animal Husbandry and Animal Wealth Development Department

**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 119-126

**Keywords:** Cross-Sectional Studies; Reproduction; Economics; Agriculture

**Abstract:** This study aimed to determine the effect of different dairy breeds and seasons on reproductive, productive and economic efficiency of dairy farms under Egyptian conditions. This study was carried out through field survey in different regions of Egypt that includes [El Behira, Alexandria and Kafr El-Shaikh] province during the period extended from summer 2012 to winter 2014 on random samples of dairy production sectors. These sectors were Farmers [Fallahy], Private farms [special] and Governmental. The dairy breeds included were Balady [local breed], Holstein-Friesian [exotic breed] and Cross-bred [Balady X Friesian]. The reproductive, productive and economic data were collected from cross-sectional and longitudinal and field survey. During the data collection, the researcher was in intimate contact with dairy holders and managers. The dairy farms were visited two times at least, once in summer and the other in winter. The results of our survey concluded that the breed significantly affected [P<0.01] all productive and reproductive traits. Holstein-Friesian cows had highest milk yield, longest lactation period; they maintained their superiority over the other breeds for milk yield in all parities. Despite lower fertility of Holstein-Friesian cows expressed in highest estimate of number of services per conception, days open, calving interval they surpassed all other breeds in the mean milk yield/day of calving interval and average net profit [17273.63 LE/cow/winter season and 4060.96 LE/cow/summer season]. Moreover, a significant variation in lactation milk yield in cows calved during different seasons. This could be due to the seasonal influences as well as the type of feed, temperature, humidity and management which varies greatly during different seasons.

## microbiology

### Sanitary evaluation of curd dairy products.

El Leboudy, Ahlam A.; Amer, Amr A.; El Gaml, Ahmed M.; Shahin, Hala F.  
Alexandria University - Faculty of Veterinary Medicine - Food Hygiene Department  
**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 51-56

**Keywords:** Staphylococcus aureus; Sanitation; Evaluation Studies as Topic

**Abstract:** A total of 90 samples, [30 of each plain yogurt, Kareish cheese, and Ras cheese] were randomly collected from street-vendors, groceries and supermarkets of different sanitary levels in Mansoura city, Dakahlia Governorate, Egypt. All samples were subjected to sanitary, chemical and microbiological evaluation. The mean values of acidity% and fat% in plain yogurt, Kareish cheese, and Ras cheese were 0.644 +/- 0.106, 1.5 +/- 0.066, 1.97 +/- 0.0578; 0.64 +/- 0.124, 5.88 +/- 0.7004 and 48.94 +/- 0.43, respectively. Meanwhile, the mean values of protein%, lactose%, and SNF% in plain yoghurt were 2.2 +/- 0.094, 3.28 +/- 0.138 and 5.98 +/- 0.25, respectively. The mean values of salt% and moisture% in Kareish cheese and Ras cheese were 2.55 +/- 0.248, 2.38 +/- 0.079; 67.18 +/- 0.891 and 32.75 +/- 0.899, respectively. The main values of Staphylococcus aureus, Coliforms and Enterococci count in plain yoghurt, Kareish cheese and Ras cheese samples were 9.2x10<sup>4</sup> +/- 2.9x10<sup>4</sup>, 4.12x10<sup>5</sup> +/- 1.3x10<sup>5</sup>, 4.64x10<sup>5</sup> +/- 8.82x10<sup>4</sup>; 10.5x10<sup>4</sup> +/- 2.16x10<sup>4</sup>, 6.65x10<sup>5</sup> +/- 1.27x10<sup>5</sup>, 2.39x10<sup>5</sup> +/- 6.54x10<sup>4</sup>; 9.99x10<sup>5</sup> +/- 1.94x10<sup>5</sup>, 3.73x10<sup>5</sup> +/- 6.11x10<sup>4</sup> and 3.38x10<sup>5</sup> +/- 9.17x10<sup>4</sup> cfu/g, respectively. The mean values of yeast and mold count in Kareish cheese and Ras cheese were 1.27x10<sup>5</sup> +/- 1.24x10<sup>4</sup>, 3.82x10<sup>4</sup> +/- 3.48x10<sup>3</sup>; 1.16x10<sup>5</sup> +/- 4.24x10<sup>4</sup> and 7.06x10<sup>4</sup> +/- 3.27x10<sup>4</sup> cfu/g, respectively. Thus, strict hygienic measures should be followed during processing, handling and distribution to improve the hygienic quality of plain yoghurt, Kareish cheese and Ras cheese.

## Data Interpretation, Statistical

### The bread and butter of statistical analysis [t-test]: Uses and misuses.

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AL-Azhar University - Faculty of Applied Medical Sciences - Department of Laboratory Medicine  
**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1558-1559

**Keywords:** Biomedical Research

## Defibrillators, Implantable

### Gulf implantable cardioverter-defibrillator registry reflects advanced cardiac care in the Arab Gulf.

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Hamad Medical Corporation - Heart Hospital

**Heart Views** 2015; 16 (4): 123-124

**Keywords:** Cardiac Care Facilities; Registries; Tachycardia, Ventricular; Arrhythmias, Cardiac; Critical Care

### The Gulf implantable cardioverter-defibrillator registry: rationale, methodology, and implementation.

Alsheikh Ali, Alawi A.; Hersi, Ahmad S.; Hamad, Adel K. S.; Al Fagih, Ahmed R.; Al Samadi, Faisal M.; Almusaad, Abdulmohsen M.; Bokhari, Fayeze A.; Al Kandari, Fawzia; Al Ghamdi, Bandar S.; Al Rawahi, Najib; Asaad, Nidal; Alkaabi, Salem; Daoulah, Amin; Zaky, Hosam A.; Elhag, Omer; Al Hebaishi, Yahya S.; Sweidan, Raed; Alanazi, Haitham; Chase, David; Sabbour, Hani; Al Meheiri, Mohammed; Al Abri, Ismail; Amin, Mohammad; Dagriri, Khaled; Ahmed, Adil O.; Shafquat, Azam; Khan, Shahul Hameed  
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Sheikh Khalifa Medical City - Institute of Cardiac Science - Division of Adult Cardiology

**Heart Views** 2015; 16 (4): 125-130

**Keywords:** Registries; Prospective Studies; Multicenter Studies as Topic; Risk Factors; Death

**Abstract:** Background: The implantable cardioverter-defibrillator [ICD] is effective in the prevention of sudden cardiac death in high-risk patients. Little is known about ICD use in the Arabian Gulf. We designed a study to describe the characteristics and outcomes of patients receiving ICDs in the Arab Gulf region. Methods: Gulf ICD is a prospective, multi-center, multinational, and observational study. All adult patients 18 years or older, receiving a de novo ICD implant and willing to sign a consent form will be eligible. Data on baseline characteristics, ICD indication, procedure and programming, in-hospital, and 1-year outcomes will be collected. Target enrollment is 1500 patients, which will provide adequate precision across a wide range of expected event rates. Results: Fifteen centers in six countries are enrolling patients [Saudi Arabia, United Arab Emirates, Kuwait, Oman, Bahrain, and Qatar]. Two-thirds of the centers have dedicated electrophysiology laboratories, and in almost all centers ICDs are implanted exclusively by electrophysiologists. Nearly three-quarters of the centers reported annual ICD implant volumes of  $\leq 150$  devices, and pulse generator replacements constitute

<30% of implants in the majority of centers. Enrollment started in December 2013, and accrual rate increased as more centers entered the study reaching an average of 98 patients per month. Conclusions: Gulf ICD is the first prospective, observational, multi-center, and multinational study of the characteristics and, the outcomes of patients receiving ICDs in the Arab Gulf region. The study will provide valuable insights into the utilization of and outcomes related to ICD therapy in the Gulf region.

## Dengue

### epidemiology

#### Suspected dengue fever cases rise in Yemen.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (25): 1

**Keywords:** Dengue; Disease Outbreaks; Malaria

**Abstract:** Yemen is currently experiencing a significant surge of suspected dengue fever in six of its governorates-Hodeidah, Taiz, Aden, Lahj, Shabwa and Hadramout. According to some unconfirmed sources, a total of 3,026 suspected dengue fever cases including 3 related deaths were reported from these governorates. Owing to escalating conflict and war, this information could not be verified.

## Dental Pulp Cavity

#### Root canal configurations of the first and second mandibular premolars in the population of north Syria.

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University of Science and Technology - Restorative Dentistry and Prosthodontics Department

**Journal of Taibah University Medical Sciences** 2015; 10 (4): 391-395

**Keywords:** Anatomy; Mandible-surgery; Population; Bicuspid

**Abstract:** Objective: This study was conducted to assess the canal anatomy and morphology of the first and second mandibular premolars in the population of north Syria. Methods: One-hundred and sixty permanent fully developed apices of the mandibular premolars [95 first mandibular premolars and 65 second mandibular premolars] were collected and stored in 10% chloramine-T solution. Teeth were stained with India Ink and cleared. The number and the type of root canal were examined in the root of each cleared mandibular premolar. Results: The results showed that 82.1% of first mandibular premolars had a single canal and 17.9% contained two canals. Eighty three percent of second mandibular premolars had a single canal, 15.3% two canals, and 1.5% three canals. Conclusion: Most of mandibular premolars have a single canal with the probability of presence of two or more canals. This possibility of the existence of two or more canals in the mandibular premolars should be considered by the dentists while performing endodontic therapy.

## Dentition

#### Validity of Moyers mixed dentition analysis for Saudi population.

Al Dlaigan, Yousef H.; Alqahtani, Nasser D.; Almoammar, Khalid; Al Jewair, Thikriat; Bin Salamah, Fahad; Alswilem, Mohammed; AlBarakati, sahar F.

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King Saud University - College of Dentistry - Department of Pediatric Dentistry and Orthodontics

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1399-1404

**Keywords:** Cross-Sectional Studies; Forecasting; Tooth; Dental Physiological Phenomena

**Abstract:** Objectives: To evaluate the applicability of Moyers probability tables and to formulate more accurate mixed dentition prediction tables in the Saudi population. Methods: A cross-sectional study was conducted at the College of Dentistry, Kind Saud University, Saudi Arabia. The data were collected from 410 [203 males and 207 females] orthodontic study models, which had erupted mandibular permanent incisors, maxillary, mandibular canines and premolars. The mesiodistal widths were measured using a digital caliper with an accuracy of 0.01 mm. Student's paired t-test was used to compare the mean width values derived from this study with the values derived using the Moyers table. Simple linear regression was used to evaluate the linear relationship between the combined mesiodistal widths of the mandibular permanent incisors and the canine-premolar segments in each dental arch. Results: The regression equations for the maxillary canine-premolar segment [males:  $Y=10.27+0.48X$ ; females:  $Y=11.71 + 0.39X$ ] and the mandibular canine-premolar segment [males:  $Y=9.71 + 0.40X$ ; females:  $11.28 + 0.39X$ ] were used to formulate new probability tables on the Moyers

pattern. Statistically significant differences were observed between predicted widths in our subjects and the widths obtained using Moyers tables. Conclusions: The new prediction tables derived in this study provided a more precise mixed dentition space analysis than Moyers prediction tables in estimating tooth dimensions in the Saudi population.

## Depressive Disorder, Major

### diagnosis

#### Gender differences among discrimination and stigma experienced by depressive patients in Pakistan.

Khan, Nashi; Kausar, Rukhsana; Khalid, Adeela; Farooq, Anum

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1432-1436

**Keywords:** Individuality; Discrimination [Psychology]; Social Stigma; Cross-Sectional Studies; Depression; Sex Factors

**Abstract:** Objective: This study aims to examine Gender Difference in the level of Discrimination and Stigma experienced by people diagnosed with Major Depressive Disorder in Pakistan. It was hypothesized that Women diagnosed with Depression are likely to be experiencing more Discrimination and Internalized Stigma in comparison to Men. Methods: This is a Cross Sectional Study. Thirty eight patients diagnosed with Major Depressive Disorder recruited from different Government Sector Hospitals of Lahore; were approached after obtaining informed consent. Discrimination and Stigma were measured through Discrimination and Stigma Scale and Internalized Stigma of Mental Illness Inventory respectively. Results: Both Men and Women experience considerably high level of associated Stigma and Discrimination due to their Mental Illness. However, Women in comparison to Men experience significantly greater level of Internalized Stigma especially in domains of Discrimination Experience and Social Withdrawal. Conclusion: The findings of this study highlight the fact that people with Depression can be more benefited with psychological treatment if dealing with Stigma and Discrimination is also addressed in Intervention Plans.

## Dermatitis, Atopic

### microbiology

#### Superantigen gene profile of Staphylococcus aureus colonizing Egyptian pediatric patients with atopic dermatitis: relationship to disease severity and multi-drug resistance.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 1-8

**Keywords:** Staphylococcus aureus-isolation and purification; Superantigens-immunology; Transcriptome; Colony Count, Microbial; Case-Control Studies; Drug Resistance, Multiple, Bacterial

**Abstract:** Background: Eczematous skin of atopic dermatitis [AD] is highly susceptible to infection and colonization by Staphylococcus aureus and the superantigen toxins can worsen the condition. Objectives: To assess the colonization of Egyptian pediatric AD patients with S. aureus and to characterize the superantigen gene profile of isolates in relation to severity and to presence of multiple drug resistant [MDR] strains. Methodology: The study included 53 AD pediatric patients and 45 controls. Severity of AD was assessed by scoring atopic dermatitis [SCORAD] index. Swabs were collected to isolate S. aureus. Isolates were subjected to multiplex PCR reactions for detection of six superantigen genes and to antimicrobial susceptibility tests by disc diffusion method. Results: Colonization with S. aureus was significantly higher [ $P < 0.0001$ ] in AD children compared to controls and was significantly associated [ $P = 0.001$ ] with severity. Superantigen genes were detected in 30.1% of isolates. The most prevalent genes were sea [64.5%], seb [32.3%], sec [6.5%] and tst-1 [3.2%]. Multidrug resistance was found in 63.1% of strains. Severity of AD was significantly higher with strains harboring superantigen genes [ $P = 0.04$ ] and with MDR strains [ $P = 0.0002$ ]. Among methicillin resistant S. aureus [MRSA], seb was the most prevalent superantigen gene [37.5%], while sea was most prevalent in methicillin-susceptible S. aureus [MSSA] [20%], MDR [23.1%] and non MDR isolates [13.2%]. Conclusion: Superantigen genes and multidrug resistance are common in S. aureus colonizing AD patients and are associated with severity. More attention should be paid at performing antimicrobial susceptibility testing before antibiotic therapy.

## Diabetes Mellitus

### Disability assessment of diabetic patients in Erbil city.

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Hawler Medical University - College of Nursing - Department of Nursing  
**Zanco Journal of Medical Sciences** 2015; 19 (1): 902-909

**Keywords:** Disability Evaluation; Cross-Sectional Studies; Surveys and Questionnaires

**Abstract:** Background and objectives: The disabling effects of diabetes mellitus are multi-factorial, which can result in the high prevalence of long term complications. The aim of this study was to assess disability levels of diabetic patients. Methods: A quantitative design descriptive study was conducted in Leila Qasim Center in Erbil City in the Kurdistan Region of Iraq from February 2012 to February 2013. A non-probability purposive sample of 400 diabetic patients for more than 5 years was selected. A questionnaire was designed and divided into three parts: sociodemographic data, clinical data, and the standardized questionnaire developed by World Health Organization for disability assessment. Results: The highest percentage [57%] of diabetic patients had a moderate level of disability, while 23% had a mild level of disability. Severe level of disability was present in 20% of sample. No one had not disability or extreme level of disability. Conclusion: More than half of diabetic patients were in the moderate level of disability.

### Refractive errors in patients with newly diagnosed diabetes mellitus.

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Special Marmara Eye Clinic Center

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1481-1484

**Keywords:** Refractive Errors; Prospective Studies; Blood Glucose; Hyperopia

**Abstract:** Background and Objective: Diabetes mellitus is a complex metabolic disorder that involves the small blood vessels, often causing widespread damage to tissues, including the eyes' optic refractive error. In patients with newly diagnosed diabetes mellitus who have unstable blood glucose levels, refraction may be incorrect. We aimed to investigate refraction in patients who were recently diagnosed with diabetes and treated at our centre. Methods: This prospective study was performed from February 2013 to January 2014. Patients were diagnosed with diabetes mellitus using laboratory biochemical tests and clinical examination. Venous fasting plasma glucose [fpg] levels were measured along with refractive errors. Two measurements were taken: initially and after four weeks. The last difference between the initial and end refractive measurements were evaluated. Results: Our patients were 100 males and 30 females who had been newly diagnosed with type II DM. The refractive and fpg levels were measured twice in all patients. The average values of the initial measurements were as follows: fpg level, 415 mg/dl; average refractive value, +2.5 D [Dioptres]. The average end of period measurements were fpg, 203 mg/dl; average refractive value, +0.75 There is a statistically significant difference between after four weeks measurements with initially measurements of fasting plasma glucose [fpg] levels [ $p < 0.05$ ] and there is a statistically significant relationship between changes in fpg changes with glasses ID [ $p < 0.05$ ] and the disappearance of blurred vision [to be greater than 50% success rate] were statistically significant [ $p < 0.05$ ]. Also, were detected upon all these results the absence of any age and sex effects [ $p > 0.05$ ]. Conclusions: Refractive error is affected inpatients with newly diagnosed diabetes mellitus; therefore, plasma glucose levels should be considered in the selection of glasses.

## parasitology

### Prevalence of some gastro-intestinal parasites in diabetic patients in Tanta city, Gharbia Governorate, Egypt.

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Al-Azhar University - Faculty of Medicine - Departments of Parasitology  
**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 681-684

**Keywords:** Prevalence; Parasites; Mortality

**Abstract:** It is well known that diabetes mellitus affects the immune system negatively through various ways. Diabetic patients are also considered as the immunocompromised group of patients. Infections with intestinal parasites are uncommon to cause high morbidity or mortality to man, but they are risky to diabetic patients. The study investigated the prevalence of common intestinal parasites in diabetic patients in Tanta City. Among the patients who were attending gastrointestinal department [360 patients], complaining of various abdominal symptoms and discomfort, thirty three [33] patients were known to be diabetic and on current treatment. Fecal samples were collected from diabetic patients and the same number from non-diabetic patients. Samples were examined macroscopically and microscopically by direct smear and different concentration methods then stained with iodine. The study was carried out through six months from March to August 2015 for common intestinal parasites. In diabetic group *E. histolytica* were detected in 13 patients [39.4%], compared to [43%] among controls, *G. lamblia* was detected in a patient [3%] compared to [3%] in controls, *A. lumbricoides* was detected in one patient [3%] compared to [5%] in controls, and *E. vermicularis* was detected in one patient [3%] compared to [3.8%] in controls. The highest level of parasitosis among diabetic patients was *E. histolytica* [39%], but without significant difference between controls and patients. There for one can assume that *E. histolytica* could be considered as a monitor for environmental pollution, low stander hygiene and low standard of living.

## Diabetes Mellitus, Type 1

### Type 1 diabetic adults should be screened for coeliac autoimmunity.

Hatanak, Simon Aiko; Alcaire, Bruna Pereira; Schiavon, Leonardo de Iucca; Narciso, Sckiavon Janainaluz Federal University of Santa Catarina [UFSC]

*Arab Journal of Gastroenterology* 2015; 16 (3-4): 81-82

**Keywords:** Autoimmunity; Celiac Disease; Prevalence

### epidemiology

### Demographic characteristics of type 1 diabetic children and adolescents in Hamadan, Iran.

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*Journal of Research in Health Sciences [JRHS]* 2015; 15 (3): 196-199

**Keywords:** Child; Adolescent; Cross-Sectional Studies; Breast Feeding; Endocrine System Diseases; Demography

**Abstract:** Background: Type 1 diabetes mellitus is the most common endocrine disease in pediatric. We aimed to determine the demographic characteristics at presentation of childhood type 1 diabetes mellitus in Hamadan, west province of Iran. Methods: In this cross sectional descriptive study, demographic data of children with type 1 diabetes mellitus being followed up in Pediatric Endocrinology Clinic of Besat Hospital Hamadan Iran, were analyzed. A detailed record of the required information including the age, sex, Place of living[urban, rural], season, disease presentation, parental consanguinity [1st cousin relation], The mean mother's age at delivery, BMI ,birth seasonality and birth order were collected. The data was analyzed by standard statistical package SPSS, version 15.0. Results with p-value less than 0.05 were defined as statistically significant. Results: In total, 150 patients were included. The mean age at diagnosis was 8.47 +/- 3.17 yr. The majority of patients were urban. The frequency of disease was higher in summer. BMI percentile of most cases was between 5[th] to 85[th]. The frequency of positive family history was 10.7%. Among the studied patients, 18.7% had parental consanguinity. The mean mother's age at delivery was 25+/- 5.3 yr. Of the studied patients, 82.7% were exclusively breastfed and 43% were the first child of family. About 13.3% had co-occurring endocrine disease. Conclusions: Age at diagnosis and sex of our patients was similar to the world reported. But, seasonal variation is different in our region. The frequency of a family history of type 1 diabetes in first and second degree relatives was relatively high. Hypothyroidism was the most frequently observed co-occurring endocrine disease.

## Diabetes, Gestational

### Association of vitamin D receptor gene BsmI [AG] and FokI [CT] polymorphism in gestational diabetes among Saudi Women.

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*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1328-1333

**Keywords:** Receptors, Calcitriol; Polymorphism, Genetic; Cross-Sectional Studies; Vitamin D

**Abstract:** Objective: Vitamin D receptor [VDR] gene polymorphism have a role in diabetes mellitus pathogenesis. Present study was conducted to determine VDR gene variants among Saudi gestational diabetics [GDM] in Madina, KSA. Methods: This cross sectional study was conducted on 112 GDM patients and 218 normal healthy control. Age, body mass index and blood pressure levels were recorded. Serum triglycerides [mg/dl], total cholesterol, HDL-cholesterol, LDL-cholesterol, fasting blood glucose FBG and post-prandial blood glucose PPBG were estimated. Extracted DNA template was amplified by PCR reaction and genotyped for single nucleotide polymorphism of BsmI and FokI by restriction fragment length polymorphism-PCR [RFLP-PCR] analysis. Results: FBG and PPBG levels in GDM patients were significantly elevated by +48.6% and +50%, respectively [P=0.005]. Serum triglycerides, total cholesterol and LDL-cholesterol [mg/dl] levels in GDM patients were elevated significantly by +40.5% [P=0.005], +16% [P=0.01] and +30.8% [P=0.005], respectively. Serum HDL-cholesterol [mg/dl] showed significant decline by-10.5%. FokI VDR genotypes showed association with PPBG [P=0.05] among GDM patients. The Ff, FF and ff genotype percentage among GDM patients was 48.2%, 30.4% and 21.4%, respectively. FokI [F and f] and BsmI [B and b] alleles frequency showed no significant difference between GDM patients and control. Percentage BsmI and FokI total homozygous and heterozygous variants among GDM was 45.5% and 81.4%, respectively. Conclusion: VDR BsmI and FokI polymorphic marker not associated with Saudi GDM.



## Diabetic Foot

### microbiology

#### Identification of virulence factors, accessory gene regulator [agr] locus and antibiotic resistance pattern of *Staphylococcus aureus* isolated from diabetic foot ulcers.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 41-47

**Keywords:** Diabetes Mellitus; *Staphylococcus aureus*-pathogenicity; Bacterial Proteins; Drug Resistance, Microbial; *Staphylococcus aureus*-isolation and purification; Foot Ulcer

**Abstract:** Background: *Staphylococcus aureus* [S.aureus] is a common virulent pathogen in diabetic foot infections. Infection of diabetic foot ulcer [DFU] is a major cause for impaired healing and leads to osteomyelitis, bacteraemia and sepsis. Treatment failure of DFU may ultimately lead to limb amputation. Objectives: This work was carried out to clarify the role of S.aureus as a causative agent of diabetic foot infection, and characterize the antibiotic resistance pattern, virulence factors implicated in the pathogenicity of S. aureus and the accessory gene regulator as a global regulator of virulence determinant production. Methodology: This study was carried out on 111 patients admitted to diabetic foot clinic [MUH] having infected diabetic foot ulcer. Grading of infection was assessed. The collected specimens were cultivated on 5% sheep blood agar and mannitol salt agar. Isolates were identified as S. aureus by being catalase positive, mannitol fermenter, DNase positive and coagulase positive. Virulence was characterized by thermonuclease test, slime production, hemagglutination test, and biofilm formation. Multiplex PCR was used for detection of agr groups. Results: S.aureus represented 32% of total pathogens isolated. 58.3% of S.aureus strains were slime producers. 70.8% were biofilm producers. The most prevalent agr type was agr 1 and represented 54.2% followed by agr 2 [29.2%], agr 3 [8.3%], and agr 4 [4.2%]. Conclusion: S. aureus is the most common cause of diabetic foot infection at our locality. Slime and biofilm producing strains are more resistant to antibiotics than non producers. S. aureus infection is more common among grade 2 and 3 ulcers. This data is crucial for selection of appropriate antibiotic therapy. agr type 1 is the most prevalent type in DFU at our locality.

## Diabetic Ketoacidosis

#### Clinical characteristics of patients with diabetic ketoacidosis at the Intensive Care Unit of a University Hospital.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1463-1466

**Keywords:** Intensive Care Units; Chemistry, Clinical; Retrospective Studies; Diabetes Mellitus; Hospitals, University

**Abstract:** Objectives: The aims of this study were assessing the frequency of clinical characteristics of patients with severe Diabetic ketoacidosis [DKA] who were admitted to the intensive care unit [ICU] and investigating the relationship between paraclinical [glucose, anion gap, and serum bicarbonate] and clinical parameters in patients with severe DKA. Method: A retrospective chart review of all adult patients with DKA who were admitted to the ICU at King Abdulaziz University Hospital, Jeddah, Saudi Arabia between January 2012 and December 2013. The data collected include the demographic data, clinical presentation, precipitating factors, duration of hospital stay and mortality rate. The data were analyzed using STAT software. Results: A total of 60 patients were included. Of these, 50 were men [83.3%]. The median age was 23 years [ranging 18-29 years]. Newly diagnosed diabetics accounted for 15 [25%] of the cases; the remainder were previously known patients of type1 diabetes on treatment. The main precipitating factors of DKA were insulin treatment cessation [87.5%] and infection/sepsis [39.6%]. Serum blood glucose, serum bicarbonate level, and the calculated anion gap did not significantly correlate with clinical parameters of severe DKA. Conclusion: Most patients with severe DKA who were admitted to the ICU of our institution presented with gastrointestinal symptoms. Non-compliance to insulin therapy was the main precipitating factor of DKA.

## Diarrhea

### veterinary

#### Characterization of enteropathogenic E. Coli and antibiotic resistance properties in diarrheic pets.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 99-104

**Keywords:** Diarrhea-microbiology; Enteropathogenic Escherichia coli; Drug Resistance, Microbial; Polymerase Chain Reaction-immunology; Pets

**Abstract:** The study was carried out to detect and characterize Endopathogenic Escherichia coli isolated from diarrheic dogs and cats and its antibiotic resistance. To perform this aim: a total of 90 rectal swabs were collected from diarrheic dogs [n=70] and cats [n=20] from different localities at Alexandria and screened for the presence of pathotype of E. coli using culture biochemically, serological, molecular identification and antibiotic sensitivity test. A total of 33 [36.6%] E. coli isolated and identified [26 isolates from dogs [37.1%] and 7 isolates from cats [35%]]. Hemolytic activity revealed 8 [6 from dogs and 2 from cats] and 4 [3 from dogs and 1 from cats] isolates with Alpha [alpha] and Beta [beta] hemolysis respectively. Serotyping of these 12 isolates revealed 2 [16.6%] were positive poly 2 [O: 127 K63], 1 [8%] isolate was positive poly 3 [O: 164 K-], 1 [8%] isolate was positive poly 1 [O: 26 K 60] and 8 [66.6%] isolates were serotyped as positive poly one. Polymerase chain reactions [PCR] revealed the presence of attaching and effacing gene [eaeA] in 4 [33.3%] isolates [3 from dogs [33.3%] and 1 from cat [33.3%]]. However, none of the isolates were positive for Heat-labile [LT], heat-stable [STa] enterotoxin genes. Shiga toxin one [Stx 1] and shiga toxin two [Stx2] genes and bundle-forming pili [Bfp] gene. The highest rate of sensitivity was observed to Amikacin and Ofloxacin. And, the highest rate of resistance was observed to Cephalixin and Ampicillin sulbactam.

#### Detection of Diarrheagenic Escherichia coli in pet animals and its antibiotic resistance in Alexandria governorate.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 113-118

**Keywords:** Escherichia coli; Pets; Cats; Dogs; Drug Resistance, Microbial

**Abstract:** Benefits of having a dog or cat as a pet varies between owners according to the purpose, however, the limit between benefit and harm is sensitive because close contact between pets and humans may involuntarily represent harm for humans. Dogs and cats have been proposed as possible reservoirs of virulent Escherichia coli strains that may cause enteric and extra-intestinal infections in humans. In this study, we aimed to detect diarrheagenic Escherichia coli [DEC] in dogs and cats and their antibiotic resistant patterns. Samples were collected from 70 dogs and cats from different veterinary clinics and hospitals in Alexandria. These animals suffered from diarrhea and other symptoms as fever, nausea, vomiting, chills, loss of appetite, muscle aches and bloating. Forty E. coli isolates were detected by culturing and biochemical tests, and were subjected to antimicrobial disc diffusion susceptibility test by using 10 different antibiotic discs, which are the most commonly used in pet animal clinics. Antibiotic resistance for individual antibiotics ranged from 5 to 98% with multiple resistances to 2 or more antibiotics detected in 15 [21%] samples. PCR for detection of virulent genes of E. coli: VT2e and eaeA genes as well as the antibiotic resistance blaTEM gene was performed. The VT2e and eaeA genes were found in E. coli isolates, from dogs and cats. These results collectively indicate that pet animals can harbor the Enteropathogenic [EPEC] and Enterotoxigenic Escherichia coli [ETEC] causing diarrhea at different ages with possible active transmission to contact humans. Further, the high and multiple antibiotic resistance level can pose therapeutic challenges in contact humans. It is fundamental that veterinarians recommend preventive measures to pet owners towards the establishment of a long-term preventive programme against antibiotic resistant E. coli.

## Dicrocoeliasis

#### Dicrocoelium dendriticum infection in a patient with chronic Schistosomiasis Haematobium.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 629-632

**Keywords:** Dicrocoelium; Schistosomiasis haematobia; Chronic Disease

**Abstract:** Infection with Dicrocoelium dendriticum in humans is seldom to be reported in Egypt. This liver fluke, which commonly infects ruminants, has a complex life cycle with two intermediate hosts; the land snail and the ant. Human infection occurs by accidental ingestion of the second intermediate host. The present reported a patient suffered from recurrent acute chole-cystitis with chronic urinary schistosomiasis whose Kato stool examination showed Dicrocoelium dendriticum eggs. He was successfully treated with Mirazid.

## Diverticulum

### Right-sided diverticulosis and disparities from left-sided diverticulosis in the Vietnamese population living in Boston, Mass., USA: a retrospective cohort study.

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Steward Carney Hospital - Division of Gastroenterology - Department of Internal Medicine

**Medical Principles and Practice** 2015; 24 (4): 355-361

**Keywords:** Diverticulosis, Colonic; Health Status Disparities; Retrospective Studies; Cohort Studies; Asian Continental Ancestry Group; Prevalence

**Abstract:** Objective: To report the prevalence, clinical differences and complications of right-sided diverticulosis [RD] and to investigate the potential disparities from left-sided diverticulosis [LD] in the Vietnamese population. Subjects and Methods: A retrospective cohort study was conducted using medical records of Vietnamese-born patients from 2000 to 2013 in a community teaching hospital in Boston, Mass., USA. By simple randomization, a randomized control group of 299 Caucasian patients was also selected from the same time frame [167 males [M] and 132 females [F]]. Colonoscopy reports were reviewed for demographics [age and gender], indication and anatomical location of the colonic diverticulosis [CD], concomitant colonic findings, symptoms, and endoscopic complications. Results: A total of 207 patients were included in the Vietnamese cohort [mean age 61.6 +/- 8.9 years]. The mean age at first screening colonoscopy was 58.2 +/- 7.2 years [114 F/92 M, 55.7/44.4%]. Our study identified 104 [50.5%] patients with LD [57 M/47 F], 65 [31.1%] with RD [35 M/30 F] and 38 [18.4%] with both LD and RD [23 M/15 F]; 133 [64%] were asymptomatic. A total of 21 [33%] patients with RD were symptomatic. The mean age of the control group was 61.6 +/- 8.1 years. The average age at first screening colonoscopy was 52.8 +/- 6.4 years. Of the 299 in the Caucasian group, 254 [84.9%] had LD [114 M/140 F], 9 [3.0%] had RD [2 M/7 F] and 36 [12%] had both LD and RD [16 M/20 F]; 225 [75%] were asymptomatic and came in for screening colonoscopies. A total of 2 patients [22%] with RD were symptomatic. Conclusion: RD was common in this Vietnamese population, and the prevalence was higher than in the Caucasian control group.

## Duloxetine Hydrochloride

### adverse effects

#### Duloxetine hydrochloride-induced oral lichenoid reaction: a case report.

Kadam, Nilima S.; Patil, Rahul A.; Gurav, Abhijit N.; Shete, Abhijeet; Jadhav, Prashant D.; Tari, Ritam Naik; Metkari, Suryakant; Agarwal, Dhanashree

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**Medical Principles and Practice** 2015; 24 (4): 394-397

**Keywords:** Lichen Planus, Oral; Drug-Related Side Effects and Adverse Reactions; Lichenoid Eruptions

**Abstract:** Objective: To report the first case of duloxetine hydrochloride [DH]-induced oral lichenoid drugreaction [OLDR]. Clinical Presentation and Intervention: A 57-year-old male patient presented with painful ulcerative lesions on the bilateral buccal mucosa of 2-year duration. The patient was on multiple drug therapy for his systemic ailments. After thorough evaluation for possible medical ailments and with the physician's consent, withdrawal of DH was done. The oral lesions were resolved after 2 weeks. Conclusion: In this case, DH induced OLDR.

## Dysmenorrhea

### epidemiology

#### Dysmenorrhea among female medical students in King Abdulaziz University: prevalence, predictors and outcome.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1312-1317

**Keywords:** Dysmenorrhea-diagnosis; Cross-Sectional Studies; Surveys and Questionnaires; Prevalence; Students, Medical; Patient Outcome Assessment

**Abstract:** Objective: To determine the prevalence, predictors and outcome of dysmenorrhea among female medical students in King Abdulaziz University [KAU], Jeddah, Saudi Arabia. Methods: A cross-sectional study was conducted among 435 medical students at KAU, Jeddah selected through stratified random sample

method. A pre-constructed, validated, self-administered questionnaire was used to collect personal and socio-demographic information. Data about menstrual history, stress, smoking were also collected. The severity of dysmenorrhea was scored by the "Visual Analogue Scale [VAS]". Descriptive and analytical statistics were conducted. Results: The prevalence of dysmenorrhea was 60.9%. Logistic regression showed that heavy period was the first predictor of dysmenorrhea [aOR=1.94; 95% CI: 1.29- 2.91], followed by stress [aOR=1.90; 95% C.I.: 1.19-3.07]. The prevalence of severe dysmenorrhea among the sufferers was 38.6%. Depressed mood was the commonest [80.8%] symptom accompanying dysmenorrhea. Regarding the outcome of dysmenorrhea, 67.5% of the sufferers reported emotional instability, while 28.3% reported absenteeism from the university. Conclusions: A high prevalence of dysmenorrhea was prevalent among medical students in King Abdulaziz University [KAU], Health promotion, screening programs, and stress management courses are recommended.

## Education, Medical

### Designing and conducting MD/MPH dual degree program in the Medical School of Shiraz University of Medical Sciences.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 105-110

**Keywords:** Public Health; Delphi Technique; Surveys and Questionnaires; Schools, Medical

**Abstract:** Introduction: Many studies have focused on the need of health systems to educated physicians in the clinical prevention, research methodology, epidemiology and health care management and emphasize the important role of this training in the public health promotion. On this basis, Shiraz University of Medical Sciences [SUMS] has established MD/MPH dual degree program since the year 2012. Methods: In the current study, Delphi technique was used. Both qualitative and quantitative methods were applied in the Delphi process. The Delphi team members including experts with extensive experience in teaching, research and administration in the field of educational management and health/medical education reached consensus in almost 86% of the questionnaire items through three Delphi rounds. MD/MPH program for SUMS was designed based on the items agreed and thematic analysis used in these rounds. Results: The goals, values, mission and program requirements including the period, the entrance condition, and the number of units, and certification were determined. Accordingly, the courses of the program are presented in parallel with the MD education period. MPH courses consist of 35 units including 16 obligatory and 15 voluntary ones. Conclusion: Designing MD/MPH program in SUMS based on the existent models in the universities in different countries, compatible with educational program of this university and needs of national health system in Iran, can be a beneficial measure towards promoting the students' knowledge and theoretical/practical skills in both individual and social level. Performing some additional research to assess the MD/MPH program and some cohort studies to evaluate the effect of this program on the students' future professional life is recommended.

### Qualitative evaluation of general practitioner training program as viewed by graduates from Shiraz, Fasa and Jahrom Medical Universities.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 142-149

**Keywords:** Cross-Sectional Studies; Surveys and Questionnaires; Evaluation Studies as Topic; General Practitioners

**Abstract:** Introduction: The majority of countries have brought the quality of higher education into focus in the past few years. They have tried to improve the quality of their own higher education. The studies show that Iranian Universities are not at an accepted level in terms of quality. They have encountered several problems which have diminished their quality level. This study aimed at assessing the quality of medical education program as viewed by general practitioners graduated from Shiraz, Fasa and Jahrom Medical Universities. Methods: This is a cross-sectional study. 215 subjects were selected based on a census of all the general practitioners graduated from Shiraz, Fasa and Jahrom Universities during 2011-2013. The questionnaire used for collecting the data was that of the Association of Graduates from American Medical Colleges. The collected data were then analyzed using SPSS 14 through which such descriptive and bivariate statistics as percentage, means, Standard Deviation and ANOVA were used. The level of significance was set to 0.05. Results: The questionnaire return rate was 97%. As to the graduates' preclinical experiences, five indices were studied which were assessed as "average" in graduates' views. However, with respect to their clinical experiences five indices were equally studied, among which such indices as "Communication" were evaluated as "desirable" in view of the graduates from the very three universities. On the contrary, the quality of clinical experiences and technological skills was evaluated as "almost weak"; furthermore, the integration of basic science with required clinical experience was also considered "weak". Conclusion: It seems essential to set up an annual assessment of general practitioner education program and a review of the medical education program in Iran based on the global medical advancement and international standards.

## trends

### Trends in medical education from traditional to integrated system: valued by first year MBBS students at a private medical college of Peshawar.

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**Journal of Medical Students** 2015; 1 (1): 9-14

**Keywords:** Surveys and Questionnaires; Curriculum; Students, Medical

**Abstract:** Introduction: Rehman Medical College Peshawar implemented a new modular integrated hybrid curriculum and modern mode of teaching strategies since its inception in 2010. The present study aimed to explore the viewpoints of students about the usefulness of the principles of integrated medical curriculum and teaching strategies and evaluation methods adopted. Material and Methods: A survey of first year MBBS students was conducted in 2011 using self-administered questionnaire which included quantitative and qualitative parts. Enough space was provided for the qualitative response. The qualitative part of the study entailed in self-response open ended format. Universal sampling approach was employed. Quantitative data analysis were done using SPSS version 15.0 while qualitative data were manually analyzed. Results: Fifty-eight students [58%] completed the questionnaires. Regarding the usefulness of integrated medical curriculum of basic medical subjects, 36 [62.1%] found it very useful, 15 [25.8%] found it useful. For preference of teaching methods, 50[87.7%] found small group format [SGF] very useful; also 34[58.6%] found large group format [LGF] very useful and 15[25.9%] found it useful; 30[51.7%] reported that mini-seminars are useful whereas 21[36.2%] students found self-directed learning [SDL] useful. Students' responses to the end of lesson examination were evaluated; 32[55.2%] students were in favor of these exams; 38[65.5%] were in favor of end of week evaluation while 49[84.5%] were in favor of end of module examinations. Similarly 41[70.7%] supported mid-term; 38[65.5%] favored inclusion of medical research in the undergraduate curriculum. Most of the students were in favor of current system with small reservations. According to them the current system should be continued with improvement in areas like; decrease in end of lesson exam, teacher student relationship, availability of reading materials, strict follow up of lesson plan. Conclusion: Majority of students prefer the new modular integrated system of teaching. A few areas of the previous system are still popular and may be continued by integrating them in suitable places in the new system. Based on evidence, diversity of teaching and evaluation method is a good thing and to be encouraged. The strategy [SGF] that promotes interaction is likely to be the most effective.

## Education, Professional

### A study of the professional development needs of Shiraz high schools' principals in the area of educational leadership.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 99-104

**Keywords:** Needs Assessment; Professionalism; Education; Leadership; Educational Technology; Professional Competence; Surveys and Questionnaires

**Abstract:** Introduction: The increased emphasis on standards-based school accountability since the passage of the No Child Left Behind Act of 2001 is focusing critical attention on the professional development of school principals and their ability to meet the challenges of improving the student outcomes. Due to this subject, the current study examined professional development needs of Shiraz high schools principals. Methods: The statistical population consisted of 343 principals of Shiraz high schools, of whom 250 subjects were selected using Krejcie and Morgan [1978] sample size determination table. To collect the data, a questionnaire developed by Salazar [2007] was administered. This questionnaire was designed for professional development in the leadership skills/competencies and consisted of 25 items in each leadership performance domain using five-point Likert-type scales. The content validity of the questionnaire was confirmed and the Cronbach's Alpha coefficient was  $[\text{Alpha} = 0.78]$ . To analyze the data, descriptive statistics and Paired-Samples t-test were used. Also, the data was analyzed through SPSS14 software. Results: The findings showed that principals' [Importance] ratings were always higher than their [Actual proficiency] ratings. The mean score of the difference between [Importance] and [Actual proficiency] pair on [Organizing resources] was 2.11, making it the highest [need] area. The lowest need area was [Managing the organization and operational procedures] at 0.81. Also, the results showed that there was a statistically significant difference between the means of the [Importance] and the corresponding means on the [Actual proficiency] [Difference of means=1.48,  $t=49.38$ ,  $p<0.001$ ]. Conclusion: Based on the obtained results, the most important professional development needs of the principals included organizing resources, resolving complex problems, understanding student development and learning, developing the vision and the mission, building team commitment, understanding measurements, evaluation and assessment strategies, facilitating the change process, solving problems and making decisions. In other words, the principals had statistically significant professional development needs in all areas of the educational leadership. Also, the results suggested that today's school principals need to grow and learn throughout their careers by ongoing professional development.

## Empathy

### Eleven years of data on the Jefferson scale of Empathy Medical student version [JSE-S]; proxy norm data and tentative cutoff scores.

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**Medical Principles and Practice** 2015; 24 (4): 344-350

**Keywords:** Weights and Measures; Students, Medical; Schools, Medical; Data Collection

**Abstract:** Objective: This study was designed to provide typical descriptive statistics, score distributions and percentile ranks of the Jefferson Scale of Empathy-Medical Student version [JSE-S] of male and female medical school matriculants to serve as proxy norm data and tentative cutoff scores. Subjects and Methods: The participants were 2,637 students [1,336 women and 1,301 men] who matriculated at Sidney Kimmel [formerly Jefferson] Medical College between 2002 and 2012, and completed the JSE at the beginning of medical school. Information extracted from descriptive statistics, score distributions and percentile ranks for male and female matriculants were used to develop proxy norm data and tentative cutoff scores. Results: The score distributions of the JSE tended to be moderately skewed and platykurtic. Women obtained a significantly higher mean score [116.2 +/- 9.7] than men [112.3 +/- 10.8] on the JSE-S [ $t[2,635] = 9.9, p < 0.01$ ]. It was suggested that percentile ranks can be used as proxy norm data. The tentative cutoff score to identify low scorers was  $\leq 95$  for men and  $\leq 100$  for women. Conclusions: Our findings provide norm data and cutoff scores for admission decisions under certain conditions and for identifying students in need of enhancing their empathy.

## Enteral Nutrition

### Effects of early enteral micro-feeding on neonatal serum Vitamin D levels.

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Child's Hospital of Changchun

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1476-1480

**Keywords:** Vitamin D-blood; Infant Health; Glutamine; Intensive Care Units; Gastrointestinal Hormones

**Abstract:** Objective: To evaluate the effects of early enteral micro-feeding on neonatal serum vitamin D levels, and to analyze the application value of glutamine. Methods: One hundred ninety neonates enrolled in intensive care unit were randomly divided into a treatment group and a control group [n=95] that were both given enteral and parenteral nutrition support. Meanwhile, the treatment group was fed formula milk containing 0.3 g/[kg·d] glutamine as enteral nutrition support for 14 days. Results: The weight of the treatment group increased significantly faster than that of the control group did [P<0.05]. The treatment group had significantly higher milk amount and calorie intake than those of the control group [P<0.05], and neonates in the treatment group who reached calorie intake of 50/80/100 kcal/kg/d were significantly younger [P<0.05]. Meanwhile, the treatment group was significantly less prone to feeding intolerance than the control group [P<0.05]. After 14 days of feeding, the serum motilin, gastrin and vitamin D levels of both groups all increased, with significant intra-group and inter-group differences. Such levels of the treatment group significantly exceeded those of the control group [P<0.05]. Conclusion: Supplementing early enteral micro-feeding with glutamine promoted the absorption of neonatal routine nutrients and vitamin D, obviously regulated gastrointestinal hormones, and elevated weight as a result.

## Enterobacteriaceae

### Screening for New Delhi metallo-Beta-lactamase-1 in Enterobacteriaceae: is there a role for the modified Hodge test?

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1340-1343

**Keywords:** beta-Lactamases; Carbapenems; Cross-Sectional Studies

**Abstract:** Objective: The New Delhi metallo-Beta-lactamase-1 [NDM-1] enzyme is a plasmid-encoded enzyme that inactivates carbapenem antibiotics. This study aims to ascertain if the modified Hodge test [MHT] has a role in screening for NDM-1 in Enterobacteriaceae with reduced carbapenem susceptibility. Methods: Over a period of one year, all Enterobacteriaceae isolates from all clinical specimens with reduced susceptibility to at least one carbapenem were subjected to MHT and conventional polymerase chain reaction [PCR] detection of the NDM-1 gene. Results: A total of 13,098 Enterobacteriaceae isolates were screened and 63 [0.48%] had reduced susceptibility to at least one carbapenem. Out of the 63 isolates, 45 [71.4%] were MHT-positive. The NDM-1 gene was detected in 18 of the 63 isolates [28.6%]. All 18 PCR-positive isolates were also MHT-positive. Thus, the sensitivity and specificity of the MHT in detecting NDM-1 in Enterobacteriaceae with reduced carbapenem susceptibility are 100% and 40%, respectively. Conclusion: The MHT is a useful test to screen for the presence of NDM-1 in Enterobacteriaceae with reduced carbapenem susceptibility. However, due to its rather low specificity, all MHT-positive isolates should be subjected to alternative tests [e.g. PCR] for confirmation, especially if other types of carbapenemases [e.g. KPC] are prevalent.

## Enterobiasis

### Relationship between *Enterobius Vermicularis* infection and pelvic inflammatory diseases in children at Sohag Governorate, Egypt.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 633-638

**Keywords:** Pelvic Inflammatory Disease; Cohort Studies; Enterobius; Child

**Abstract:** A cohort of children presented with pelvic inflammatory diseases [gastro-intestinal and/or genitourinary surgical conditions] and had concomitant infection with *E. vermicularis*. To find out this relationship, a total of 135 patients suffering from different gastro-intestinal and genitourinary surgical conditions were selected from Departments of Surgery and Gynecology. They were subjected to stool analysis, peri-anal swabs and blood examination mainly for eosinophilia. The results showed that 26 patients out of 135 [19.2%] had *E. vermicularis* with high eosinophilia in 30 cases [22.2%]. Identification of *vermicularis* by peri-anal swab test in the cohort was successful [16.30%]. Males were more affected than females with ratio 2.2:1 and age mean 7.13 +/- 1.92. As to residence and housing, rural children with bad housing [73.08% and 88.46% respectively] were more affected than those living in urban areas with healthy housing [26.92% and 11.54% respectively].

## Enterocolitis, Pseudomembranous

### diagnosis

### Evaluation of real time polymerase chain reaction and enzyme immunoassay in diagnosis of clostridium difficile infection.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 119-127

**Keywords:** Real-Time Polymerase Chain Reaction; Immunoenzyme Techniques; Clostridiumdifficile- genetics; Clostridium difficile-isolation and purification; Predictive Value of Tests; Cross Infection

**Abstract:** Background: Clostridium difficile infection [CDI] is the most common cause of antibiotic associated diarrhea [AAD]. Rapid diagnosis of CDI is essential to prevent hospital spread of infection. Objectives: The aim of this work were to determine the prevalence of CDI among cases of AAD in Zagazig University Hospitals, identify risk factors, and evaluate real-time polymerase chain reaction [PCR] and enzyme immunoassay [EIA], against toxigenic culture [TC]. Methodology: Stools were collected from 150 patients with AAD. Results: They were tested for TC, toxin A/B EIA, and *C. difficile* tcdA/tcdB genes. Thirty four toxigenic *C. difficile* isolates were obtained [22.7%] out of the 150 patients and those patients were considered positive for CDI. On the other hand, 6 non-toxigenic *C. difficile* isolates were obtained [4%], while culture of the remaining 110 patients [73.3%] did not yield *C. difficile*. The later 116 patients [77.3%] were considered negative for CDI. Analysis of risk factors revealed that advanced age, prolonged hospitalization, long duration of antibiotic intake, potentiated penicillins, 3rd generation cephalosporins, antibiotic combined therapy, liver cirrhosis, malignancy, proton pump inhibitors, enteral tube feeding, and cancer chemotherapy were significantly associated with CDI. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy of real-time PCR against TC were all 100%, however, values of EIA were 79.4%, 100%, 100%, 94.3%, 95.3%, respectively. Conclusions: CDI is an underappreciated nosocomial infection predisposed by many risk factors. Real-time PCR proved superior diagnostic performance to toxin A/B EIA.

## Epistaxis

### therapy

### Comparison of outcomes between endoscopic surgery and conventional nasal packing for epistaxis in the posterior fornix of the inferior nasal meatus.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1361-1365

**Keywords:** Endoscopy; Administration, Intranasal

**Abstract:** Objective: To investigate the clinical features of epistaxis in the posterior fornix of the inferior nasal meatus and compare the treatment outcomes of endoscopic surgery and conventional nasal packing for this intractable form of epistaxis. Methods: Between August 2011 and August 2014, the medical records of 53 adult patients with idiopathic epistaxis in the posterior fornix of the inferior nasal meatus diagnosed by nasal endoscopy were obtained from our department. Of these, 38 patients underwent endoscopic surgery [surgery

group] and 15 received a nasal pack [packing group]. The patients' background characteristics, incidence of re-bleeding, extent of discomfort after treatment as assessed using a 10-point visual analogue scale [VAS] and incidence of nasal cavity adhesion after treatment were analysed. Results: There were no significant differences in background characteristics between the two groups. The incidence of re-bleeding [0/38 vs. 4/15, surgery vs. control,  $P = 0.001$ ], VAS score for discomfort [2.4 +/- 1.4 vs. 7.6 +/- 1.0, surgery vs. control,  $P = 0.001$ ] and incidence of nasal cavity adhesion after treatment [2/38 vs. 7/15, surgery vs. control,  $P = 0.007$ ] were significantly lower in the surgery group than in the packing group. Conclusion: Endoscopic surgery is superior to conventional nasal packing for the management of epistaxis in the posterior fornix of the inferior nasal meatus. During surgery, it is crucial to expose the bleeding sites by shifting the inferior turbinate inward by fracture.

## Esophageal and Gastric Varices

### Platelet count to spleen diameter ratio and to spleen area ratio as predictors for esophageal varices in chronic hepatitis C patients with liver cirrhosis.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 485-492

**Keywords:** Liver Cirrhosis; Hepatitis C, Chronic; Platelet Count; Spleen; Cross-Sectional Studies; Prospective Studies

**Abstract:** Endoscopic detection of esophageal varices [EV] especially the high risk esophageal varices [HREV] is recommended in cirrhotic patients. There are several studies about non-invasive markers to predict the presence of EV. The aim of this study was to evaluate platelet count to spleen diameter [P/D] ratio and platelet count to spleen area [P/A] ratio as predictors for EV and HREV in patients with liver cirrhosis. This prospective study included 100 cirrhotic patients without previous variceal hemorrhage or endoscopic intervention. Biochemical, imaging and endoscopic findings were collected in all patients. Several parameters including P/D and P/A ratio were measured and their association with the presence of EV and HREV was tested. The results showed that only P/D and P/A ratios were found to be independent predictors for the presence of EV and HREV in multivariate analysis. For prediction of the EV formation in cirrhotic patients, P/D ratio at value  $\leq 979.9$  and P/A ratio of  $\leq 20.6$  had area under the curve [AUC] 0.922 and 0.975 respectively with sensitivity 100%, specificity 30% for P/D ratio and sensitivity 100%, specificity 75% for P/A ratio. For prediction of the HREV formation, P/D ratio at value  $\leq 587.9$  and P/A ratio of  $\leq 13.7$  had AUC 0.867 and 0.991 respectively with sensitivity 100%, specificity 50% for P/D ratio and sensitivity 100%, specificity 88% for P/A ratio.

## Esophageal Perforation

### Endoscopic treatment of an oesophageal rupture using an over-the-scope clip [OTSC]: a case report.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 139-141

**Keywords:** Mediastinal Diseases; Endoscopy

**Abstract:** Oesophageal rupture [Boerhaave syndrome] is a rare but serious complication after vomiting. Early intervention is mandatory in order to avoid a deleterious outcome for the patient. This case report describes the endoscopic approach using an over-the-scope clip.

## Ethics, Institutional

### The main indicators for Iranian hospital ethical accreditation.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 117-132

**Keywords:** Accreditation; Hospitals; Ethics; Delphi Technique; Surveys and Questionnaires

**Abstract:** Introduction: The application of organizational ethics in hospitals is one of the novel ways to improve medical ethics. Nowadays achieving efficient and sufficient ethical hospital indicators seems to be inevitable. In this connection, the present study aims to determine the best indicators in hospital accreditation. Methods: 69 indicators in 11 fields to evaluate hospital ethics were achieved through a five-step qualitative and quantitative study including literature review, expert focus group, Likert scales survey, 3 rounded Delphi, and content validity measurement. Expert focus group meeting was conducted, employing Nominal Group Technique [NGT]. After running NGT, a three rounded Delphi and parallel to Delphi and a Likert scale survey were performed to obtain objective indicators for each domain. The experts were all healthcare professionals



who were also medical ethics researchers, teachers, or Ph.D students. Content validity measurements were computed, using the viewpoints of two different expert groups, some ethicists, and some health care professionals [n=46]. Results: After conducting NGT, Delphi, Likert survey, 11 main domains were listed including: Informed consent, Medical confidentiality, Physician-patient economic relations, Ethics consultation policy in the hospital, Ethical charter of hospital, Breaking bad medical news protocol, Respect for the patients' rights, Clinical ethics committee, Spiritual and palliative care unit programs in the hospitals, Healthcare professionals' communication skills, and Equitable access to the healthcare. Also 71 objective indicators for these 11 domains were listed in 11 tables with 5 to 8 indicators per table. Content Validity Ratio [CVR] measurements were done and 69 indicators were highlighted. Conclusion: The domains listed in this study seem to be the most important ones for evaluating hospital ethics programs and services. Healthcare organizations' accreditation and ranking are crucial for the improvement of healthcare services. Ethics programs would also motivate hospitals to improve their services and move towards patients' satisfaction. In this regard, more involvement of bioethicists can help healthcare organizations to develop ethics programs and ensure ethicsbased practice in hospitals.

## Factor VIIa

### Use of recombinant factor VIIa in uncontrolled gastrointestinal bleeding after hematopoietic stem cell transplantation among patients with thrombocytopenia.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1389-1393

**Keywords:** Recombinant Proteins; Gastrointestinal Hemorrhage; Hematopoietic Stem Cell Transplantation; Thrombocytopenia

**Abstract:** Background and Objective: Recombinant-activated factor VII [rFVIIa] is a vitamin K-dependent glycoprotein that is an analog of the naturally occurring protease. It has an off-label use to control life-threatening bleeding that is refractory to other measures and was shown to decrease transfusion requirements. Gastrointestinal [GI] bleeding is a severe complication following hematopoietic stem cell transplantation [HSCT] in patients with thrombocytopenia, while hemostatic measures based on ant fibrinolytic or transfusion therapy may not always be successful. The present study investigated the treatment with rFVIIa in severe GI bleeding among thrombocytopenia patients undergoing HSCT. Methods: rFVIIa was given as a single dose of 60 microg/kg in patients with GI bleeding following hematopoietic stem cell transplantation [HSCT]. Results: Among all patients enrolled, 12 [75%] of 16 patients obtained a response, of which 5 achieved a complete response and 7 achieved a partial response. The 4 remaining patients [25%] had no response. Nine patients [56.3%] died in a follow-up of 90 days. No thromboembolic events were associated with the drug administration occurred. Conclusions: Our study showed that rFVIIa may represent an additional therapeutic option in such cases.

## Faculty, Medical

### Medical faculty development: perceptions about teachers' characteristics.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 405-410

**Keywords:** Perception; Surveys and Questionnaires; Personality; Human Characteristics

**Abstract:** Objectives: This study explored the attributes of an effective medical teacher as determined by faculty members. The faculty's perspectives about whether teaching qualities correspond to faculty members' years of experience were also studied. Methods: A quantitative survey was performed by using a pretested online self-administered questionnaire that was distributed to the medical faculty of the College of Medicine Qassim University. The questionnaire probed the faculty members' opinions about the qualities and attributes of good medical teachers. Results: Seventy-five per cent of faculty members responded. The most important attributes according to the faculty were good communication skills, honesty, and organized presentations. In contrast, telling jokes, sharing personal narratives, and being non-judgemental were the least-valued attributes. Experienced teachers with more than 10 years of experience attached more value to a greater array of qualities than their junior colleagues. Conclusion: Faculty development programmes at medical schools should focus on improving the attributes of effective teachers identified by teachers themselves and their students. Future studies could identify more significant attributes in greater depth and detail.

## Fasting

### The effect of Ramadan fasting on fetal development.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1295-1299

**Keywords:** Fetal Development; Pregnancy; Pregnant Women; Islam

**Abstract:** Objective: To evaluate the effects of Ramadan fasting on fetal development and outcomes of pregnancy. Methods: We performed this study in Antakya State Hospital of Obstetrics and Child Care, between 28 June 2014 and 27 July 2014 [during the month of Ramadan]. A total of two hundred forty healthy pregnant women who were fasting during Ramadan, were included in the groups. The three groups were divided according to the trimesters. The each group was consisted of 40 healthy pregnant women with fasting and 40 healthy pregnant women without fasting. For evaluating the effects of Ramadan on fetus, ultrasonography was performed on all pregnant women in the beginning and the end of Ramadan. We used the essential parameters for the following measurements: increase of fetal biparietal diameter [BPD], increase of fetal femur length [FL], increase of estimated fetal body weight [EFBW], fetal biophysical profile [BPP], amniotic fluid index [AFI], and umbilical artery systole/diastole [S/D] ratio. Results: No significant difference was found between the two groups for the fetal age, maternal weight gain [kilogram], estimated fetal weight gain [EFWG], fetal BPP, AFI, and umbilical artery S/D ratio. On the other hand, a statistically significant increase was observed in maternal weight in the second and third trimesters and a significant increase was observed in the amniotic fluid index in second trimester. Conclusion: In Ramadan there was no bad fetal outcome between pregnant women with fasting and pregnant women without fasting. Pregnant women who want to be with fast, should be examined by doctors, adequately get breakfast before starting to fast and after the fasting take essential calori and hydration. More comprehensive randomized studies are needed to explain the effects of fasting on the pregnancy and fetal outcomes.

## Fatty Acids

### Fatty acid composition of diets of early school-age children and its health implications.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1467-1471

**Keywords:** Dietary Fats; Fatty Acids, Unsaturated; Fatty Acids, Monounsaturated; Surveys and Questionnaires; Diet; Child; Schools

**Abstract:** Objective: The main objective of this study was to determine the amount and type of fat consumed by early school-age children per day. Dietary fat intake as a percentage of the total calorie intake was also estimated. Methods: The study was conducted in Lublin, the largest city in south-east Poland, between January 2014 and April 2014, on 702 randomly selected children, i.e. 3% of the total population of early school-age children in the research area. The parents were asked to provide information about the type and amount of food consumed by their children daily. A standard food frequency questionnaire was used. Results: Dietary levels of saturated fat were elevated in the analyzed populations and were the source of 13.33% of daily calorie intake. In the studied population, the ratio of saturated to monounsaturated and polyunsaturated fatty acids was determined at 3.25: 2.95: 1. Dietary intake of alpha-linolenic acid [ALA] reached 1.057 +/- 0.55 g [0.63% of daily calorie intake] on average, and dietary intake of linoleic acid [LA] was determined at 3.86 +/- 2.51 g [2.31% of daily calorie intake]. Conclusions: The average total calorie intake of children aged 6-11 years was 1445.66 calories per day. Average fat intake was 29.64% of the total calorie intake. The highest intake of SFAs was found in the youngest age group of 6- to 8-year-olds. The type of food consumed by children affected the amount and type of dietary fat in all age groups.

## Femoral Neck Fractures

### Multiple cannulated screw fixation of young femoral neck fractures.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1517-1520

**Keywords:** Bone Screws; Fracture Fixation; Femur Head Necrosis

**Abstract:** Objective: We wanted to analyze the factors affecting the results of multiple cannulated screws fixation in patients less than 60 years old with femoral neck fracture [FNF]. Methods: We reviewed 52 patients [30 males, 22 females] who were treated with multiple cannulated screws fixation for FNFs. They were followed up for more than one year during January 2002 to December 2012. They were classified by Garden's

classification. The anatomic reduction was evaluated by Garden's alignment index on hip both anteroposterior and lateral images. Postoperative complications were analyzed during follow up periods. Results: By Garden's classification, 6 cases were in stage I, 13 cases in stage II, 30 cases in stage III and 3 cases in stage IV. During follow up periods, avascular necrosis of the femoral head was observed in 12 cases [23%] and nonunion was observed in 5 cases [9%]. The 16 patients who had complications underwent total hip arthroplasty [31%]. In non-displaced fracture groups [Garde I, II] did not have AVN nor nonunion. The incidence of complications in displaced fracture group was 51.5%. The complicated cases showed tendency for increased apex anterior angulation of femoral neck on hip lateral images and the result was statistically significant. [p=0.0260]. Conclusion: The patients less than 60 years old who were treated with multiple cannulated screws fixation for displaced FNFs showed the incidence of complications was more than 50%. It needs a cautious approach for anatomical reduction, especially related to anterior angulation on hip lateral image.

## Fishes

### microbiology

#### Mycological evaluation of imported frozen fish.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 127-131

**Keywords:** Frozen Foods; Yeasts; Perciformes; Evaluation Studies as Topic; Candidiasis

**Abstract:** A total number of 100 samples of four types of frozen fish [Barbone, Sardine, Baga and Mackerel] were collected from different Alexandria markets. The samples were subjected to mycological tests to evaluate the fungal load of these frozen fish. The result showed that the predominant genera of the isolated mould from the 4 types of fish were *Aspergillus* spp. and *Penicillium* spp. In addition to other mould isolates these were *Cladosporium* spp., *Fusarium* spp., *Alternaria* spp., *Nigrosporium* spp., *Paecilomyces* spp., *Mucor* spp. and *Rhizopus* spp. It showed also that the predominant genus of isolated yeast, from the 4 types of fish, was *Candida* spp. and the other isolated yeast were *Torulopsis* spp., *Rhodotorulla* spp. and *Geotrichium* spp. This study showed how these types of frozen fish were being contaminated from different sources by yeast and mould. Also, the hazardous and public health importance of such contaminants were fully discussed and suggested recommendations to improve its quality and safety were explained to be implemented.

## Fluoroquinolones

#### Prevalence of fluoroquinolone resistance in *Escherichia coli* in an Indian teaching hospital and adjoining communities.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 504-508

**Keywords:** Prevalence; *Escherichia coli*; Hospitals, Teaching; Drug Resistance, Multiple; Community-Acquired Infections

**Abstract:** Multidrug resistant [MDR] strains of the Gram-negative pathogenic bacterium, *Escherichia coli*, particularly fluoroquinolone-resistant strains, are the major causative agents for hospital acquired [HA] infections, as well as epidemics linked to gastrointestinal [GI] and urinary tracts in the non-hygienic communities of most developing countries. The prevalence of multidrug resistance among 1642 strains of *E. coli*, isolated from clinical samples of patients with GI infections in a hospital over 39 months [November 2009-January 2013] is recorded, along with sensitivity patterns to 23 currently used antibiotics, including third-generation cephalosporins and fluoroquinolones with disc-diffusion method. A total of 1642 strains of *E. coli* were isolated from the clinical samples, of which 810 isolates were from CA samples and 832 isolates were from hospitalized patients during the study period. Of the 810 CA isolates, 567 strains were resistant to fluoroquinolone antibiotics; of the 832 HA isolates, 575 strains were fluoroquinolone-resistant, independently. Minimum inhibitory concentration values of fluoroquinolones [ciprofloxacin and levofloxacin] against the isolated *E. coli* strains confirmed the resistance in the current/coveted treatment options. Patients with other bacterial infections had relatively higher chances of becoming infected with fluoroquinolone-resistant *E. coli* strains. The data presented epitomize the daunting state of the infection-dynamics of fluoroquinolone-resistant *E. coli* in hospitals and adjoining communities.

## Foot-and-Mouth Disease

### genetics

#### Molecular study on foot and mouth disease virus in Beheira governorate, Egypt during 2014.

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*Alexandria Journal of Veterinary Science [AJVS]* 2015; 45 (April): 151-160

**Keywords:** Foot-and-Mouth Disease-etiology; Cattle; Serotyping; Antigens, Viral; Buffaloes

**Abstract:** Foot and mouth disease [FMD] is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. Egypt has a long history of occurrence of FMDV outbreaks, as the country is dependent on importation of live animals and meat from many countries all over the world. The present study was designed for detection, isolation and molecular characterization of FMDV circulating among different regions in Beheira governorate. Thirty-eight tissue samples were collected from clinically diseased cattle and buffalo from different localities of Beheira governorate. Direct detection of FMDV using ELISA revealed that 84.2% of the samples were positive. Molecular characterization showed that 24 samples [75%] were positive for serotype O and eight samples [25%] were positive for serotype SAT2. This indicates the predominance of serotype O FMDV in Beheira, Egypt.

### immunology

#### Comparative studies of the potency of foot and mouth disease virus trivalent vaccine with different concentration of the antigenic content [146S]

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*Alexandria Journal of Veterinary Science [AJVS]* 2015; 45 (April): 33-42

**Keywords:** Foot-and-Mouth Disease-genetics; Antigens; Vaccine Potency; Cattle; Foot-and-Mouth

**Abstract:** Estimation of antigenic content [146S] of FMDV serotypes [A, O, SAT2] by sucrose density gradient [SDG] ultracentrifugation by determining the absorbance at 254 nm using ISCO520C density gradient system to produce a highly potent trivalent virus vaccine. The antigenic mass 146S [microg/ml] of serotype [O Pan Asia2, A Iran O5 and SAT2/EGY/2012] were 6.5, 6.2 and 5.9, respectively. The vaccine was injected into three groups of calves [2 individuals/each group] subcutaneously in lateral part of the neck for a dose 3 ml [6.2 microg/serotype/ml], a dose 1.5 ml [4.1 microg/serotype/ml] and a dose 1 ml [2 microg/ml], the sera samples were collected at 7[th] day post vaccination [dpv], 14[th] dpv, 21[th] dpv, 28[th] dpv and every 2 wks till 40 weeks to evaluate the immune response along that period. The antibody titers/40wpv for a 3 ml dose [6.2 microg/ml] of serotypes [O Pan Asia-2, A Iran O5 and SAT-2/EGY/2012] were 2.08, 2 and 1.94, respectively [over the protective titer, PT=1.5 in SNT for cattle], a dose [4.1 microg/ml] of the three serotypes were 1.56, 1.62 and 1.63 [over PT], respectively, but for [2 microg/ml] dose of the three serotypes, the antibodies titer were 1.25, 1.19 and 1.2 [below PT], that show the antibodies titer depend on the concentration of the antigenic mass [146S] and with increase of the 146S concentration increase of the potency of the vaccine. The potency testing of the study depend upon the correlation between 146S and the neutralizing antibody titers were measured by SNT which are the perfect alternative of other potency tests which employ the challenge of the cattle with virulent virus. The immune response of the highly potent vaccine [4.1 microg/serotype/ml and 6.2 microg/serotype/ml] started early after 1[st] wpv and the protective titer remain for more than 38 wpv [especially in 6.2 microg/ml injected calves] and that confer the potency of the vaccine of that dose.

### prevention and control

#### Indigenous foot and mouth disease control methods among nomadic cattle fulanis in Adamawa state, Nigeria.

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*Alexandria Journal of Veterinary Science [AJVS]* 2015; 45 (April): 71-78

**Keywords:** Cattle; Health Services, Indigenous; Surveys and Questionnaires

**Abstract:** This study analyzed the indigenous foot and mouth disease control methods among nomadic cattle Fulani herders in Adamawa State, Nigeria. Primary data were collected by the use of semi-structured questionnaire administered to randomly selected 363 respondents. Data collected were analyzed using percentages, frequency distribution and regression analysis. Result of the analysis of socio-economic characteristics of respondents showed that majority were above 40 years of age [87.9%], 94.5% were married

and only 16.5% acquired formal education. On the average there were eight persons per household and about 80% of the respondents had more than 24 years of cattle herding experience. Twenty eight control methods were identified to be in practice among the respondents. Result of the regression analysis between socio-economic characteristics of the respondents and use of indigenous foot and mouth disease control methods showed that coefficient of age was positive and significant at 1% level, while household size and experience were positive and significant at 5% level. Deforestation and concealment of indigenous control methods by the custodians among others were found to be the constraints against the utilization of indigenous foot and mouth control methods. The study concluded that indigenous control methods were well established and practice among herders who are well experienced and knowledgeable. It is recommended that laws banning bush burning and indiscriminate tree felling be re-enforced in order to preserve indigenous herbs to avert possible extinction. There is a greater need for extension workers and services to be strengthened so as to incorporate the indigenous methods used by the herders.

## Gastric Outlet Obstruction

### Balloon dilatation in patients with gastric outlet obstruction related to peptic ulcer disease.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 121-124

**Keywords:** Dilatation; Gastric Dilatation; Peptic Ulcer; Endoscopy; Helicobacter pylori; Helicobacter Infections; Retrospective Studies

**Abstract:** Background and study aims: Gastric outlet obstruction [GOO] is a rare complication of peptic ulcer disease [PUD]. The endoscopic balloon dilatation [EBD] associated with medical treatment of Helicobacter pylori is a successful method in the management of pyloric stenosis. The aim of this study was to describe epidemiological, clinical, and endoscopic characteristics of GOO related to PUD and to evaluate the effectiveness, safety, and outcome of EBD. Patients and methods: In a retrospective study of patients seen between 1999 and 2009 with symptoms of GOO secondary to PUD, pyloro-bulbar stenosis was confirmed by endoscopic examination. Balloon dilatation was performed when obstruction persisted after treatment with double-dose proton-pump inhibitor [PPI] intravenously for 7-10 days. The H. pylori status was assessed with histology, and eradication therapy was prescribed for infection. Results: A total of 45 consecutive patients [38 males, 7 females median age, 51.9 years; range, 20-58 years] with symptoms of GOO secondary to PUD underwent EBD. Median follow-up time of the 45 patients was 32 months [range, 4-126 months]. The immediate success rate of the procedure was 95.5%. Clinical remission was noted in 84.4% of the patients. Remission without relapse was observed in 55.8%, 30 months after the dilatation. Pyloric stenosis relapsed in 15 patients [39.5%] after a median period of 22.9 months. The dilatation was complicated in three patients [6.7%, two perforations and one bleeding]. A total of 13 patients [29%] underwent surgery. H. pylori was found to be positive in 97.7% of the patients, and was eradicated in 78.4% of them. Smoking and failure of H. pylori eradication were associated with the relapse of the stenosis. Conclusion: EBD is a simple, effective, and safe therapy for the GOO related to PUD, producing short- and long-term remission.

## Gastroenterology

### Highlights from Gastro Update Europe: Budapest, June 12-13, 2015.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 150-156

**Keywords:** Pancreatic Diseases; Short Bowel Syndrome

## Gastrointestinal Hemorrhage

### A case of acute oesophageal necrosis [AEN] in a hypothermic patient. The grave prognosis of the black oesophagus.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 136-138

**Keywords:** Esophagus; Esophageal Diseases; Necrosis; Liver Cirrhosis, Alcoholic; Hypothermi; Prognosis

**Abstract:** Acute oesophageal necrosis, also known as black oesophagus, is a rare, and potentially lethal syndrome which is often diagnosed incidentally during upper endoscopy for evaluation of upper gastrointestinal bleed. It is characterised by diffuse circumferential black mucosal discolouration in the distal oesophagus secondary to necrosis that may extend proximally to involve variable length of the oesophagus. One theory of pathogenesis is that the relatively low perfusion state in the distal areas of the oesophagus makes it susceptible to mucosal injury. We present a case of acute oesophageal necrosis in a 62 year-old lady with history of alcoholic cirrhosis who presented with haematemesis and severe hypothermia, and was eventually found to have acute oesophageal necrosis.

## Gastrointestinal Neoplasms

### Clinical assessment of malnutrition in patients with gastrointestinal cancer during chemotherapy: a prospective study.

Zamiri, Reza Eghdam; Salarpour, Fatemeh; Ghadimi, Zahra; Ali, Sahar Baba; Nazaraian, Morteza; Jafari, Sattar; Nejad, Leili Hashemi; Salimi, Maryam; Abbaspour, Zahra; Vosough, Fereshteh; Moghimi, Minoosh Zanjan University of Medical Sciences - Vali-e-Asr Hospital - Department of Radiation Oncology

**Reports of Radiotherapy and Oncology** 2015; 2 (1): 19-26

**Keywords:** Antineoplastic Agents; Prospective Studies; Malnutrition; Surveys and Questionnaires; Mortality; Nutritional Status

**Abstract:** Background: Malnutrition is common in patients with cancer and in many cases can result in shortened survival rate. More than 20% of cancer mortality can be attributed to the effects of malnutrition, rather than malignancy itself. Malnutrition results in poor response to treatment, increased length of hospital stay, immunodeficiency, reduced quality of life, and increased health care costs in patients with cancer. Objectives: The aim of this study was to assess the nutritional status of patients with gastrointestinal cancer during chemotherapy. Patients and Methods: In this study, 92 patients over the age of 18 who were referred to Vali-e-Asr hospital of Zanjan [since Apr, 2011 to Dec, 2011] were selected. Nutritional status of patients during 3 cycles of chemotherapy was assessed by a questionnaire. The obtained data were statistically analyzed by ANOVA, using SPSS 16.0. Results: There was a significant relationship between duration of treatment and the average of mid arm circumference [MAC] and body mass index [BMI]. BMI can be considered as an anthropometric index which can be used to alarm the physicians about nutrition problems of the patient. Conclusions: At the end of treatment, patients who survived had better nutritional statuses compared to the ones who passed away. During chemotherapy, malnutrition got worse in patients with metastatic esophageal cancer. Our findings show that patients with moderate or severe malnutrition are in the critical need to improve their malnutrition status.

## Genetic Therapy

### First study of the safety and tolerability of Allvec-1, a gene therapy vector, in patients with advanced stage IV malignant solid tumors.

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 1-6

**Keywords:** Genetic Vectors; Carcinoma; Response Evaluation Criteria in Solid Tumors

**Abstract:** Background: Gene therapy relies on the delivery of foreign DNA into cells. More than 50% of all reported clinical trials for gene therapy are for cancer. Objectives: To test the tolerability, safety, and recommended phase II dose of Allvec-1, a highly selective gene therapy vector, after systemic administration in patients with advanced stage IV solid tumor malignancies. Patients and Methods: A phase I trial evaluated escalating doses of Allvec-1, administered 3 times weekly for 8 weeks in 6 patients with gastric, breast, esophageal, non-small cell lung cancer [NSCLC], and leiomyosarcoma. Clinical lab parameters, blood pressure, pulse and patients' own-reported adverse events were used for evaluation of safety. The maximum dose was set based on the first sign of any minor side effect to be likely related to Allvec-1. Tumor imaging techniques were applied before and after Allvec-1 treatment for any tumor response. No further concomitant anti-tumor treatment was admitted during the study period. Results: Six patients [median age, 50.5 years [range 23-66], they were heavily pretreated; received Allvec-1 starting at a dose of  $1.25 \times 10^{10}$  and increasing to the final dose of  $2 \times 10^{11}$  thrice weekly. During the study period 3 patients have received 24, one patient 21, one patient 14, and one patient 13 intravenous [I.V] injections, respectively. Treatment-related adverse events were nausea [1 out of 6] and increase of body temperature [38 degree C, 2 out of 6]. These side effects were minor and lasted only up to 30 minutes, and disappeared after repeated dosing. The increase of body temperature occurred 24 to 48 hours after the treatments and was observed only during the second week. No other side effects were reported. All clinical lab and vital functions remained unaffected. An increase of body weight and an improvement of general condition could be observed in 4 out of 6 patients. One of these patients showed stable disease until the end of 4 weeks surveillance period. A partial response was seen in 1 out of 6 patients. Four patients died within one month after termination of the treatment due to the progressive disease. Conclusions: Allvec-1, as the first gene therapy vector for systemic administration, was tolerated without any side effects. Dose-limiting toxicities were not observed in this study. Therefore, higher doses can be recommended in phase II trials. Despite extensive prior treatment and final stage of all patients a partial

response and stable disease could be reached during the treatment period. It could be expected that a treatment beyond 8 weeks, even in those terminally ill patients, might increase the life expectancy without any side-effects. Therefore, additional clinical trials are well warranted in defining the role of Allvec-1 in treatment of cancer.

## Glioma

### radiotherapy

#### **First experience of intraoperative radiation therapy in cerebral high grade glioma in Iran: a report of three cases and literature review.**

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 1-6

**Keywords:** Brain Neoplasms; Radiotherapy; Intraoperative Care; Glioblastoma; Review Literature as Topic; Chemoradiotherapy

**Abstract:** Introduction: Among the high grade cerebral gliomas, Glioblastoma multiforme for instance, would be the main pattern of local recurrence causes clinical deterioration and deaths. This has been observed 2 - 3 cm upon the initial lesion. During the period of 2 - 4 weeks post-surgery, remaining tumor cells have re-grown until radiochemotherapy has initiated. So it has seemed clear that improved local control could hopefully translate into improved survival. As a matter of fact, mass reduction has insufficiently achieved in almost every case of GBM as that the tumor cell number has not fallen below a "threshold" that tumor control might achieve by the host immune system. Intraoperative Radiation therapy has been one of those add-on therapies, which has been performed during or directly after resection and cleared the tumor cavity from microscopically remaining cells. Although IORT has presented a novel and feasible principle, the method faced a number of technical and geometrical errors and limitations, which has decreased its potential in the reports of previous studies. Examples could be mentioned as incomplete target volume coverage that seemed as the greatest influence on survival, due to irradiation with an inadequate electron cone size, due to angle errors, or inadequately low energies. In contrast to the previously used forward-beaming electron cones, spherical irradiation sources were specifically attractive in brain tumor IORT, even in post resection cavities with normal complex shapes. Case Presentation: We have been reporting 3 cases of high grade gliomas, one recurrent GBM, one primary glioma grade III, and the last one recurrent Rhabdoid GBM, which have been fulfilling our entrance criteria of IORT procedure, by using spherical applicators, which has been increasingly discussed in recent studies. Conclusions: It was the first experience of intraoperative radiation therapy for cerebral malignant tumours in Iran. Finally, we had a brief overview on the past and present IORT strategies in the treatment of GBM.

## Granulomatosis with Polyangiitis

#### **Pulmonary renal syndrome in a patient with vasculitis: case report and review of literature.**

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1545-1548

**Keywords:** Glomerulonephritis; Hemorrhage; Lung Diseases; Vasculitis; Review Literature as Topic

**Abstract:** Granulomatosis with polyangiitis (GPA) previously known as Wegner's granulomatosis, is a small vessel vasculitis that preferentially involves capillaries, arterioles and venules, presenting as multisystemic disease classically with alveolar haemorrhage and renal insufficiency. We report a case of GPA diagnosed on history, clinical findings and supported by imaging and very high levels of C-ANCA. Renal biopsy confirmed the typical histopathological findings. We discuss herein the management of the case and review of literature.

## Hand Disinfection

**Hand** sanitation practices within clinical settings: its knowledge and practice among students of Peshawar Medical College [PMC]

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**Journal of Medical Students** 2015; 1 (1): 26-30

**Keywords:** Sanitation; Knowledge; Hand Hygiene; Surveys and Questionnaires; Cross Infection; Students, Medical

**Abstract:** Introduction: Healthcare-associated infection is a major cause of morbidity and mortality. Hand hygiene is regarded as the most effective method of prevention but is poorly performed by health workers. Maintaining adequate hand hygiene remains amongst the three requisites of good health. This study was conducted to assess the knowledge regarding different hand sanitation techniques and various factors responsible for non-compliance among students of Peshawar Medical College. Material and Methods: It was a cross-sectional survey based on self-administered questionnaire carried out at Peshawar Medical College. Self-designed questionnaire was distributed and responses obtained from students after their informed consents. SPSS 15 was used for analyzing data. Results: Response rate of the students was 51.6%. In total 87[56.1%] students were male and 68[43.9%] were female. Prevention in transmission of resistant microbes among patients in clinical settings was reported negative by the students [65.8%], the seven standardized steps were known by 42.6% of the students whereas 39.6% students applied it in clinical settings. Conclusion: Awareness about standardized steps of hand sanitation was not adequate among these medical students in the clinical settings; using soap and water for hand sanitation was found to be an effective tool for reducing surface tension between dirt and skin. Non-availability of hand sanitizers and careless attitude to medical students was considered as one of poor compliances. Findings may be considered important in controlling various factors responsible for poor adherence to different hand hygiene practices among medical students in clinical settings.

## Head and Neck Neoplasms

### A review of chemotherapy for locally advanced head and neck cancers.

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 35-42

**Keywords:** Carcinoma, Squamous Cell; Antineoplastic Agents; Radiotherapy

**Abstract:** Context: Chemoradiation provides a survival advantage as well as increased rate of organ preservation compared with radiation alone in locally advanced head and neck squamous cell carcinoma [LAHNSCC]. Evidence Acquisition: Combined modality protocols can be used in 3 forms: a) induction chemotherapy or neoadjuvant therapy before definitive surgery or radiotherapy, b) Concurrent chemoradiotherapy, and c) sequential therapy consisting of induction chemotherapy followed by concurrent chemo radiation. Results: Despite an improvement in organ preservation, induction treatment has no impact on survival. Ongoing phase III trials comparing sequential therapy with concurrent chemoradiation may establish which of these two approaches is superior. Conclusions: Until those trials have been completed, Taxane- based sequential therapy can be a reasonable alternative to concurrent chemo radiotherapy in the patients with locally advanced disease.

## pathology

### Head and neck squamous cell carcinoma in Iran: clinico-pathological and treatment-related factors influencing survival.

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 21-26

**Keywords:** Head and Neck Neoplasms-therapy; Carcinoma, Squamous Cell; Disease-Free Survival; Survival Rate; Prognosis

**Abstract:** Background: Evidences about survival of the patients with head and neck squamous cell carcinoma [HNSCC] have been scant in our region. Objectives: The aim of current study was to determine clinico-pathological and treatment-related factors, influencing outcome of these patients. Patients and Methods: We have reviewed all patients with a new diagnosis of HNSCC admitted between 2008 and 2014 in "Jorjani Cancer Center", Tehran, Iran. Overall survival [OS] and event free survival [EFS] of the patients, and their relation with demographic and clinico-pathological factors have been analyzed. Results: Among 119 included patients, 90 were male and 29 were female with mean age of 58 years. Larynx was the most common primary tumor site [55% of all patients]. With a median follow-up period of 28 months, OS and EFS of the study patients was 61.2% and 52.4%, respectively. Tumor stage was the only parameter that significantly influenced the patients' OS. Patients with normal BMIs had significantly higher mean EFS compared with patients with below or above normal BMIs. Surgical treatment modalities have resulted in the same prognosis as non-surgical approaches. Conclusions: Our study seems to be the first that investigated outcome of Iranian patients with head and neck cancer and its influencing factors.



## Health

### Decomposition of health inequality determinants in Shiraz, South-west Iran.

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**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 152-158

**Keywords:** Social Determinants of Health; Quality of Life; Mental Health; Cross-Sectional Studies; Health Status; Socioeconomic Factors

**Abstract:** Background: Despite the enhancement in health outcomes worldwide, health inequity and inequality is one of the most relevant topics both for health policy and public health. This research was designed to decompose the health inequality of people living in Shiraz, south-west Iran. Methods: Data were obtained from a multistage-sample survey conducted in Shiraz from April to May 2012, to find determinants of health related quality of life [HRQoL]. General health [GH] and mental health [MH] were used as health status. As a measure of socioeconomic inequality, a concentration index of GH and MH was used and decomposed into its determinants. Results: The overall concentration indices of MH and GH in Shiraz were 0.023 [95% CI: 0.015, 0.031] and 0.016 [95% CI: 0.009, 0.022], respectively. Decomposition of the concentration indices indicated that income made the largest contribution [39.92% for GH and 39.82% for MH] to income-related health inequality. Education [about 25% for GH and 34% for MH], insurance [about 14% for GH and 11% for MH], and occupation [about 12% for GH and 11% for MH] also proved important contributors to the health inequality in Shiraz. Conclusions: There exist MH and GH inequalities in Shiraz. Apart from insurance, most of the health inequalities in Shiraz can be explained through factors beyond the health sector. Hence, implementing redistributive policies and education expansion programs as well as providing an insurance scheme and secure career conditions could decrease these unethical health inequalities.

## Health Promotion

### Doctors' views on the quality of claims provided by pharmaceutical representatives: a comparative study in Malaysia and Australia.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 471-480

**Keywords:** Administrative Claims, Healthcare; Community Health Workers; Surveys and Questionnaires; Pharmaceutical Services; Occupational Health Physicians

**Abstract:** Objectives: Doctors perceive the interactions with pharmaceutical representatives as professionally appropriate. However, studies have shown that the interaction is associated with less rational prescribing of medications. No previous study has assessed doctors' opinions of the presentation of pharmaceutical representatives and the quality of claims provided to the doctors in Australia and Malaysia. The aim of this study was to compare the opinions of Australian and Malaysian doctors of sales explanations and quality of claims provided by the pharmaceutical representatives. Methods: We recruited samples of primary care doctors in Australia and Malaysia to evaluate pharmaceutical sales visits. After a visit, doctors were asked to fill out a questionnaire on the main product and claims discussed during the visit. Descriptive statistics were employed, and Chi-square analysis and clustered linear regression were used to assess differences between doctors from both countries. Results: The majority of doctors reported that the presentations were convincing as well as likely to change their prescribing habits and improved their knowledge. The majority of marketing claims recorded by doctors in Australia and Malaysia were classified as vague claims. Approximately one-third of the claims were unambiguous [Australia 31% and Malaysia 33%]. In a majority of the presentations [Australia, 65%, Malaysia, 84%], doctors indicated that the primary claims by the pharmaceutical representatives were entirely or nearly accurate. Conclusions: Doctors in Australia and Malaysia held generally positive views of the presentations of pharmaceutical representatives, although the information being presented varied.

## Heart Block

### Complete heart block lacking functional anatomical impairment in the conduction system.

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 36-39

**Keywords:** Atrioventricular Block; Sinoatrial Node; Ischemia; Heart Conduction System

**Abstract:** Complete heart block also known as third-degree atrioventricular block [AV block] is a condition in which there is no conduction of the impulse produce in the sinoatrial node [SA node] in the atrium to the ventricle.[1] Complete heart block may be congenital or acquired. There are certain conditions which can lead to third-degree heart block, commonest being the coronary ischemia. Initially there may be first degree atrioventricular block [AV block], second

degree atrioven-tricular block [AV block], bundle branch block or bifasicular block ultimately leading to complete heart block. In most cases third-degree AV block presents with acute myocardial infarction.[2,3] A 45 years old male with no known comorbid and without any risk factors for coronary heart disease coming with a short duration of complaints of dizziness and vertigo was diagnosed as a case of complete heart block without any functional and anatomical impairment in conduction system.

## Heart Rate

### Heart rate recovery and physical conditioning.

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*Medical Principles and Practice* 2015; 24 (4): 399-400

**Keywords:** Psoriasis; Physical Conditioning, Human; Motor Activity; Surveys and Questionnaires

## Heat Stress Disorders

### Development and validation of a questionnaire for preliminary assessment of heat stress at workplace.

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*Journal of Research in Health Sciences [JRHS]* 2015; 15 (3): 175-181

**Keywords:** Hot Temperature; Surveys and Questionnaires; Validation Studies as Topic; Workplace; Occupational Health

**Abstract:** Background: Current heat stress indices are not completely suitable for heat strain screening in developing countries due to their inherent and applied limitations. The aim of this study was development of a questionnaire method entitled "Heat Strain Score Index" [HSSI] in order to perform a preliminary assessment of heat stress at work. Methods: This research included six phases [i] Item generation [ii] Content validity [iii] Reliability analysis [iv] Structure validity [v] Concurrent validity and [vi] Classification of thermal risk level. In item generation phase, 40 items were identified to have impact on the heat strain. Content validity was evaluated by occupational health specialists. Results: In consistency assessment, Cronbach's coefficient [alpha] of items was 0.91. Exploratory factor analysis on items HSSI draft identified four subscales which explained 71.6% of the variance. Correlation between the HSSI score with aural temperature was 0.73. Cut-off point; sensitivity and specificity for upper no thermal strain zone were 13.5, 91% and 50%, respectively. Whereas Cut-off point, sensitivity and specificity for lower thermal strain zone were 18, 86% and 73%. Conclusions: The results showed that 18 variables that were measurable through subjective judgment and observation in the HSSI scale covered heat stress key factors. This scale demonstrated reliability and initial validity in scale were suitable. Therefore HSSI scale for primary evaluation heat stress is appropriate.

## Helicobacter pylori

### Detection of Helicobacter antigen in stool samples and its relation to H. Pylori positive cholecystitis in Egyptian patients with chronic calcular cholecystitis.

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 579-586

**Keywords:** Chronic Disease; Gallbladder; Cross-Sectional Studies; Cholecystitis; Antigens; Feces

**Abstract:** Evidences supporting the association between H. pylori infection and chronic cholecystitis could be found by using direct culture or staining of H. pylori in gallbladder tissues as well as indirect techniques. Stool antigen test has been widely used due to its non-invasive nature. Various stool antigen tests were developed to detect H. pylori using an enzyme immunoassay [EIA] based on monoclonal or polyclonal antibodies. This study evaluated the frequency of H. pylori antigen in stool samples of patients with chronic calcular cholecystitis as regard gall bladder histopathological changes. Fifty patients were included presented with symptomatic cholelithiasis recruited from the outpatient clinic of National Hepatology and Tropical Medicine Research Institute during 2014-2015. Full history and clinical examination and abdominal ultrasonography were performed. Stool samples were collected, prepared and examined for detection of H. pylori antigen. Cholecystectomy was done for all patients; 45 patients [90%] by laparoscopic Cholecystectomy and 5 patients [10%] by open surgery and removed gallbladders were submitted to pathology department for detection of H. pylori in tissue under microscope using Giemsa stain. The results showed that [82%] were females with mean age [42.6+1 years]. The mean BMI was [29+7.2]. H.pylori-specific antigen in stool samples was detected in 40% of patients and 38% were detected in patients; tissue, with significant correlation between H. pylori-specific antigen in stool and in tissue. Histopathological pictures infection in tissue were 68.4% mucosal erosions, 63.2% mucosal atrophy, 57.9% mucosal hyperplasia, 26.3% metaplasia, 42.1% muscular hypertrophy, 26.3% fibrosis, but lymphoid aggregates were in 42.1% of cases.

### Quadruple therapy versus standard triple therapy for eradication of *Helicobacter pylori* in Kuwait.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 131-135

**Keywords:** *Helicobacter* Infections-prevention and control; *Helicobacter* Infections-drug therapy; Clarithromycin-therapeutic uses; Bismuth-therapeutic uses; Omeprazole; Tetracycline; Metronidazole; Amoxicillin

**Abstract:** Background and study aims: Chronic infection caused by *Helicobacter pylori* [*H. pylori*] is associated with chronic gastritis, peptic ulcer disease, and gastric cancer. Eradication of *H. pylori* reduces morbidity of chronic gastritis and incidence of gastric cancer in high-risk population. We aimed at testing the efficacy of clarithromycin-based triple therapy and bismuth-based quadruple therapy for eradicating *H. pylori* in patients with chronic gastritis in Kuwait. Patients and methods: A total of 218 dyspeptic patients from different countries who were proved to have chronic gastritis by endoscopy and gastric biopsy were enrolled. All of them were naïve to *H. pylori* eradication therapy. They were randomised into two groups: group A, received triple therapy [omeprazole, amoxicillin, and clarithromycin] for 10 days, and group B, received quadruple therapy [omeprazole, bismuth subcitrate potassium, tetracycline, and metronidazole] for 10 days. All patients were tested for eradication of *H. pylori* by carbon-13 urea breath test 4 weeks after treatment. Results: Total response rate of eradication therapy in both groups was 77.5% [n = 169]. However, group B [n = 100] had a higher eradication rate [88%] than group A [n = 118] [68.6%]. *H. pylori* eradication rate was significantly higher in males [84.2%] than females [70.2%] in both groups [p < 0.01]. There were no differences in eradication rates with regard to median age or nationality. Conclusion: Bismuth-based quadruple therapy is more effective as a first-line therapy than clarithromycin-based triple therapy for eradicating *H. pylori* in patients with *H. pylori*-related chronic gastritis in Kuwait.

### pathogenicity

### The sialic acid binding adhesin [SabA] of *Helicobacter pylori* isolated from Egypt is associated with gastric cancer.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 35-40

**Keywords:** *Helicobacter pylori*-isolation and purification; Bacterial Outer Membrane Proteins; Adhesins, Bacterial; Stomach Neoplasms-diagnosis; Sialic Acids

**Abstract:** Background: *Helicobacter pylori* [*H. pylori*] expressed outer membrane proteins [OMP[s]] that assist in bacterial adherence to the gastric epithelium promoting successful colonization. One of these OMPs is the blood group antigen binding adhesin A [BabA] which bind to the fucosylated Lewis[b] blood group antigen [Le[b]] on the surface of gastric epithelial cells. Another OMP[s] is the sialic acid binding adhesin [SabA] that mediates *H. pylori* binding the specific sialyl dimeric Lewis[x] glycosphingolipid [Le[x]] on the gastric epithelium. A lot of discrepancies about the correlation between the presence of both babA and sabA genes and the apparent clinical outcome of *H. pylori* infection were reported. Objectives: The present study was to disclose the relationship between the presence of these genes and the clinical outcomes in Egyptian *H. pylori* patients. Methodology: Forty three *H. pylori* strains were isolated from patients with different clinical findings. Polymerase chain reaction [PCR] for detecting the presence of babA and sabA genes was performed using different sets of primers for detecting different regions of the gene. Further bioinformatics analysis for the sabA product was done using KEGG and Pfam websites. Results: evincing striking correlation between sabA presence and the gastric cancer disease. However, we could not find any correlation between presence of babA and the associated diseases. Conclusions: SabA is one of the *H. pylori* OMPs adhesins involving in increasing the risk of *H. pylori* associated gastric cancer in *H. pylori* Egyptian patients.

### Hemorrhagic Disease Virus, Rabbit

#### genetics

### Molecular characterization of a haemagglutinating and non haemagglutinating rabbit haemorrhagic disease viruses from Egypt.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 1-5

**Keywords:** Viral Proteins; Hemagglutinins, Viral; Sequence Analysis; Rabbits

**Abstract:** Rabbit viral haemorrhagic disease [RVHD] is a highly contagious, peracute and acute viral disease of both wild and domestic rabbits caused by rabbit haemorrhagic disease virus [RHDV]. RHDV is considered as a haemagglutinating virus; however, there is a growing evidence for presence of non haemagglutinating RHDV strains. In this study, two RHDVs have been characterized. The two viruses were selected from ten different infected rabbit flocks. One of them had haemagglutination [HA] activity and the other one lacked HA activity. HA test was carried out on both isolates at 4[degree]C using human red blood cells [RBC] type 'O'. RT-PCR was performed on the liver samples of the ten infected rabbit flocks using specific primers targeting VP60 gene. The obtained partial VP60 gene sequences of the two selected strains were aligned with other haemagglutinating and non haemagglutinating strains of RHDV in the world, including "RHDVa" strains as France 99-05, France-Reu-00, Germany-Triptis and China TP. Phylogenetic analysis showed that the two strains were genetically different. Haemagglutinating strain was similar to Rainham strain which is low haemagglutinating virus while non haemagglutinating strain was similar to whn-1 strain which is non haemagglutinating virus. The study confirmed presence of non haemagglutinating RHDV in rabbits reared in Egypt and suggested that VP60 might be related to HA activity.

## Hemorrhagic Fever, Crimean

### prevention and control

#### CCHF in the EMR: Call for strategic actions for control.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (50): 1

**Keywords:** Hemorrhagic Fever Virus, Crimean-Congo; Disease Outbreaks; Mediterranean Region

**Abstract:** A recent sub-regional meeting held from 7-9 December in Muscat, Oman on Cri-mean Congo haemorrhagic fever [CCHF] concluded with a clarion call for developing effective strategies for its control in the Eastern Mediterranean Region of WHO.

## Hemorrhagic Fevers, Viral

### epidemiology

#### Unknown VHF in Sudan.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (49): 1

**Keywords:** Hemorrhagic Fevers, Viral-epidemiology; Disease Outbreaks; Yellow Fever; Rift Valley Fever

**Abstract:** An outbreak of Viral Haemorrhagic Fever [VHF] of unknown illness has been reported from Darfur in Sudan. Between 30 August to 27 November 2015, a total of 469 suspected cases of VHF including 120 deaths [CFR: 26%] were reported from 27 localities in Greater Darfur.

## Hepacivirus

### genetics

#### Generation and characterisation of HCV genotype 1 viruses most recent common ancestor.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 49-57

**Keywords:** Hepacivirus-immunology; Drosophila Proteins; Genotype

**Abstract:** Background: Hepatitis C virus [HCV] causes acute and chronic liver diseases in humans. Its two envelope glycoproteins, E1 and E2, interact with host cell receptors and provide a target for neutralising antibodies. Past vaccine studies using unmodified E2 proteins have failed to convincingly generate broadly neutralising antibody responses. Objectives: This study sought to generate and evaluate an immune-focused,

vaccine candidate for HCV. Methodology: A synthetic construct based on most recent common ancestral sequence [MRCA] of HCV genotype 1 viruses was generated using sequences available from the Los Alamos HCV database [720 sequences [360 subtype 1a and 360 subtype 1b sequences]], after exclusion of epidemiologically-related sequences. Soluble E2 [sE2] proteins were generated by stably transfected S2 cells and purified using Strep- tag purification and size exclusion chromatography. The MRCA construct was subsequently interrogated using a linear [AP33] and conformational [1: 7] monoclonal antibodies directed at E2. A full length E1E2 construct was used for production of HCV pseudoparticles [HCVpp]. The infectivity of the HCVpp was measured in the presence of monoclonal antibodies; AP33 1: 7 and AR3A. Results: Monomeric proteins of the MRCA generated using a Drosophila expression system were conformationally intact when examined by the monoclonal antibody 1: 7 that targets the conformational epitope on E2 responsible for interaction with the CD81 receptors. The full length MRCA E1E2 construct showed functionality in the HCV pseudo-particle [HCVpp] system. The MRCA HCVpp construct was susceptible to neutralisation by AP33, 1: 7 and AR3A, in dose- dependant manner. Conclusion: This study demonstrates the generation of a functional construct that could be used as a vaccine candidate in a potential vaccine approach to minimise the problem of genetic diversity between the vaccine construct and contemporary viruses.

## pathogenicity

### Assessment of serum hydroxyproline and osteopontin as noninvasive markers of hepatic fibrosis in Egyptian patients with chronic hepatitis C virus infection.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 135-145

**Keywords:** Hepatitis C, Chronic-complications; Hepatitis C, Chronic-diagnosis; Blood Proteins; Osteopontin; Liver Cirrhosis; Aspartate Aminotransferases

**Abstract:** Background: Hepatitis C virus [HCV] infection is a progressive disease that may result in chronic hepatitis, cirrhosis and hepatocellular carcinoma [HCC]. Liver fibrosis is an essential factor that must be considered in the management of patients with HCV. Although liver biopsy represents the gold standard for evaluating the presence, type and stage of liver fibrosis, this technique remains a costly and invasive procedure. Therefore, several diagnostic methods for determining liver fibrosis, such as the detection of serum biomarkers, have been used. Objective: To evaluate the use of serum hydroxyproline [HYP] and osteopontin [OPN] as non invasive direct markers to assess the degree of hepatic fibrosis in Egyptian patients with chronic HCV infection in comparison to indirect markers such as aspartate aminotransferase platelet ratio index [APRI] and to determine the most diagnostically accurate non invasive marker of hepatic fibrosis, hoping to replace liver biopsy in the next few years. Methodology: This study was carried out on 48 patients with chronic HCV infection who had undergone liver biopsy and scored as mild fibrosis [F1], moderate fibrosis [F2], severe fibrosis [F3] and liver cirrhosis [F4] based on Metavir scoring system, and 12 age and sex matched controls. The serum levels of HYP and OPN were measured by enzyme linked immunosorbent assay [ELISA]. Results: There was a highly significant increase in HYP, OPN and APRI in all patients groups in comparison to control group and their increase was significantly associated with the degree of hepatic fibrosis. Furthermore, HYP, OPN and APRI values showed highly significant increase in significant hepatic fibrosis [F2-F4] in comparison to mild fibrosis [F1], and in hepatic cirrhosis [F4] in comparison to hepatic fibrosis [F1-F3]. There was a highly significant positive correlation between serum HYP level, OPN and APRI. The receiver operating characteristic [ROC] curve analysis revealed that OPN has the highest area under the curve [AUC] value for discriminating fibrosis stages, followed by HYP and lastly APRI. Conclusion: This study demonstrated that OPN was the most diagnostically accurate marker for assessing the severity of hepatic fibrosis and served as a prognostic index towards the progression of hepatic fibrosis to cirrhosis in patients with chronic HCV infection, followed by HYP and lastly APRI. These findings indicated that OPN and HYP could be used as non invasive markers of hepatic fibrosis and cirrhosis which would help to reduce the need for liver biopsy in chronic HCV infection.

## Hepatitis A

### epidemiology

#### Hepatitis A cases in Syria.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (14-15): 1

**Keywords:** Hepatitis A virus; Jaundice

**Abstract:** In recent time, the Ministry of Health of Syria has reported an increasing number of acute jaundice syndrome cases from different governorates of the country. Laboratory tests performed in Damascus has identified hepatitis A virus [HAV] as the causative organism of this high number of acute jaundice syndrome cases.

## Hepatitis B

### diagnosis

#### Interleukin-12 as a biomarker for diagnosis of hepatitis B viral infection and related liver function.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 153-157

**Keywords:** Hepatitis B virus-genetics; Interleukin-12; Hepatitis B Vaccines; Biomarkers; Liver Diseases; Bilirubin

**Abstract:** Objective: This work aims to evaluation of IL-12 as a biomarker in hepatic patients, chronically infected patients, hepatic patients Under treatment, recovered patients and vaccinated patients. Methodology: The liver function pattern of these groups were monitored using biochemical assays relative to IL-12 as a biomarker using ELISA. Results: Data Recorded revealed that there was a highly significant negative correlation between Interleukin-12 and ALT level, Total Bilirubin and Total Bilirubin [ $P < 0.05$ ]. In the mean time, there was a highly significant negative correlation between Interleukin-12 and AST level, Albumin and Alkaline phosphatase. Conclusion: IL-12 can be used as a biomarker for the hepatic infection.

### epidemiology

#### Frequency and determinants of Hepatitis B and C virusin general population of Farash Town, Islamabad.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1394-1398

**Keywords:** Hepatitis C-epidemiology; Developing Countries; Risk Factors; Cross-Sectional Studies; Hepacivirus; Hepatitis B virus

**Abstract:** Background and Objective: Both Hepatitis B virus [HBV] and hepatitis C virus [HCV] infections are rapidly spreading in the developing countries. Both of them are blood borne and are transmitted through un-screened blood transfusion, inadequately sterilized needles and equipment. According to WHO's criteria of endemicity, Pakistan has high disease burden of Hepatitis B and C. The present study was planned to determine the frequency and to identify the risk factors of hepatitis B and C virus in the general community of Farash town. Methods: This descriptive study was carried out in Al Nafees Medical Hospital Lab, from January 2013 to December 2013. Both the genders and all age groups were included in the study. All the patients who fulfilled the inclusion criteria had given a written consent. Data was collected through questionnaire and was analyzed on Statistical Package for Social Sciences [SPSS] version 21. Results: Three-hundred and forty five patients were studied. Among these 92 [27%] were males and 253[73%] were female, 33% of them had hepatitis C, 9% had hepatitis B. History of injections was reported in all of the patients. Visit to community barbers was present in 58.6% and 41% cases of hepatitis B and C. History of dental procedures was obtained in 7[24%] and 15[13%] patients of hepatitis B and C. Conclusion: Major contributors for Hepatitis B and C in Farash town are use of unsterilized therapeutic injections and visit to community barbers. Education of the barbers regarding sterilization may help in reducing the burden of infection in this community.

## Hepatitis B virus

#### Knowledge of and risky behaviours towards hepatitis B virus infection among Egyptian school children.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 94-98

**Keywords:** Knowledge; Risk Factors; Cross-Sectional Studies; Hepatitis B; Schools; Students

**Abstract:** Background and study aims: Success in the prevention of hepatitis B virus [HBV] depends to a large extent on the adolescents' HBV knowledge and their risky behaviours. This study aims to assess the knowledge of and the risky behaviours towards HBV among school students and to determine the significant predictors affecting their knowledge. Patients and methods: A cross-sectional study was approved in four Egyptian governorates [Dakahleya, Gharbeya, Cairo, and Beni-Suef] on 574 students aged 11-17 years. A questionnaire was filled through a face-to-face interview to collect data about the socio-demographic character, HBV knowledge, and risky behaviours among children who were chosen for this study. Results: While 75% of students had poor levels of HBV knowledge, 1.7% had good levels of knowledge. As regards gender, more than 60% of students shared scissors and went to dental clinic with no significant difference. While boys reported a significant history of hospitalisation [50.2%] and wound stitches [36%], girls reported a lesser degree

of the same [40.2% and 22.6, respectively],  $p < 0.01$ . During logistic regression analysis, the most important predictors of poor HBV knowledge were age  $< 15$  years and living in Cairo governorate, with adjusted odds ratio [AOR] 1.5 and 5.0, respectively. Conclusion: The majority of students chosen for the study had low levels of knowledge and high risky behaviours towards viral hepatitis. In order to minimise the risky behaviours among adolescents, health education programmes should be conducted concerning the mode of transmission and prevention of viral hepatitis.

## Hepatitis C, Chronic

### Epstein-Barr virus and Interleukin-28B polymorphism in the prediction of response to interferon therapy in hepatitis C patients.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 84-89

**Keywords:** Herpesvirus 4, Human; Epstein - Barr virus Infections; Interleukins; Polymorphism, Genetic; Interferons

**Abstract:** Background and study aims: In chronic hepatitis C virus [HCV], viral and host factors are known to be predictors for anti-viral therapy. IL-28B genotype strongly influences treatment outcome, while Epstein-Barr virus [EBV] co-infection could accelerate the course of chronic HCV infection. This study was conducted to assess whether EBV co-infection adds to the predictive value of IL-28B. Patients and methods: A total of 105 patients with chronic HCV were classified according to their response to treatment into two groups: 38 sustained virological responders [SVRs] and 67 nonresponders [NRs]. Collected sera at baseline and follow-up [FUP] were used for assessing EBV antibodies by enzyme-linked immunosorbent assay [ELISA] and the expression of EBV genes [BNLF-1, BZLF-1, and EBER-2] by polymerase chain reaction [PCR]. Collected peripheral blood was used for detecting IL-28B rs.12979860 single-nucleotide polymorphism. Results: Regarding IL-28B genotype frequencies, a significant difference [ $p = 0.003$ ] was observed between SVRs [C/C = 51.4%, C/T = 48.6%, T/T = 0%] and NRs [C/C = 25%, C/T = 55%, T/T = 20%]. On assessing EBV infection at baseline and FUP, it was found that 61% and 55% were positive, respectively, with no significant difference between SVRs and NRs. As for anti-viral capsid antigen [VCA] antibodies, the NRs had significantly higher baseline anti-VCA immunoglobulin M [IgM] levels than SVRs [ $p = 0.01$ ]. While FUP anti-Epstein-Barr nuclear antigen-1 [EBNA-1] IgG reported a significant decline within SVR patients [ $p = 0.02$ ], neither baseline nor FUP anti-VCA IgG levels showed a statistically significant viral response. Finally, on comparing EBV markers with CC versus CT and TT genotypes, it was found that FUP anti-VCA IgG levels were significantly increased in CC genotype [ $p = 0.003$ ]. Conclusion: Interleukin-28B polymorphism could be a possible predictor of response to pegylated interferon/ribavirin therapy [PEG-IFN/RBV]. Furthermore, co-infection with EBV did not affect the response to IFN-based therapy in HCV-infected patients.

### Pegylated interferon associated thyroidal dysfunction among hepatitis C patients.

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 7-9

**Keywords:** Interferons; Thyroid Gland; Case-Control Studies

**Abstract:** Background: Chronic hepatitis C and interferon both have their effect on thyroid gland function including clinical and subclinical thyroidal dysfunction [TD] that form major clinical manifestations of chronic hepatitis c. Objective: To assess Pegylated interferon based therapy related thyroidal dysfunction in chronic hepatitis C patients and to compare it with those who are hepatitis C Sero positive but have not receive interferon based treatment. Methods: A case control study in which, 203 patients of Chronic, compensated hepatitis C [130 females, 73 males] were included from Baqai University Hospital Karachi Liver Clinic [b/w Jan 2010-Jun 2014]. The participants were checked for thyroid dysfunction at the onset, 17 patients were found to have thyroidal dysfunction in the beginning and were excluded from the total 203 cases, then out of the remaining 186 cases, 101 patients [who were not having TD initially] opted treatment with pegylated interferon/ribavirin [Treated Group] and the rest [85 cases] were taken as control group. Results: Thyroid dysfunction was identified in 7 patients giving a frequency of 6.9%. Out of these 7 patients only one patient was male while the rest were females. The mean age of the patients with thyroid dysfunction was 39.2  $\pm$  7.13 years. Amongst the patients identified with the thyroid dysfunctions, 2 [28.5%] had overt hypothyroidism and 5 [71.4%] had sub-clinical hypothyroidism. The treatment with combination therapy was significant for development of thyroid dysfunction in patients with hepatitis C [ $p = 0.013$ ] as compared to control group in which 85 patients of chronic hepatitis C who have not developed [TD] during the study period. Conclusion: dysfunction after pegylated interferon/ribavirin treatment in chronic hepatitis C is statistically significant with sub-clinical hypothyroidism is the predominant type in the study population.

## genetics

### Anti-C1q antibody as a predictor of chronic HCV genotype 4 response to treatment in Egyptian children.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 73-79

**Keywords:** Hepatitis C, Chronic-diagnosis; Blood Proteins; Hepatitis C Antibodies; Interferon-alpha; Ribavirin; Child

**Abstract:** Background: Hepatitis C virus [HCV] infection has been reported to be the most common blood born pathogen all over the world. The prevalence of HCV in children in developed countries ranges between 0.1 and 0.4%, and is generally lower than in adults. Combined pegylated interferon and ribavirin is still the only standard of care treatment in spite of its side effects, high costs and low sustained virological response [SVR] rates. Hence, this provides a compelling reason for the identification of biomarker predictors of disease response to treatment. Objective: To evaluate anti-C1q antibody as a predictor of chronic HCV response to treatment with combined pegylated interferon alpha-2b and ribavirin in Egyptian children. Methodology: This study was conducted on forty-four chronic HCV-infected children [Male/Female: 30/14; aged 12.02 +/- 3.1 years] from the outpatient clinic, Pediatric Hepatology Department, National Liver Institute, Menoufiya University. They were given combined pegylated interferon alpha-2b [Peg-IFN-alpha-2b] and ribavirin [RBV] for 48 weeks and a quantitative polymerase chain reaction [PCR] for hepatitis C virus Ribonucleic acid was performed at 12, 24, 48 weeks during treatment and after another 24 weeks post-treatment. Anti-HCV antibody and Real-time PCR for HCV-RNA was performed [the detection limit was 15 IU/mL]. Anti-C1q antibodies were performed by enzyme-linked immunosorbent assay [ELISA]. Results: Serum levels of Anti-C1q antibodies were significantly higher [P = 0.001] in the Non-responders group [mean = 14.61 +/- 6.749ng/ml] compared to the SVR one [mean = 2.27 +/- 3.77ng/ml]. No statistically significant difference [P > 0.05] had been found between SVR and Non-responders regarding the age, ALT, viral load, or hepatic necroinflammatory activity and liver fibrosis. Anti-C1q at a cutoff value of 9.05 ng/ml, had sensitivity and specificity of 84.6% and 75% respectively and 92% positive predictive value. No significant correlation between the serum level of anti-C1q antibodies and the age, sex or HCV viral load, liver enzymes, and the degree of fibrosis and necroinflammatory activity was found [P > 0.05] for all parameters. Conclusion: Anti-C1q could be a good predictor for HCV treatment and should be included in pretreatment laboratory assessment for proper choice of chronic HCV children patients who will benefit from combination therapy.

## History of Medicine

### The clinicopathologic conference.

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**Heart Views** 2015; 16 (4): 170-173

**Keywords:** Congresses as Topic; Education, Medical; Schools, Medical; Heart Diseases

## HIV

### Packed cell volume Platelet count, PT, PTTK and Fibrinogen concentration of HIV positive patients on antiretroviral drugs.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1533-1536

**Keywords:** Antiretroviral Therapy, Highly Active; HIV Infections; Hematocrit; Platelet Count; Prothrombin; Blood Coagulation Factors; Fibrinogen; Hemostatics

**Abstract:** Objective: This is aimed at investigating some coagulation and haematologic profile of HIV positive patients on highly active antiretroviral therapy in patients attending clinic at the University of Benin Teaching Hospital. Methods: This is a correlation study comprising fifty [50] HIV positive patients on HAART between 6 - 12 months as test subjects and fifty [50] HIV positive patients who have not began HAART as control subjects. Five millilitres of blood was withdrawn from each group by venepuncture into ethylene diaminetetracetic and sodium citrate anticoagulant containers. Platelet counts were estimated manually using ammonium oxalate solution, packed cell volume by the microhaematocrit method while Prothrombin Time [PT], Activated partial thromboplastin time and fibrinogen concentration were done by methods described by Monica Chessbrough. Results: This is presented as mean +/- standard error of mean. There were reduction in PCV and platelet count between test and control subjects although not statistically significant [P > 0.05] while there was a significant increase in PT and PTTK between test and control groups [P < 0.05]. No significant change was observed in fibrinogen concentration in HIV patients on HAART and those not on HAART. Conclusion: HAART increases PT and PTTK in HIV infection.



## Horse Diseases

### etiology

#### Studies on diarrhea in equine associated with *Clostridium difficile* and *Clostridium perfringens* infection.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 132-138

**Keywords:** Horse Diseases-mortality; Diarrhea-veterinary; *Clostridium difficile*; *Clostridium perfringens*; Equidae

**Abstract:** *Clostridium difficile* and *Clostridium perfringens* play a significant role in diarrhea affecting equine. This study was designed to determine the role of *Clostridium difficile* and *Clostridium perfringens* in equine diarrhea, 380 animals were examined clinically, where 65 were suffering from diarrhea. Fecal samples were collected from diarrheic animals, and 10 samples from apparently healthy animals. *Clostridium difficile* and *Clostridium perfringens* were isolated from 19 and 11 samples respectively, while the two bacteria were isolated from 5 samples simultaneously. Moreover 4 samples from apparent clinical healthy animals had *Clostridium difficile* infection, indicating the high prevalence of these organisms in equine. Toxins of *Clostridium difficile* wasn't detected in diarrheic samples or culture of *Clostridium* isolates by ELISA and PCR-technique, while alpha and beta2 toxins of *Clostridium perfringens* were detected in culture of *Clostridium*.

## Human papillomavirus 16

#### A live vector expressing HPV16 L1 generates an adjuvant-induced antibody response in-vivo.

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**Iranian Journal of Cancer Prevention** 2015; 8 (6): 35-40

**Keywords:** Oncogene Proteins, Viral; Capsid Proteins; Leishmania; Immunity, Humoral; Mice; Antibody Formation

**Abstract:** Background: The association between human papillomavirus [HPV] infections and cervical cancer has suggested the design of prophylactic and therapeutic vaccines against genital warts. The HPV capsid has made of two L1 and L2 coat proteins that have produced late in viral infections. Regarding to the recent studies, two commercial prophylactic vaccines have based on L1 viral like particles [VLPs] could strongly induce antibody responses, and protect human body from HPV infections. However, the use of these HPV vaccines has hindered due to their high cost and some limitations. Currently, among various vaccination strategies, live vector-based vaccines have attracted a great attention. Objectives: Herein, a non-pathogenic strain of the protozoan organism known as *Leishmania tarentolae* has utilized to induce potent humoral immunity in mice model. Materials and Methods: At first, cloning of HPV16 L1 gene into *Leishmania* expression vector has performed and confirmed by PCR and digestion with restriction enzymes. The promastigotes of *Leishmania tarentolae* [Ltar] have transfected with linearized DNA construct by electroporation. Protein expression has analyzed by SDS-PAGE and western blotting. Then, the immunogenicity of *Leishmania* expressing L1 protein [Ltar-L1] has assessed in mice model. Results: Our data has indicated that subcutaneous immunization of mice with the recombinant Ltar-L1 has led to enhance the levels of IgG1 and IgG2a in comparison with control groups. Furthermore, there was no significant increase in antibody levels between two and three times of immunizations. Conclusions: The recombinant live vector was able to induce humoral immunity in mice without need of any adjuvant. However, further studies have required to increase its efficiency.

## Hypertension, Portal

#### Non-invasive predictors of portal hypertension in patients with hepatitis C virus related hepatocellular carcinoma.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 545-554

**Keywords:** Carcinoma, Hepatocellular; Hepacivirus; Cross-Sectional Studies; Liver Neoplasms

**Abstract:** The reference standard for portal venous pressure measurement which is clinically important for estimating the feasibility of resection of hepatocellular carcinoma is the hepatic venous pressure gradient, which is invasive and expensive. The present study evaluated the noninvasive parameters for assessment of portal hypertension in Child A patients with hepatocellular carcinoma on top of hepatitis C virus. A total of 112 patients

were subjected to clinical assessment, biochemical assay, ultra-sonographic Doppler study, triphasic spiral abdominal computed tomography, upper gastrointestinal endoscopy and hepatic venous pressure gradient measurement. According to hepatic venous pressure gradient measurement, they were classified into groups: GI: 58 patients with hepatic venous pressure gradient <10 mmHg and GII: 54 patients with hepatic venous pressure gradient  $\geq$  10 mmHg. Significant variables in univariate analysis were included in a multivariate analysis to establish a model for prediction of clinically significant portal hypertension. Results showed that portal vein diameter  $\geq$  1.3 cm, mono or biphasic pattern of flow in hepatic veins and Giannini index  $\leq$  909 were independent risk factors for the clinically significant portal hypertension as indicated by HVPG  $\geq$  10 mmHg. A model with highest likelihood ratio and good fitness was created. This prediction model was displayed by the receiver operating characteristic curve and under the curve area was 0.969 [0.938-1].

## Immunization

### Social marketing and awareness about routine immunization among the parents of children under 5 years coming to a private hospital in Khyber Pakhtunkhwa.

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**Journal of Medical Students** 2015; 1 (1): 3-8

**Keywords:** Social Marketing; Surveys and Questionnaires; Awareness; School Health Services; Parents; Hospitals, Private; Child, Preschool

**Abstract:** Introduction: Social marketing is a key strategy to influence the health seeking behavior of human beings on a large scale. Although social marketing approach is applied to address a variety of social concerns, it also has a vital role in the health promotion and disease prevention. Objectives: 1-To elaborate the source of social marketing for the promotion of routine immunization among children under-5 years. 2-To assess the determinants of social marketing in term of promotion of routine immunization. Material and Methods: The survey was conducted in the Department of Pediatrics of the Rehman Medical Institute [RMI] Peshawar KPK over a period of two months. Self-administered questionnaire-based survey was used to address the objectives. The questionnaire catered to the four Ps [Promotion, Personnel, Partnership, and Proof] that are the basic themes of social marketing applicable for promotion of immunization. Parents of children under-5 years of age were included as subjects. Data were analyzed by using SPSS version 15.0. Results: A total of 63 parents were surveyed during two months of data collection period. About 54% of them were unaware about National immunization days. However 84% had got information about immunization, where 63% had got information from print media and perceived that the information was sufficient to convince them. Conclusion: Social marketing is an effective tool in ensuring health seeking behavior especially in immunization of under-5 year children; however health promotion activities by vaccinators, others health care professionals and governmental and non-governmental organization linked with low immunization are lacking in the region.

## Infertility, Male

### veterinary

### Chemical sterilization of dogs using single bilateral intra-testicular injection of calcium chloride or clove oil.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 26-32

**Keywords:** Calcium Chloride-pharmacology; Calcium Chloride-administration and dosage; Testis; Testosterone; Clove Oil-pharmacology; Clove Oil-administration and dosage; Dogs

**Abstract:** The current study was designed to evaluate the efficacy of single bilateral intra-testicular injection of calcium chloride or clove oil to induce chemical sterilization in ten dogs divided into two groups each of five animals. Chemical sterilization was evaluated by clinical signs, hormonal analysis and histopathological examination. Testosterone level was decreased significantly after injection of both agents with complete degeneration of the interstitial leydig cells and seminiferous tubules while cortisol level was increased during the 1<sup>st</sup> week after calcium chloride injection. The single bilateral intra-testicular injection of calcium chloride or clove oil proved to be accepted as a suitable alternative to the surgical sterilization of dogs; however clove oil was superior to calcium chloride as it induced less pain and irritation to the dogs.

## Influenza Vaccines

### Recommended Seasonal Influenza Vaccine for use in 2015-2016.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (09): 1

**Keywords:** Influenza A Virus, H1N1 Subtype; Influenza A Virus, H3N2 Subtype; Influenza B virus; World Health Organization; Immunization; Mediterranean Region

**Abstract:** In February 2015, WHO has recommended influenza viruses for inclusion in the seasonal influenza vaccines in the northern hemisphere for 2015-16. These recommendations are based on the antigenic and genetic analysis of the circulating influenza viruses shared by the countries with WHO through the Global Influenza Surveillance and Response System [GISRS].

## Influenza, Human

### Medical students' and doctors' knowledge about influenza disease and its vaccine.

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 28-32

**Keywords:** Influenza Vaccines; Cross-Sectional Studies; Knowledge; Students, Medical; Physicians; Surveys and Questionnaires

**Abstract:** Background: Influenza is a common disease affecting people of all age groups. Generally considered to be a mild disease, it can however, cause devastating effects in the very young, elderly and immunocompromised people. Objective: To assess and compare the knowledge of influenza and its vaccine amongst medical students and practicing physicians. Methods: A cross sectional survey was conducted on medical students and doctors at a tertiary care hospital. The participants were asked to fill out a structured questionnaire regarding knowledge and beliefs about influenza disease and its vaccine. Information thus obtained was tabulated and analysed and the two groups compared. Knowledge scores were calculated and the respondents were considered to have adequate knowledge if they scored > 60% on the knowledge part of the questionnaire. Results: There were 179 participants in the study, of which 79 were medical students and 100 were practicing doctors. Majority of the respondents in both the groups knew the causative agent, mode of transmission and preventative measures of influenza. However, they lacked knowledge about complications of influenza. Respondents' knowledge was significantly deficient regarding many aspects of the influenza vaccine. Analysis of the knowledge scores revealed that only 49% of the physicians and 31.6% of the medical students had adequate knowledge about influenza disease and its vaccine. Conclusion: Medical students and practicing physicians lack adequate knowledge about influenza and its vaccine. More emphasis needs to be placed on educating health care professionals about influenza and the importance of its vaccination program.

## epidemiology

### Avian Influenza A [H5N1] in Egypt.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (03-04): 1

**Keywords:** Influenza in Birds; Influenza A Virus, H5N1 Subtype; Disease Outbreaks; Poultry

**Abstract:** The Ministry of Health and Population of Egypt reported 17 new human cases of avian influenza A [H5N1] to WHO in 2015. Since the first reported case in 2006, Egypt has so far reported 227 laboratory-confirmed cases of avian influenza A [H5N1] including 85 deaths [CFR 37.4%].

### Avian influenza A[H5N1] in Egypt.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (11-12): 1

**Keywords:** Influenza in Birds; Influenza A Virus, H5N1 Subtype; Poultry

**Abstract:** The Ministry of Health and Population [MoHP] of Egypt reported 116 new human cases of avian influenza A [H5N1] to WHO in 2015 including 36 deaths [CFR 31%]. Since the first report-ed case in 2006, Egypt has so far reported 318 laboratory-confirmed cases of avian influenza A [H5N1] including 112 deaths [CFR 35.2%].

**Meningococcal disease in Sudan.**

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (13): 1**Keywords:** Disease Outbreaks; Meningitis, Meningococcal-epidemiology**Abstract:** In 2014, Sudan reported only 111 suspected cases of meningococcal meningitis including 2 deaths [CFR 2%]. None of the samples were tested positive for Neisseria Meningitidis of any sero-group especially sero-group A. The reported cases were distributed sporadically in some of the 494 sectors [sub-districts] of the 18 States in the country.

Intestinal Diseases, Parasitic

**Incidental parasitic infections in surgically removed appendices: a retrospective analysis.**

Zaghlool, Dina A.; Hassan, Amal A.; Ahmed, Mona A.; Faidah, Hani S.

Assuit University - Faculty of Medicine - Department of Medical Parasitology

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 571-578**Keywords:** Incidental Findings; Acute Disease; Appendicitis; Retrospective Studies; Enterobiu; Schistosoma mansoni**Abstract:** Numerous parasitic infections can cause inflammation of the appendix and can mimic appendicitis clinically. The diagnosis is generally achieved only after surgery. However early diagnosis through stool examination may prevent life-threatening complications. This study investigated the presence of parasitic infections in surgically removed appendices as an etiology of acute appendicitis. A retrospective study included patients who had undergone surgery for acute appendicitis over a period of three years from Jan 2012 to Dec 2014. Demographic data, laboratory investigations, operative data and pathological findings, presence and type of parasites were retrieved. The results showed that out of 1536 patients with appendectomy done, 938 [61.1%] were males and 598 [38.9%] were females. Parasitic infection was demonstrated only in 0.4% [6 patients]. Mean average age of these patients was 12 years. Enterobius vermicularis was present in 4 patients [66% of the parasitic affection] and Schistosoma mansoni in 2 patients [34% of the parasitic affection]. Other etiologies were acute suppurative appendicitis [94.1%], chronic appendicitis [3.1%], tumors [0.3%], tuberculosis [0.2%] and actinomycosis [0.1%]. Appendix was found normal in 2% of patients underwent appendectomy.**epidemiology****Epidemiology of intestinal parasitic infections in school children in Ghazni Province, eastern Afghanistan.**

Korzeniewski, Krzysztof; Augustynowicz, Alina; Smolen, Agata; Lass, Anna

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Military Institute of Medicine - Department of Epidemiology and Tropical Medicine

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1421-1425**Keywords:** Prevalence; Students; Schools; Child**Abstract:** Objective: To estimate the prevalence of intestinal parasites and their species in Afghan school children and to establish appropriate treatment methods for detected pathogens. Methods: Parasitological examination of stool samples collected from 1369 children aged 8-18, students of the Jahan Malika High School in Ghazni Province in eastern Afghanistan, was conducted in the period November 2013-April 2014. Three stool samples were collected from each patient every second day; the samples were fixed in 10% formalin and tested by light microscopy using the methods of direct smear in Lugol's solution, decantation in distilled water, and Fulleborn's flotation. Results: Of 535 examined children [39.1% of the study group] were infected with nematodes [n=324], cestodes [n=118], trematodes [n=12], and protozoa [n=228], 132 were diagnosed with co-infections [mainly ascariasis+giardiasis, ascariasis+hymenolepiasis] and received single or combined therapy. Conclusions: The Afghan community is an example of population characterized by a high rate of parasitic infections. Owing to high prevalence of multiple infections among inhabitants of Afghanistan, it seems that a mass deworming campaign with a single-dose chemotherapy may prove ineffective in eradicating intestinal parasites in the local population.**Intra-Articular Fractures****Outcome of intraarticular communicated fractures distal radius treatment with orthofix external fixators.**

Sahito, Badaruddin; Tariq, SM.; Mamji, Farooqi; Kumar, Dileep

DOW University of Health Sciences

**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 15-17**Keywords:** Prospective Studies; External Fixators; Radius Fractures; Bone Wires; Fractures, Comminuted

**Abstract:** Background: Assess the outcome of intracicular comminuted fracture distal radius treated with orthofix external fixator. Methods: Prospective study with inclusion criteria of Comminuted intraarticular fractures distal radius, 20 to 60 years age, close and open fractures and exclusion criteria of patient above 60 years, extraarticular fracture, volar and dorsal barton fractures, more than 10 days old fracture. Results: From January 2012 to sept 2014, 63 patient with intraarticular comminuted fracture distal radius treated with orthofix external fixator included in this study. Functional outcome was assessed on Gartland and Wesley scoring system. 40 [63%] male and 23[37%] female patients, 35[56%] road traffic accident and 28[44%] have fall. AO C1, were 32[51%], C2 19[30%], C3, 12[19%] patients. Additional kwire fixation applied in 54 patients. Fixator removed at 6 weeks. Functional result were excellent in 26 patient[41%], good 32[51%], satisfactory in 4 patient[6%], poor in 1[2%]. Complication observed were, minor and major pin track infection 30[65%], tethering of external indicis tendon 3[7%] patient, k wire loosening 10[22%] and sudecks atrophy 3[7%] patients. Conclusion: Orthofix external fixator application in intraarticular comminuted fracture distal radius is recommended because it is minimal invasive technique have excellent to good outcome. Most of the times needs additional kwire fixation for the fragment stabilization.

## Intubation

### Wire assisted sigmoid intubation: an alternative approach to overcome technically difficult colonic angulations.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 129-130

**Keywords:** Colon, Sigmoid; Colonic Diseases; Colonoscopy

**Abstract:** Complete colonoscopy can sometimes prove technically challenging. Sharp colonic angulation can be one of the contributing factors. With the advancement in technology, various modalities have been employed to overcome technical difficulties. Here we describe a guidewire assisted sigmoid intubation to overcome this hurdle with limited resources.

## Islam

### Preparedness for hajj.

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**Weekly Epidemiological Monitor** 2015; 08 (28-29): 1

**Keywords:** Meningitis-epidemiology; Coronavirus Infections-epidemiology; Health Promotion; Islam; Meningitis, Meningococcal-epidemiology; Communicable Diseases; Disease Outbreaks; Saudi Arabia

**Abstract:** According to Islamic lunar calendar, hajj, the annual Muslim pilgrimage, is expected to be held this year in Saudi Arabia during the week of 21-26 September. In view of a number of public health events currently ongoing around the world from where the Muslim pilgrims would assemble in Saudi Arabia for the hajj, there an urgent need to scale up preparedness for a blessed hajj.

## Ivermectin

### therapeutic uses

### Distribution and utilisation of Ivermectin [MECTIZAN]: a chemotherapeutic approach to the control of onchocerciasis in old Ohaozara Lga, Ebonyi State, Eastern Nigeria.

Okpara, Elom Michael; Nnaemeka, Alo Moses; Iyioku, Ugah Uchenna; Udoh, Usanga Victor

Ebonyi State University - Department of Medical Laboratory Science

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 663-670

**Keywords:** Onchocerciasis-drug therapy; Surveys and Questionnaires; Disease Management

**Abstract:** Onchocerciasis [river blindness] is a devastating, debilitating Stigmatising and incapacitating parasitic disease that is endemic in tropical and sub-tropical regions of the world, including Nigeria. Mass distribution of ivermectin [Mectizan] to the endemic parts of the world was initiated by the Onchocerciasis Control Programmes [OCPs]. Absolute compliance to the regimen for up to 15 years has been reported to be effective in the control of the disease. The study was carried out in Ohaozara LGA, Onicha LGA and Ivo LGA. The three [3] LGAs made up the defunct Old Ohaozara LGA. A structured questionnaire was used to generate information on knowledge of Onchocerciasis and on the use of ivermectin by the inhabitants of the communities of the study areas. The distribution coverage of ivermectin in the study areas dating from 2010 to 2014 was

ascertained with drug distribution charts obtained from Ebonyi State Health Management Board [ESHMB], Abakaliki [the point source of distribution in the state], and from the health centres in communities of old Ohaozara LGA [the service delivery points [SDPs] to inhabitants of the communities. Data was analysed using descriptive statistics. Utilization of the regimen was ascertained by determining the actual number of tablets of mectizan that was administered to the patients at the various health centres [service delivery points [SDPs] in the communities. The percentage utilization of the regimen was determined by dividing the number of mectizan tablets administered to the patients at SDPs with the number of mectizan tablets supplied from state point source of distribution and multiplying by 100. A total of 347, 299 out of 1, 919135 tablets of mectizan supplied to the study areas from 2010 to 2014 were actually utilized, forming an overall percentage utilization of 18.10%. There was adequate supply but very poor utilization of the regimen. The poor utilization resulted from factors including locating of health centres very far from homes of some of the rural villagers, non-yearly compliance with regimen administration, poor health sensitization and education and lack of incentives or poor incentives to the village-based health workers [VBHWs]. Intensification of efforts to cover the lapses in the utilization of the regimen is advocated for a more effective control of the disease.

## Kidney

### ultrasonography

#### **Sonographic evaluation of maternal kidneys in normal pregnancy.**

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Hawler Medical University - College of Medicine - Department of Surgery

**Zanco Journal of Medical Sciences** 2015; 19 (1): 880-885

**Keywords:** Pregnancy; Ultrasonography; Hydronephrosis; Kidney Calculi; Ureteral Calculi; Pyelonephritis

**Abstract:** Background and Objectives: Renal disease can affect the outcome of pregnancy. The renalsystem undergoes significant physiological and anatomical changes during pregnancy. Ultrasound is the commonest imaging modality used in the evaluation of the abdominal organs in pregnancy. The purpose of this study was to sonographically evaluate the kidneys in normal pregnancy. Methods: A prospective descriptive study in which real time B-mode renal ultrasound was performed on 500 pregnant women attending for a routine obstetric ultrasound scan. Questions about the age, parity and presence of loin pain were asked. Obstetrical ultrasound examination was initially performed followed by examination of maternal kidneys. Results: Renal collecting system dilatation was the main abnormal finding; it was present in 18.2% of cases, [15.2% right side and 3% left side]. Bilateral hydronephrosis was seen in [2.6%] of cases. Rate of hydronephrosis was more in primiparous women. Other findings were renal stones [2.8% right and 1.8% left sides, respectively], ureteric stone [0.2%] and acute pyelonephritis [1%]. Conclusions: This study established the value of renal sonography in the pregnant women, though not a common condition. Renal collecting system dilatation was the main finding. A significant proportion of patients with asymptomatic renal calculi were detected incidentally.

#### **Sonographic measurement of normal renal size and correlation with somatic variables in subset of Karachi pediatric population.**

Younus, Naila; Raza, Farheen; Bhugio, Sanobar; Zehra, Nosheen; Gul, Pashmina; Nizamani, Waseem Mehmood; Younus, Shumaila

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 22-27

**Keywords:** Ultrasonography; Cross-Sectional Studies; Organ Size; Pediatrics

**Abstract:** Background: Multiple renal pathogenesis manifested as unilateral or bilateral size changes, therefore there should be normative reference data for proper comparison. Our goal is to determine normal standard value ranges for renal dimensions in pediatric population in Karachi. Sonographically renal length in 150 children were measured and correlate with age, gender, body height, weight and BMI. Objective: Sonographic Measurement of Normal Renal Size and Correlation with Somatic Variables in Subset of Karachi Pediatric Population. Methods: A six month cross sectional hospital based assessment of kidney size [length, width] was evaluated with the help of sonography. XarioTM 200 Toshiba with convex 3.5 frequency transducer will be used. The mean renal dimensions with standard deviation [SD] were estimated for every group of age. The renal length and width were determined and corresponded with different somatic variables. Descriptive statistics with Regression analysis was done. Results: The normal length and the width of kidneys and its ranges were obtained. Right kidney length moderately and significantly correlated with height and weight [ $r=0.651$ ,  $r=0.654$ ] and age [ $r=0.538$ ] respectively. However, moderately insignificant with BMI [0.129]. Lefts kidney moderately and significantly correlated with height and weight [ $r=0.665$   $r=0.705$ ], negative insignificant with age [0.564] and moderately weak insignificant relationship with BMI [0.174]. Conclusion: The research presents the normal range parameters of renal size and measurements by sonography in healthy pediatric population in Karachi. Guideline measurements of kidneys represent a statistically important and comprehensive interaction with specifications of growth which allows us to easily calculate the renal size by derived regression analysis.

## Kidney Failure, Chronic

### Predictor of cardiovascular risks in end stage renal failure patients on maintenance dialysis.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1300-1305

**Keywords:** Cardiovascular Diseases-mortality; Renal Dialysis; Risk Factors; Peritoneal Dialysis; Cross-Sectional Studies; Retrospective Studies

**Abstract:** Objective: Cardiovascular disease [CVD] is the main cause of morbidity and premature mortality in end stage renal failure patients [ESRD] receiving dialysis. The aim of our study was to evaluate the impact of various risk factors in this group of high CVD risk patients in local population. Methods: We carried out a cross-sectional retrospective study in a single hospital. A total of 136 ESRF patients, consisted of 43 haemodialysis [HD] and 93 continuous ambulatory peritoneal dialysis [CAPD] patients, were recruited and followed up for 36 months duration. Midweek clinical and laboratory data were collected. The occurrence of existing and new CVD events was recorded. Results: Multiple Logistic Regression showed pre-existing cardiovascular event [odds ratio, 4.124, 95% confidence interval [CI], 0.990 to 17.187], elevated total cholesterol level [odds ratio, 0.550, 95% CI, 0.315 to 0.963], elevated serum phosphate level [odds ratio, 5.862, 95% CI, 1.041 to 33.024] and elevated random blood glucose level [odds ratio, 1.193, 95% CI, 1.012 to 1.406] were significantly associated with occurrence of CVD events. Conclusions: History of cardiovascular event before the initiation of dialysis, elevated level of serum phosphate and random blood glucose levels are the risk factors of CVD whereas paradoxically a high total cholesterol level has CVD protective effect towards the ESRF patients.

### complications

### Occult Hepatitis B virus infection among Egyptian hepatitis C virus seropositive and seronegative hemodialysis patients in Sohag government, Upper Egypt.

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**JMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4):113-118

**Keywords:** Liver Diseases-virology; Hepatitis B virus; Renal Dialysis; Hepacivirus; Hepatitis C Antibodies; Polymerase Chain Reaction; Viral Core Proteins; Hepatitis B-transmission

**Abstract:** Background: Hepatitis B virus [HBV] and hepatitis C virus [HCV] Infections are important and common causes of liver disease in end-stage renal failure [ESRF] in patients on haemodialysis [HD]. HBV is less endemic than HCV in Egypt [ranges from 2%-7%]. Although, the prevalence of HBV in haemodialysis patients has decreased significantly due to HBV vaccine and screening of blood donors, the immunosuppressive nature of renal disease often leads to chronicity of the HBV infection and an opportunity for nosocomial spread of the infection among dialysis patients. Haemodialysis patients are more risky to develop occult hepatitis B infection [OBI] due to an increased number of blood transfusions, frequent invasive procedures, difficulty in diagnosis of occult hepatitis B infection [OBI] and immunosuppression. Occult hepatitis B infection [OBI] is defined by the presence of HBV DNA in serum or liver tissue in the absence of HBsAg. Objective: to study the prevalence of occult HBV infection in HCV-positive and HCV negative patients on regular hemodialysis from Upper Egypt. Methodology: One Hundred hemodialysis patients with negative HBsAg were included in the study. These patients were divided into two groups: HCV positive and HCV negative, based on the results of anti-HCV by ELISA and HCV-RNA by PCR. HBV-DNA was studied using the real-time PCR method in both groups. Results: HBV DNA was detected in 7 of the 100 patients [7%] and HBcAb was detected in 22 patients [22%]. There were no statistically significant differences in the age, sex, duration of hemodialysis, biochemical parameters, HBcAb, or HBV DNA between patients with and without HCV infection. Conclusion: The prevalence of occult HBV infection [OBI] among Egyptian hemodialysis patients is 7% with no significant difference in the prevalence of OBI between hemodialysis patients with or without HCV infection and we suggest screening of all HD patients for OBI by testing anti-HBc and HBV DNA.

## Leiomyoma

### Effects of embolic agents with different particle sizes on interventional treatment of uterine fibroids.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1490-1495

**Keywords:** Uterine Artery Embolization; Quality of Life; Ovarian Function Tests; Uterine Neoplasms

**Abstract:** Objective: To compare the effects of embolic agents with different particle sizes on interventional treatment of uterine fibroids [UFs]. Methods: One-hundred and thirty patients with UFs were divided into a treatment group and a control group [n=65] by random draw. All patients were treated by uterine artery embolization, with the treatment group using 200 Micro m polyvinyl alcohol [PVA] particles and the control group using 500 Micro m PVA particles. Results: The success rate of embolization was 100%. After intervention, the treatment group was significantly less prone to complications such as lower abdominal pain, fever, nausea, vomiting and bleeding than the control group [P<0.05]. The follicle-stimulating hormone levels of both groups were similar before and after intervention, and there were also no significant inter-group differences. The uterine and UF volumes of both groups significantly decreased six months after intervention [P<0.05], and those of the treatment group were significantly lower [P<0.05]. The two groups had similar physical function, role-physical, bodily pain and general health scores before intervention, but the treatment group scored significantly higher than the control group did six months after intervention [P<0.05]. Conclusion: Interventional embolization can well treat UFs, without apparently affecting ovarian functions. Small-sized PVA particles can improve the quality of life by shrinking the uterus and UFs as well as by reducing the risks of complications.

## Leukemia, Lymphocytic, Chronic, B-Cell

### Solid tumors after chronic lymphocytic leukemia patients: report of six cases and review of the literature.

Chaabouni, H.; Kacem, K.; Zriba, S.; Mansouri, R.; Ghédira, H.; Lakhal, R.B.; Zarrouk, M.; Abdennebi, Y.B.; Neji, H.B.; Aissaoui, L.; Ali, Z.B.; Abid, H.B.; Sadek, F.M.; Meddeb, B.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 28-32

**Keywords:** Response Evaluation Criteria in Solid Tumors; Neoplasms, Second Primary; Review Literature as Topic

**Abstract:** Introduction: Malignancies have been reported to occur with increased frequency in chronic lymphocytic Leukemia [CLL] patients. The aim of this study was to describe which second malignancies occur in patients with CLL, whether these malignancies are related to CLL, its treatment, or both. We also attempt to study factors predicting the development of other malignancies. Patients and methods: Between 1995 and 2009, six cases of CLL associated with solid tumor were diagnosed in Hematology Department of Military Hospital of Tunis. The diagnosis of CLL was made by immunophenotyping of peripheral blood circulating B cells, and the diagnosis of solid tumors was made by biopsy with anatomopathological exam and immunohistochemical study. Results: The mean age of patients was 71 years. Five patients were male. The CLL was classified Stage A in one case, Stage B in three cases and Stage C in two cases. Two patients had abnormal karyotype. Three patients have not received specific treatment for their CLL. Solid tumors were represented by skin cancer in three cases, lung cancer in two cases and breast cancer in one case. The median time between diagnosis of CLL and that of solid tumor was 53 months. Conclusion: Patients with CLL have an increased risk of developing a second cancer. Awareness of risk factors could permit early detection.

## Life Style

### Construction and validation the lifestyle questionnaire related to cancer.

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 41-46

**Keywords:** Neoplasms; Surveys and Questionnaires; Cross-Sectional Studies; Motor Activity; Mental Health; Environmental Pollutants

**Abstract:** Background: Healthy lifestyle is a significant factor in cancer etiologic and prevention of cancer. There are instruments to measure a healthy life style, but the lifestyle questionnaires only examine one or a few more aspects of lifestyle. Objectives: The purpose of this study was to construct a comprehensive instrument to examine all aspects of lifestyle related to cancer. Materials and Methods: This study was a cross-sectional study that was conducted in Yazd city in Iran. A questionnaire was designed to assess and measure various aspects of lifestyle related to cancer using similar studies. Researchers used the Cronbach's alpha and test-retest method to determine the reliability. Also, construct validity was determined using the factor analysis method in SPSS 16 software. Results: Face validity was examined using a panel of experts. Cronbach's alpha for the whole scale was appropriate [alpha = 0.87]. Also, Cronbach's alpha for all dimensions of questionnaire was acceptable [perfect score]. Test-retest method was used to determine the reliability. The results indicated that ICC was in the range of 0.84 to 0.94. Based on the obtained results of factor analysis method, 8 dimensions of the questionnaire were extracted [physical health, physical activity and exercise, mental health, drug and alcohol avoidance, balanced consumption of food, environmental pollutants and harmful substances, weight control and nutrition, and reproductive health]. Conclusions: This study showed that the present questionnaire can be used as a valid and reliable tool for collecting data about the lifestyle of people related to cancer.



## Lipid Metabolism, Inborn Errors

### Chanarin-Dorfman syndrome: a case report and review of the literature.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 142-144

**Keywords:** Muscular Diseases; Ichthyosiform Erythroderma, Congenital; Review Literature as Topic

**Abstract:** Chanarin-Dorfman syndrome, a "neutral lipid storage disease with ichthyosis," is a multisystem inherited metabolic disorder associated with congenital ichthyosis and accumulation of lipid droplets in various types of cells. Case report: A 3-year-old male presented to the Pediatric Hepatology Unit, Cairo University Children's Hospital, Cairo, Egypt, with accidentally discovered hepatomegaly. He had generalised ichthyosis with dark skin pigmentation and bilateral ectropion. Abdominal examination revealed generalised abdominal distention with firm nontender hepatomegaly. His liver functions were deranged. Blood film showed many vacuolated neutrophils. Serum triglyceride and creatine kinase levels were elevated. Abdominal ultrasound showed a moderately enlarged liver with a bright echo pattern. Liver biopsy revealed marked diffuse macrovesicular fatty changes. The diagnosis of Chanarin-Dorfman Syndrome was made based on the dermatological, haematological, and liver biopsy findings.

## Liver Cirrhosis

### veterinary

### Antifibrotic effect of curcumin on thioacetamide induced liver fibrosis.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 43-50

**Keywords:** Liver Cirrhosis; Fibrosis; Phosphoric Diester Hydrolases; Curcumin-pharmacology; Thioacetamide; Rats

**Abstract:** The objective of the present study was to elucidate whether serum ATX activity might be a target for regulation of liver fibrosis and to evaluate the hepatoprotective and antifibrotic effect of curcumin in TAA induced liver fibrosis in rats. Therefore 40 healthy adult albino rats, divided into 4 groups [10 rats in each]. Rats in the 2[nd] group received curcumin [500 mg/kg b. wt /orally every day], the 3[rd] group injected by thioacetamide [TAA] intraperitoneal [250 mg/kg b. wt] three times a week, the 4[th] group injected by TAA intraperitoneal [250 mg/kg b. wt] three times a weeks and received curcumin orally [500 mg/kg b. wt every day]. The changes in body weight index and histopathological examination. In addition, selected biochemical parameters were also determined. The present study revealed that, oral supplementation of curcumin causing increase of liver weight index, autotaxin [ATX], HDL-c level and decrease of total protein, urea, creatinine and ammonia, total cholesterol, LDL-c and triacylglycerols. Treatment with TAA induced increase in the liver weight index, ATX, ALT, triacylglycerols, ammonia levels and decrease in serum proteins, urea, total cholesterol, HDL-c and LDL-c levels. Histopathological examination revealed severe necrosis, inflammatory cellular infiltration and nodules in TAA group. While the supplementation of rats with TAA and curcumin orally together resulted in increase in liver weight index, ATX, ALT, triacylglycerols levels and decrease in serum total protein, urea, total cholesterol, HDL-c, LDL-c concentration moreover, revealed mild inflammation and necrosis by histopathological examination. Conclusively, the use of curcumin ameliorated the effect of TAA induced liver fibrosis but cannot reach the normal levels.

## Liver Diseases

### pathology

### Complications of blind versus ultrasound-guided percutaneous liver biopsy in children.

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 90-93

**Keywords:** Liver-pathology; Biopsy; Liver Diseases-ultrasonography; Liver Diseases-complications; Surveys and Questionnaires; Child

**Abstract:** Background and study aims: Liver biopsy is a well-established procedure in the diagnosis and follow-up of liver diseases. Complications of liver biopsies are rare but potentially lethal. The aim of this study was to evaluate the complications of percutaneous liver biopsy and to compare the complications of blind and ultrasound-guided percutaneous liver biopsy in paediatric wards of Nemazee Hospital of Shiraz in the south of Iran. Patient and method: To complete the questionnaire, registered information of liver biopsies due to different causes in paediatric patients between 2008 and 2012 was retrospectively reviewed. All children aged between 0 and 18 years, who underwent liver biopsy [due to any indication], participated in this study. Results: Liver biopsies were obtained from 210 patients. Seven of 210 cases were excluded due to unreliable data. A total of 209 liver biopsies were done in the rest of the cases [n = 203]. Of all cases of liver biopsies, 22 [10.5%] experienced complications after biopsy. Pain [n = 7] was the most frequent complication in 22 cases of liver biopsy. Mortality rate was one [0.5%] due to rupture of subcapsular haematoma. In terms of complication [p = 0.592], there was no significant difference statistically between patients with blind liver biopsy [n = 16] and patients with ultrasound-guided liver biopsy [n = 6]. Conclusion: In terms of complications, there was no significant difference when the patients were evaluated with and without ultrasound-guided biopsy.

## Lung Neoplasms

### Level of awareness of lung cancer risk factors, signs, symptoms and safe practices among college teachers of different states in India: do awareness programmes have an impact on adoption of safe practices?

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 57-62

**Keywords:** Risk Factors; Faculty; Awareness; Surveys and Questionnaires; Mortality

**Abstract:** Introduction: Lung cancer is the one of the most common cause of cancer mortality among men in India where incidence rates are increasing although they are largely preventable diseases. In India, late presentation is generally responsible for high mortality and morbidity rates and early detection is one of the best ways to control it. The purpose of this study is to measure the level of awareness on lung cancer among women represented by a sample of college teachers in India and the impact of awareness programs in changing or adopting safer practices and the prevention and early detection of the disease. Material and methods: The assessment was conducted during a Pink Chain Campaign on cancer awareness in 2011 in various women colleges in India. Pre-test related to lung cancer was followed by awareness programs. Post-test using the same questionnaire was conducted at the end of interactive session, at 1 year and 6 months. Results: A total of 156 out of 182 teachers participated in the study [overall response rate was 85.7%]. Mean age of the study population was 42.4 years [range- 28-59 yrs]. There was a significant increase in level of knowledge regarding lung cancer at 6 months and this was sustained at 1 year. Magazines and newspapers were the primary source for information regarding risk factors, signs and symptoms of lung cancer in more than 60% of teachers whereas more than 30% teachers were educated by doctors. At post-awareness after 1 year and 6 months, there was a significant change in alcohol and smoking habits. The main reasons for not undergoing screening tests are: ignorance [50%], lethargic attitude [44.8%] and lack of time [34.6%]. Conclusion: Knowledge about lung cancer was very low among teachers. Overall awareness of risk factors, signs and symptoms, and screening modalities of lung cancer have improved after 1 year along with practices related to smoking and alcohol consumption. There was a significant improvement in people undergoing regular check-up's. Improved means of communication, access to information and effective warnings about cigarette smoking are necessary to increase public awareness. To ensure the adoption of safe practices in the lifestyle of people who smoke and consume alcohol, awareness programmes such as the pink chain campaign should be conducted regularly, frequently and more widely in various areas of India.

### Presentation of a model-based data mining to predict lung cancer.

Shahhoseini, Reza; Ghazvini, Ali; Esmailpour, Mansour; Pourtaghi, Gholamhossein; Tofghi, Shahram Baqiyatallah University of Medical Sciences - School of Health - Department of Health Care Management

**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 189-195

**Keywords:** Data Mining; Neural Networks (Computer); Multiple Pulmonary Nodules; Pleural Effusion, Malignant

**Abstract:** Background: The data related to patients often have very useful information that can help us to resolve a lot of problems and difficulties in different areas. This study was performed to present a model-based data mining to predict lung cancer in 2014. Methods: In this exploratory and modeling study, information was collected by two methods: library and field methods. All gathered variables were in the format of form of data transferring from those affected by pulmonary problems [303 records] as well as 26 fields including clinical and environmental variables. The validity of form of data transferring was obtained via consensus and meeting group method using purposive sampling through several meetings among members of research group and lung group. The methodology used was based on classification and prediction method of data mining as well as the method of supervision with algorithms of classification and regression tree using Clementine 12 software. Results: For clinical variables, model's precision was high in three parts of training, test and validation. For environmental variables, maximum precision of model in training part relevant to Candor algorithm was equal to

76%, in test part relevant to Neural Net algorithm was equal to 61%, and in validation part relevant to Neural Net algorithm was equal to 57%. Conclusion: In clinical variables, C5.0, CHAID, C and R models were stable and suitable for detection of lung cancer. In addition, in environmental variables, C and R model was stable and suitable for detection of lung cancer. Variables such as pulmonary nodules, effusion of plural fluid, diameter of pulmonary nodules, and place of pulmonary nodules are very important variables that have the greatest impact on detection of lung cancer.

## genetics

### Polymorphisms in NF-KB pathway genes and their association with risk of lung cancer in the Chinese population.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1411-1416

**Keywords:** NF-kappa B; Retrospective Studies; Case-Control Studies; Risk Factors; Genotyping Techniques; Polymorphism, Genetic

**Abstract:** Objective: To investigate the association of NFKB1 -94 ins/del ATTG, NFKBIA -826C>T and NFKBIA -881A>G polymorphisms with risk of lung cancer in a Chinese population. Methods: Genotyping of the polymorphisms were performed on 1,436 subjects [718 cases and 718 controls] by using PCR-RFLP technique, followed by DNA sequencing. Results: We found a significant risk reduction associated with heterozygous ins/del [OR=0.705, 95% CI=0.566-0.878, P=0.002] and variant del/del [OR=0.342, 95% CI=0.221-0.528, P<0.001] genotypes of the NFKB1 polymorphism. In contrast, the heterozygous and variant genotypes of the NFKBIA polymorphisms showed association with increased lung cancer risk [NFKBIA -826 CT, OR=1.256, 95% CI=1.004-1.572, P=0.046; TT, OR=1.773, 95% CI=1.131-2.778, P=0.013; NFKBIA -881 AG, OR=1.277, 95% CI=1.023-1.599, P=0.031; GG, OR=1.801, 95% CI=1.169-2.775, P=0.008]. Several genotypic combinations of the three polymorphisms also showed significant association with lung cancer risk. The risk association of NFKB1 polymorphism remained significant when analyses were done according to gender and smoking status [P<0.05]. The significance of NFKBIA risk association was not observed when gender-specific analyses were made [P>0.05], while only NFKBIA -881 GG genotype showed significant risk association among smokers when analyzed according to smoking status [P=0.032]. Conclusions: Polymorphisms in NFKB1 and NFKBIA genes were associated with risk of lung cancer.

## Lymphatic Diseases

### diagnosis

#### Utility of fine needle aspiration cytology in evaluation of lymphadenopathy - an audit from a Cancer Centre in South India.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 50-56

**Keywords:** Biopsy, Fine-Needle; Tertiary Care Centers; Hyperplasia

**Abstract:** Background: Cytological evaluation and diagnosis of lymphadenopathy plays an important role in distinction between reactive hyperplasia and malignancy. Being a tertiary cancer care centre, lymph node enlargement clinically suspected to be due to malignancy constitute the commonest indication for fine needle aspiration cytology [FNAC] at our centre. The aim of this study was to determine the utility of FNAC in evaluating enlarged lymph nodes and to categorize the causes of lymphadenopathy diagnosed by FNAC at our centre. Material and Methods: Data was collected from the records of department of Pathology over a period of three months from January to March 2014. The data was analyzed and various parameters studied. Results: There were 2000 aspirates over a period of three months of which 270 [13.5%] were from lymph nodes. Of these, 130 cases [48.2%] have metastatic deposits. We also came across 16 cases [5.9%] of lymphoma, 5 cases [1.9%] of granulomatous lymphadenitis, 2 cases [0.7%] of suppurative lesion and 99 cases [36.7%] of reactive hyperplasia during this period. In 3 cases [1.1%], the lesion turned out to be of salivary gland origin. Aspirates were suboptimal for diagnosis in 15 cases [5.5%]. Aspirates were more in males [181] as compared to females [89]. The most common site of aspiration was the cervical lymph node [64.5%], followed by supraclavicular=81[30%], inguinal=33[12.22%], axillary=19[7.04%] sub mental=1[0.37%] and others=7[2.59%]. Apart from metastatic carcinomas other metastatic malignancies we came across were malignant melanoma, neuroblastoma, germ cell tumor and synovial sarcoma. Conclusion: FNAC of lymph nodes helps in rapid diagnosis of lymphadenopathy. Categorizing the cause of lymph node enlargement as metastatic malignancy, lymphoma, reactive change, inflammatory cause, suppuration etc. can be done by FNAC. In patients with known histologically proven malignancy in whom a subsequent enlargement of lymph node occurs, a cytological diagnosis of metastasis helps in avoiding unwanted surgery for confirming metastasis. In patients without a previous diagnosis of malignancy, FNAC not only confirm metastatic deposit but in most conditions give a clue regarding site of primary. The use of immunocytochemistry and cell block preparations have increased the scope of FNAC.

## Lymphoma

### drug therapy

#### **Cost-utility analysis of IEV drug regimen versus ESHAP drug regimen for the patients with relapsed and refractory Hodgkin and non-Hodgkin's lymphoma in Iran.**

Hatam, Nahid; Deghhani, Mehdi; Habibian, Mostafa; Jafari, Abdosaleh  
Shiraz University of Medical Sciences - School of Management and Information Sciences

**Iranian Journal of Cancer Prevention** 2015; 8 (5): 59-66

**Keywords:** Lymphoma, Non-Hodgkin-drug therapy; Hodgkin Disease-drug therapy; Ifosfamide; Epirubicin; Etoposide; Methylprednisolone; Cytarabine; Cisplatin; Cross-Sectional Studies

**Abstract:** Background: Chemotherapy for lymph nodes cancer is often composed of several drugs that are used in a treatment program. Objectives: The aim of this study was to perform a cost-utility analysis of IEV regimen [ifosfamide, epirubicin and etoposide] versus ESHAP regimen [etoposide, methylprednisolone, high-dose cytarabine, and cisplatin] in patients with lymphoma in the south of Iran. Patients and Methods: This was a cost-utility analysis done as a cross-sectional study in the south of Iran. Using decision tree, expected costs, quality -adjusted life years [QALYs] and the incremental cost-effectiveness ratio [ICER] were estimated. In addition, the robustness of results was examined by sensitivity analysis. Results: The results of this study indicated that the total lymphoma patients were about 65 people that 27 patients received IEV regimen and 38 patients ESHAP [43 patients with Hodgkin's and 22 with non-Hodgkin lymphoma]. The results of decision tree showed that in the IEV arm, the expected cost was dollar 20952.93 and the expected QALYs was 3.89 and in the ESHAP arm, the expected cost was dollar 31691.74 and the expected QALYs was 3.86. Based on the results of the study, IEV regimen was cost-effective alternative to the ESHAP regimen. Conclusions: According to the results of this study, it is recommended that oncologists use IEV instead of ESHAP in the treatment of patients with lymphoma and because of high costs of IEV drug costs, it is suggested that IEV drugs should be covered by insurance.

### epidemiology

#### **Oral lymphoma prevalence in Iranian population: a multicenter retrospective study.**

Akbari, Mohammad Esmail; Bastani, Zahra; Mokhtari, Sepideh; Moghadam, Saede Atarabashi  
Shahid Beheshti University of Medical Sciences - Cancer Research Centre [CRC]

**Iranian Journal of Cancer Prevention** 2015; 8 (6): 5-10

**Keywords:** Mouth Neoplasms; Prevalence; Retrospective Studies; Cross-Sectional Studies; Carcinoma

**Abstract:** Background: Oral lymphoma is the second most common malignancy of the head and neck region after malignant epithelial tumors. Objectives: Considering the lack of a multicenter study on the frequency of oral lymphoma in Iran, this study aimed to assess the relative frequency of oral lymphomas in Iran during a 6-year period. Materials and Methods: This multicenter, retrospective, cross-sectional study was conducted in two phases. In the first phase, cases of oral lymphoma registered in the cancer research center [CRC] of Shahid Beheshti University of medical sciences were extracted. The patient records and pathology reports of these patients were retrieved from the archives and age, sex and microscopic type site of the lesions were evaluated. Results: Oral lymphoma accounts for 1% of head and neck malignancies and 8% of all lymphomas. From 2003 to 2008, a total of 437 new cases of oral lymphomas had been registered in the CRC. Diffuse large B-cell lymphoma was found to be the most common form of oral lymphoma in the 6-year period with 240 [54.9%] registered cases. The majority of detected cases were in the 6th and 7th decades of life with a male to female ratio of 1: 84. Tonsils were the most common site of occurrence of lymphoma in the oral cavity [77.8%]. Conclusions: The age of onset, site of involvement, sex of patients, and histopathological subtype of oral lymphomas in the Iranian population were found to be similar to those of most other countries.

## Lymphoma, B-Cell

#### **Nail alterations in cutaneous B-cell lymphoma with extracutaneous relapse.**

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Arak University of Medical Sciences - Ayatollah Khansari Hospital - Radiotherapy Oncology Department

**Reports of Radiotherapy and Oncology** 2015; 2 (1): 31-34

**Keywords:** Nails, Malformed; Recurrence; Radiotherapy; Skin Neoplasms

**Abstract:** Introduction: Cutaneous B-Cell lymphoma can be associated with clinically significant nail alterations, the presentation of which can be unusual and misleading. To date, only a few reports have demonstrated direct specific tumor infiltration of the nail bed with lymphoma, while there is much less information about infiltration of nail bed with diffuse large B-cell lymphoma. Case Presentation: We describe the case of a 74 years old man presenting with nail bed ulceration who developed clinically significant nail shape alterations. Light microscopy studies demonstrated the presence of a specific lymphocyte infiltrate within the nail bed. The IHC analysis demonstrated diffuse large B cell lymphoma [DLBCL]. Conclusions: Specific nail involvement should be recognized and considered in all patients with cutaneous B-cell lymphomas specially when there is refractory to conventional treatment.

## Lymphoma, Non-Hodgkin

### pathology

#### Cardiac involvement in non-Hodgkin lymphoma, an incidental large atrial mass: a case report.

Aledavood, Seyed Amir; Torghabeh, Ali Emadi; Shandiz, Fateme Homaei; Memar, Bahram  
Mashhad University of Medical Sciences - Faculty of Medicine

**Iranian Journal of Cancer Prevention** 2015; 8 (5): 7-10

**Keywords:** Myocardium-pathology; Heart; Heart Atria-pathology; Echocardiography; Drug Therapy

**Abstract:** Introduction: Cardiac involvement as an initial presentation of malignant lymphoma has been a rare occurrence. Case Presentation: We have reported a 78 year old man with complaint of abdominal pain and vomiting. In patients' preoperative evaluation for surgical management of an intra-abdominal mass, a large intracardiac mass has found incidentally during the echocardiography. Pathologic biopsy of right atrial mass that has removed by open heart surgery shown: non Hodgkin-B cell lymphoma. Bone marrow biopsy was taken and was positive for lymphomatous involvement. Conclusions: The patient has treated by CHOP chemotherapy regiment successfully and after completion of treatment, there was complete response.

## Magnetic Resonance Imaging

#### Acute one-stop cardiovascular magnetic resonance imaging for differential diagnosis in patients with acute coronary syndrome and unobstructed coronary arteries.

Chu, Guang; Zhang, Guobing; Zhu, Ming; Zhang, Zhi; Wu, Ying; Zhang, Hao  
Shanghai Jiaotong University - First People's Hospital - Department of Cardiology

**Medical Principles and Practice** 2015; 24 (4): 325-331

**Keywords:** Acute Coronary Syndrome-diagnosis; Coronary Vessels; Coronary Artery Disease-diagnosis; Chest Pain

**Abstract:** Objective: We aimed to evaluate the contributions of acute one-stop cardiovascular magnetic resonance [CMR] imaging to the differential diagnosis of acute coronary syndrome [ACS] and unobstructed coronary arteries. Subjects and Methods: In this study, 32 consecutive patients who presented with ACS and unobstructed coronary arteries on angiography were enrolled between January 2010 and December 2012. Acute one-stop CMR, including cine, angiography, black-blood, first-pass perfusion and late gadolinium enhancement [LGE] imaging, was performed with a pre-specified algorithm which was decided on by the doctors for all patients. The intimal flap in the aorta and the filling defect in the pulmonary artery were detected on MR angiography imaging. Left ventricular wall motion and ventricular thickness were analyzed in cine-mode sequences. The LGE images were reviewed for the presence, anatomical distribution and extent of contrast enhancement. Results: The acute one-stop CMR study was completed in all the 32 patients without adverse events. The overall time duration was between 15 and 60 min. Of the 32 patients, a CMR diagnosis was made in 30 [93.8%]. Aortic dissection was detected in 3 patients, pulmonary embolism in 2, hypertrophic cardiomyopathy in 2, acute myocardial infarction in 5, acute myocarditis in 16 and stress cardiomyopathy in 2. No confirmed diagnosis was established in the remaining 2 patients with normal CMR. Conclusion: Acute one-stop CMR allowed for the identification of an aetiology in most of the patients in this study. It may prove to be of immense help in establishing a differential diagnosis in patients presenting with acute chest pain, elevated troponin I and normal coronary arteries.

## Malaria

#### Reevaluation of Malaria parasites in El-Fayoum Governorate, Egypt using rapid diagnostic tests [RDTs].

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Ministry of Health - Research Institute of Medical Entomology - Department of Epidemiology

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 617-628

**Keywords:** Evaluation Studies as Topic; Diagnostic Tests, Routine

**Abstract:** Malaria as a disease has been identified in Egypt since ancient times. Malaria was endemic in almost all parts of the country but prevalence showed a steady decrease by 1990, and regressed in most of the Governorates. Then by the end of 1998 till now Egypt become free from local transmission of malaria. All reported cases were imported mainly from Sudan. However, the outbreak of falciparum [1 case] and vivax [23 cases] that occurred [May 2014] in Aswan Governorate strongly indicated that malaria is reemerging in the country. El-Fayoum should be take special attention, rather than being the last residual focus. The efficient malaria vector *A. sergenti*, the proven vector *A. pharoensis* and the suspected vector *A. multicolor* were encountered. This work reevaluated malaria status by using RDTs in survey and Giemsa stained thick films to confirm positive cases and estimation of parasite rate, formula, densities and species, also to study the ecological and entomological efficacy factors. The result showed that out of 2044 examined persons, 14

[0.68%] were passive cases i.e. attending themselves to El-Fayoum Malaria Units after their return from Sudan. Microscopic examination of their stained thick films obtained from MOH and P shows that 9 [64.2%] out of passive cases were positive 3 of them are *P. falciparum* [33.3%] and the rest *P. vivax* 6 [66.7%]. The species formulas of *P. falciparum* and *P. vivax* were 33.3% and 66.7% respectively. Concerning the density class, only one *vivax* case was of low density class while the other cases were of high density class. All positive cases were males, imported from Sudan and most of them were merchants having trade activities in Sudan. All examined persons during active case detection ACD [1551] and neighborhood of detected cases NOD [479] were malaria negative by rapid diagnostic tests. The areas recording the highest number of imported cases were Abu Shanap, Aboxa [Ballona] and Kafr Aboud [Abshaway Center] but no Anopheline spp larvae were detected. While in Al Nazla A. sergeni and A. multicolor larvae were detected where there was no imported case or even traveler to Sudan. If the situation is reversed i.e. an imported case inhabit Al Nazla, reemergence of local malaria may start. The situation of Kafr Fazara is greatly changed by using fine sand instead of clay in manufacturing red brick after prevention excavation of land. No imported cases or Anopheline spp larvae were recorded.

## diagnosis

### Comparison of a genus-specific conventional PCR and a species-specific nested-PCR for Malaria diagnosis using FTA collected samples from Kingdom of Saudi Arabia.

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 457-466

**Keywords:** Malaria, Falciparum; Polymerase Chain Reaction; Malaria-epidemiology; Malaria-epidemiology

**Abstract:** Molecular tools are increasingly accepted as the most sensitive and reliable techniques for malaria diagnosis and epidemiological surveys. Also, collection of finger prick blood spots onto filter papers is the most simple and affordable method for samples preservation and posterior molecular analysis, especially in rural endemic regions where malaria remains a major health problem. Two malaria molecular diagnostic tests, a Plasmodium genus -specific conventional PCR and a Plasmodium species -specific Nested PCR, were evaluated using DNA templates prepared from Whatman - FTA -cards' dry blood spots using both, Methanol -fixation/Heat -extraction and FTA commercial purification kit. A total of 121 blood samples were collected from six Saudi south -western endemic districts both, as thick and thin films for routine microscopic screening and onto FTA - cards for molecular studies. Out of the 121 samples, 75 were *P. falciparum* positive by at least one technique. No other species of Plasmodium were detected. *P. falciparum* parasites were identified in 69/75 [92%] samples by microscopic screening in health care centers. *P. falciparum* genus-specific PCR was able to amplify *P. falciparum* DNA in 41/75 [55%] and 59/75 [79%] samples using Methanol -fixation/Heat -extraction and FTA purification kit, respectively. *P. falciparum* species -specific Nested PCR revealed 68/75 [91%] and 75/75 [100%] positive samples using DNA templates were isolated by Methanol-fixation/Heat - extraction and FTA purification methods, respectively. The species -specific Nested PCR applied to Whatman -FTA preserved and processed blood samples represents the best alternative to classical microscopy for malaria diagnosis, particularly in epidemiological screening.

## Malaria, Falciparum

### blood

### Serum Apolipoprotein-A1 and cholesterol levels in Nigerian children with Plasmodium falciparum infection.

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*Medical Principles and Practice* 2015; 24 (4): 318-324

**Keywords:** Plasmodium falciparum; Apolipoprotein A-I-blood; Cholesterol-blood; Lipids-blood; Case-Control Studies; Child

**Abstract:** Objective: This study was carried out to determine whether or not Plasmodium falciparum malaria infection significantly affected apolipoprotein-A1 and cholesterol levels and if apolipoprotein-A1 correlated with the malaria severity in children younger than 5 years old. Subjects and Methods: Two hundred and fifty-five children, 170 of whom had microscopically confirmed *P. falciparum* infection, i.e. 85 cases of uncomplicated malaria [UM] and 85 of complicated malaria [CM], and 85 healthy controls were enrolled in this study. Serum levels of apolipoprotein-A1, total cholesterol, high-density lipoprotein [HDL], low-density lipoprotein [LDL] and triglycerides were determined. These levels were compared among the malaria and control groups, using ANOVA and post hoc analyses at  $p = 0.05$ . Results: There were significant differences in the mean serum levels of apolipoprotein-A1 [UM: 104.5 +/- 38.1 mg/dl, CM: 90.9 +/-33.3 mg/dl and controls: 129.7 +/- 48.3 mg/dl;  $p < 0.001$ ], total cholesterol [UM: 138.8 +/- 62.9 mg/dl, CM: 121.2 +/- 55.2 mg/dl and controls: 155.1 +/- 69.8 mg/dl;  $p = 0.002$ ] and LDL [UM: 98.2 +/- 55.5 mg/dl, CM:84.3 +/- 47.4 mg/dl and controls: 122.7 +/- 69.4

mg/dl;  $p < 0.001$ ]. Post hoc analyses revealed that children with UM and CM had significantly lower levels of apolipoprotein-A1, cholesterol, HDL and LDL than controls but that there was no difference between the 2 malaria groups. Reductions in levels of lipids and apolipoprotein-A1 were worse in CM than in UM. Conclusion: Altered levels of serum lipids with CM were associated with a reduction in apolipoprotein-A1. These findings have potential diagnostic utility for the management of malaria.

## Mandibular Condyle

### pathology

#### Unilateral mandibular condylar hyperplasia- a rare entity.

Vaswani, Aneel Kumar; Shahani, Bhesham Kumar; Nizamani, Waseem Mehmood; Aneel, Geeta; Bhesham, Indra

Ziauddin University and Hospitals - Department of Radiology

**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 33-35

**Keywords:** Mandibular Neoplasms; Hyperplasia; Facial Asymmetry

**Abstract:** True unilateral condylar hyperplasia [CH] of mandible including its variants is an uncommon maxillofacial deformity. It represents unilateral abnormal growth of the mandible including its body and ramus. Discrepancy in the growth of the mandible causing vertical facial asymmetry, creating aesthetic problem resulting in malocclusion as well as psychological issues requiring bi-maxillary surgical correction. In this report we discuss the use of imaging in the diagnosis of these pathologies and investigate its variants.

## Mastitis, Bovine

### diagnosis

#### Some studies on E-Coli mastitis in cattle and buffaloes.

Mahmoud, Abdel Kerim A.; Khadr, Adel M.; Elshemy, Tharwat M.; Hamoda, Hassan A.; Ismail, Mohamed I.

**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 105-112

**Keywords:** Escherichia coli-genetics; Escherichia coli-isolation and purification; Cattle; Buffaloes; Polymerase Chain Reaction; Fluoroquinolones

**Abstract:** The aim of this study is to identify the role E.coli in bovine, its virulence factors and antimicrobialsensitivity. Three hundred and sixty locating cows and buffaloes were examined clinically and by CMT, 210 were suffering from clinical mastitis with percentage of 62.7% and 39[20.4%] E.coli isolates were detected in clinical cases of mastitis, 90 cases were suffering from subclinical mastitis and 6[6.8%] E.coli isolates were detected from these samples. The percentage of E.coli in cows was 31[21.1%] while in buffaloes 8[18.3%] isolates. Serotyping of E.coli revealed that O55[30%], O111[15%], O124[15%], O119[10%], O114[10%], O26[5%], O157[10%] and O44[5%]. That's showing that O55, O111 and O124 were the most serotypes causing mastitis. PCR identification of TraT gene revealed 5 cases were positive and give positive reaction at 307 bp. and for eaeA gene revealed 6 cases and give positive reaction at 384 bp. the antimicrobial sensitivity indicated that the most effective antibiotics were lincospectine [56.6%], danofloxacin[56.6%], enrofloxacin[40%] and cefitire [40%], while the lowest effective antibiotics were oxytetracycline and ampicillin.

## Maternal Health

#### Achieving fertility control through woman's autonomy and access to maternal healthcare: are we on track? in-depth analysis of PDHS-2012-13.

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National University of Sciences and Technology [NUST] - Department of Behavioral Sciences

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1355-1360

**Keywords:** Contraception; Prenatal Care; Developing Countries; Personal Autonomy

**Abstract:** Background and Objective: Fertility control preferences and maternal healthcare have recently become a major concern for developing nations with evidence suggesting that low fertility control rates and poor maternal healthcare are among major obstructions in ensuring health and social status for women. Our objective was to analyze the factors that influence women's autonomy, access to maternal healthcare, and fertility control preferences in Pakistan. Methods: Data consisted of 11,761 ever-married women of ages 15-49 years from PDHS, 2012-13. Variables included socio-demographics, women's autonomy, fertility control preferences and access to maternal healthcare. Results: Findings from multivariate analysis showed that women's younger age, having less than three number of children and independent or joint decision-making [indicators of high autonomy] remained the most significant predictors for access to better quality maternal

healthcare and better fertility control preferences when other variables were controlled. Conclusion: Women's access to good quality maternal health care and fertility control preferences are directly and indirectly influenced by their demographic characteristics and decision-making patterns in domestic affairs.

## Meat Products

### microbiology

#### **Polymerase chain reaction [PCR]: an alternative rapid method for detection of some microbial contamination of meat products.**

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 91-98

**Keywords:** Food Contamination; Polymerase Chain Reaction-immunology; Meat; Escherichia coli; Staphylococcus aureus

**Abstract:** The use of advanced molecular techniques such as PCR has been introduced as a new rapid and reliable method for detection of microbial contamination of food stuff. In this study, a total of 160 meat products samples (40 of each luncheon beef burger, minced meat, and fresh sausage) were examined for the presence of *E. coli* and pathogenic *Staph. aureus* using traditional methods of isolation and identification and RAPD-PCR. The data obtained from this study showed that *E. coli* was isolated from 9 [22.5%], 13 [32.5%], 19 [47.5%], and 24 [60%] by traditional method comparing with 8 [20%], 13 [32.5%], 17 [42.5%], 23 [57.5%] using RAPD-PCR method out of 40 samples of luncheon, beef burger, minced meat, and fresh sausage samples respectively. While, *Staph. aureus* was isolated from 17 [42.5%], 11 [27.5%], 28 [70%], and 18 [45%] using traditional methods in comparison with 13 [32.5%], 8 [20%], 23 [57.5%], and 14 [35%] using RAPD-PCR method out of 40 samples of luncheon, beef burger, minced meat, and fresh sausages samples correspondingly, with a sensitivity rate ranged from 87 to 96% in case of *E. coli* and 72 to 82% in case of *Staph. aureus*. Collectively, the obtained results in the current study clarified that the PCR is considered as a rapid, reliable and sensitive tool for detection of microbial contamination of food stuff.

## Meningitis, Bacterial

### complications

#### **Cognitive and neurological complications of bacterial meningitis in adult patients: a hospital based study.**

El Gindy, Eman M.; Ali Eldin, Fatma A.; Bayoumy, Iman; Abdel Moneim, Lamiaa; Ibrahim, Wesam A.

Ain Shams University - Faculty of Medicine - Department of Tropical Medicine

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 477-484

**Keywords:** Cognition Disorders; Tuberculosis, Meningeal; Neurology

**Abstract:** Bacterial meningitis is associated with disabling sequelae in a significant proportion of patients. It is associated with high mortality, risk of neuropsychological sequelae and risk of cognitive impairment the purpose of this study is to assess cognitive and neurological complications in adult patients with bacterial meningitis. A total of 45 patients with bacterial meningitis and 16 patients with tuberculous meningitis were enrolled. They were subjected to full medical history taking and clinical examination, full neurological examination on admission and discharge. Mini mental state examination [MMSE] and Wechsler memory scale [WMS] were used to assess cognitive function. The results showed that the ischemic brain insult [87.88%] followed by cranial nerves affection [32.42%] were the commonest neurological complication detected on discharge. Cognitive impairment was detected in 53.66% of patients using MMSE. WMS showed that orientation, information and logical memory were the most common affected. Cognitive and neurological complications were not statistically related to age or etiology [ $P > 0.05$ ]. Longer duration until diagnosis [ $\text{Beta} = -.18, p < 0.001$ ], presence of intracranial complications [ $\text{Beta} = -.12, p < 0.005$ ], need for mechanical ventilation [ $\text{Beta} = -.79, p < 0.001$ ] and drug abuse [ $\text{Beta} = -0.11, p < 0.05$ ] were significant predictors of worse outcome assessed by Glasgow outcome score.



## diagnosis

### Value of cerebrospinal fluid tumor necrosis factor-alpha [TNF-ALPHA] for rapid diagnosis of bacterial meningitis.

Montasser, Iman Fawzy; El Gindy, Eman Mohamed; Allam, Enas Hassan; Elbaz, Hosam S.; Khalifa, Reham Ali Ahmed; Ali, Hany El Sayed

Ain Shams University - Faculty of Medicine - Departments of Tropical Medicine

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 655-662

**Keywords:** Case Control Studies; Cerebrospinal Fluid; Tumor Necrosis Factor-alpha

**Abstract:** Meningitis is common in tropical areas and also in Egypt and has a world-wide distribution. This study evaluated the potential role of CSF TNF alpha in diagnosis and differential diagnosis of acute meningitis [bacterial versus aseptic meningitis]. This case-control study was conducted between Ain Shams University Tropical Medicine Department and Embaba Fever Hospital. Fifty patients with suspected meningitis were recruited during from January 2014 to June 2014. They were divided according to culture results into 2 groups: G1: 40 patients with acute bacterial meningitis [proved by CSF culture], G2: 10 patients matched according to age and sex with clinical signs of CNS infection but without laboratory evidence of bacterial origin, [Suspected cases, and negative culture]. Both groups were subjected to thorough history taking, full clinical examination, and laboratory investigations including CSF analysis and CSF TNF was measured by ELISA. The results showed a highly significant difference between cases and control regarding CSF TNF [P=0.00]. The criteria's of diagnostic validity test was 100% for all at cutoff  $\geq$  275ng/ml and  $\leq$  700ng/ml with 100% specificity and sensitivity. A significant correlation between CSF-TNF and each of ESR [P=0.003] and CSF cells [P=0.015], without significant correlation regarding other parameters [P>0.05].

## Metabolic Syndrome X

### epidemiology

### Alarming high prevalence of metabolic syndrome among Jordanian adults.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1377-1382

**Keywords:** Prevalence; Cross-Sectional Studies; Risk Factors; Adult

**Abstract:** Objective: To evaluate the prevalence and the individual components of metabolic syndrome [MetS] in Jordanian adults. Methods: In this cross sectional study, 630 adult subjects [308 men and 322 women] aged between 20-70 years were recruited from the clinics at the King Hussein Medical Center. The diagnosis of MetS was made according to the International Diabetes Federation [IDF] criteria-2005. Blood samples were collected after 10-12 hours overnight fasting and serum was obtained for biochemical analysis. Results: The prevalence of metabolic syndrome according to IDF criteria was 51% [46.4% in men and 55.3% in women]. Prevalence of increased waist circumference in the total sample was 71.6%, 46% for high blood pressure, 42.4% for elevated fasting blood glucose, 43.5% for low high density lipoprotein, and 50.2% for hypertriglyceridemia. Conclusion: The prevalence and individual components of MetS in Jordan were high. Screening of MetS is needed at national level to reduce the incidence of Type 2 diabetes mellitus [T2DM] and cardiovascular disease [CVD].

## Middle East Respiratory Syndrome Coronavirus

### MERS-CoV: Need to search for un-known answers.

WHO Eastern Mediterranean Regional Office

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (26-27): 1

**Keywords:** Disease Outbreaks; Camels

**Abstract:** The spread of Middle East respiratory syndrome coronavirus [MERS-CoV] to South Korea and China is an important signal for increased vigilance in global health security. Yet, nearly four years have passed since the first case of MERS-CoV made headline worldwide, a number of key research and knowledge gaps remain which is a major impediment to global efforts to effectively contain the spread and transmission of this novel respiratory virus.

## Milk

### Molecular study of some candidate genes affecting milk production traits in Holstein cattle.

El Bayomi, Khairy M.; El Araby, Iman E.; Awad, Ashraf; Zagloul, Asmaa W.  
Zagazig University - Faculty of Veterinary Medicine - Department of Animal Wealth Development

**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 146-150

**Keywords:** Genes; Caseins; Lactoglobulins; Cattle; Polymerase Chain Reaction; Polymorphism, Restriction Fragment Length

**Abstract:** Most of the economically important traits in dairy cattle are quantitative in nature, which means that they are affected by environmental factors and by large number of gene. Selection of superior animals has been made more effective through studies of major milk protein genes that are known to affect both milk yield and composition. The present study was carried out to detect polymorphism in kappa casein [CSN3] and beta-lactoglobulin [LGB] genes in Holstein cattle under Egyptian condition through DNA sequencing and polymerase chain reaction restriction fragment length polymorphism [PCR-RFLP]. Fifty Animals were divided into high and low milk producing according to their breeding value. PCR amplification of exon III of CSN3 and LGB was performed followed by restriction fragment length polymorphism [PCR-RFLP] using Hind-III and HinfI for CSN3 and HaeIII restriction endonuclease for LGB. Nucleotide polymorphisms between high and low producing cows were detected by DNA sequencing. The restriction enzymes digestion failed to produce restriction patterns and revealed no polymorphism in all studied animals. Comparison of nucleotide sequences between high and low producing cows revealed lack of polymorphism in CSN3 and four nucleotide changes in LGB gene; C179 T, C225T, T246C, and C294G. The further study using other specific restriction endonuclease was required to detect polymorphisms of CSN3 and LGB in Egyptian Holstein cattle. SNPs discovered in this study can be used as molecular genetic markers for marker assisted selection [MAS] to increase and accelerate the rate of genetic improvement of milk production traits.

## Minimally Invasive Surgical Procedures

### The mapping of preferred resources for surgical education: perceptions of surgical trainees at the Advanced International Minimally Invasive Surgery Academy [AIMS], Milan, Italy.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 396-404

**Keywords:** Laparoscopy; Learning; Education; Surveys and Questionnaires; Surgical Instruments; Training Support

**Abstract:** Objectives: Surgical training courses provide the trainees with anatomical knowledge and manual dexterity. This study aimed to capture the learning styles and training preferences of participants attending a masterclass training centre. This data can facilitate the program directors in tailoring the course contents to enhance the learning environment. Methods: Between 2010 and 2013, a questionnaire was administered to all participants at the end of each course at the Advanced International Minimally Invasive Surgery Academy [AIMS] in Milan, Italy. The instrument explored the feedback of participants regarding their surgical experiences, learning needs and desired surgical educational resources in minimally invasive surgery. Results: Of 636 respondents, 606 [95%] performed some laparoscopic procedures at their workplaces. Of the respondents, 467 [73%] preferred 'direct experience in the operating room', 424 [66%] preferred 'tutoring with skilled colleague', and 275 [43%] wanted 'hands-on training on animals in their own countries'. Female respondents favoured national congresses as educational resources more than males, with mean ranks of 207.22 vs. 176.51, respectively [p 0.022]. The respondents serving hospitals preferred international congresses [mean rank 189.21] more than the respondents serving universities [mean rank 181.72] and private clinics [mean rank 127.45]. Conclusion: This study shows that surgical trainees prefer hands-on training in operating rooms, tutoring by skilled colleagues and short fellowships to learn and enhance their surgical skills. Surgical educators can focus on these preferred surgical educational resources to enhance students' acquisition of surgical skills.

## Mitral Valve

### abnormalities

#### **Cleft anterior mitral leaflet with supralvalvular aortic stenosis a rare association.**

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**Heart Views** 2015; 16 (4): 151-153

**Keywords:** Aortic Stenosis, Supralvalvular-diagnosis; Echocardiography; Echocardiography, Transesophageal; Multidetector Computed Tomography

**Abstract:** A 20 year old female was referred to us for evaluation of effort dyspnoea of NYHA class II with feeble left common carotid, left brachial and left radial artery as compared to other sides. Detail evaluation with two dimensional [2D] transthoracic echocardiographic, 2D transesophageal echocardiography and multidetector computed tomography [MDCT] delineated Cleft AML and diffuse type of supralvalvular aortic stenosis. To the best of our knowledge, no such case have been described in the literature where these anomalies co-existed in the same patient.

## Mouth Neoplasms

#### **Awareness of risk factors among medical students of Peshawar for using oral snuff [NASWAR] in causing oral cancer.**

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**Journal of Medical Students** 2015; 1 (1): 41-45

**Keywords:** Risk Factors; Awareness; Students, Medical; Surveys and Questionnaires; Cross-Sectional Studies; Tobacco, Smokeless

**Abstract:** Introduction: Naswar [in Pashto, Snuff in English] is a known risk factor in causing oral cancer. Many domestic and international studies have shown it to be associated with increased risk of developing oral cancer. Naswar addiction in men and women of Southern and Northern districts of KPK is considered a risk factor in causing serious health problems. This study aimed to evaluate the awareness level among medical students of Peshawar about the association of naswar with oral cancer. Material and Methods: It was a cross-sectional study based on online administered questionnaire in which perceptions were taken. A total of 50 medical students from different medical colleges participated to complete the online survey, developed using Google Spreadsheet form. SPSS version 15 was used for data analysis. Result: Out of 50 students n=45 [90%] were aware about the oral cancer. 68% [n=34] of students believed that naswar caused oral cancer and majority of the students [76%] thought naswar as social. Tobacco leaves were considered the main ingredient used in naswar, also 66% [n=33] of the students believed that it is not safe to use tobacco in some other form. Conclusion: Majority of medical students were aware of oral cancer and health hazards of naswar and its association with oral cancer. However, lack of correct information was observed in both users and non-users of naswar. This has implication for raising the incidence of oral cancer and addiction rate among vulnerable population, especially children.

## Multiple Myeloma

### therapy

#### **Immunotherapy in multiple myeloma using cancer-testis antigens.**

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**Iranian Journal of Cancer Prevention** 2015; 8 (5): 11-20

**Keywords:** Immunotherapy; Antigens, Neoplasm; Neoplastic Stem Cells; Biomarkers, Tumor; Testicular Neoplasms

**Abstract:** Context: Multiple myeloma [MM] is a B-cell malignancy characterized by monoclonal expansion of abnormal plasma cells in the bone marrow. It accounts for 10% of hematological malignancies. Although patients respond to a wide range of anticancer modalities, relapse occurs in a significant number of the cases. Immunotherapeutic approaches have been evolved to tackle this problem. Cancer-testis antigens CTAs as a group of tumor-associated antigens are appropriate targets for cancer immunotherapy as they have restricted expression pattern in normal tissues except for testis which is an immune-privileged site. Expression of these antigens has been assessed in different malignancies including MM. Evidence Acquisition: We performed a

computerized search of the MEDLINE/PubMed databases with key words: multiple myeloma, cancer-testis antigen, and cancer stem cell and immunotherapy. Results: Several CTAs including NY-ESO-1, MAGE and GAGE family have been shown to be expressed in MM patients. Cellular and humoral immune responses against these antigens have been detected in MM patients. Conclusions: The frequent and high expression level of CTAs in MM patients shows that these antigens can be applied as cancer biomarkers as well as targets for immunotherapy in these patients.

## Multiple Sclerosis

### diagnosis

#### Multiple sclerosis presenting as a delirium: a case report.

Mahboobi, Nastaran; Nolden Hoverath, Silke; Rieker, Olaf; Bauer, Hartmut  
Teaching Hospital of Bonn University - Marien Hospital Euskirchen - Department of Neurology

**Medical Principles and Practice** 2015; 24 (4): 388-390

**Keywords:** Delirium; Plasmapheresis

**Abstract:** Objective: To report a case of multiple sclerosis [MS] with delirium as the first presentation. Clinical Presentation and Intervention: A 34-year-old female was referred to our department with an acute onset of drowsiness, withdrawal from routine activities and aggression, followed by neurologic deficits after a couple of days. Clinical and radiographic examinations were performed, leading to the initial diagnosis of MS. A vast range of differential diagnoses was excluded to confirm the diagnosis of MS. Conclusion: Neurological examination and appropriate imaging enabled the diagnosis of MS with delirium in this patient followed by the appropriate treatment.

## Musculoskeletal Abnormalities

#### Recurrent mutation in CDMP1 in a family with Grebe chondrodysplasia: broadening the phenotypic manifestation of syndrome in Pakistani population.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1542-1544

**Keywords:** Osteochondrodysplasias; Growth Differentiation Factor 5; Mutation; Dwarfism

**Abstract:** Grebe syndrome [OMIM-200700] is a very rare type of acromesomelic dysplasia with autosomal recessive inheritance. We studied a Pakistani family with two affected individuals having typical features of Grebe chondrodysplasia. Patients were observed with short and deformed limbs having a proximo-distal gradient of severity. Hind-limbs were more severely affected than fore-limbs. Digits on autopods were very short and nonfunctional. Index subject also had nearsightedness. However, symptoms in the craniofacial and axial skeleton were minimal. Genetic analysis revealed four base pair insertion mutation [c.1114insGAGT] in gene coding cartilage-derived morphogenetic protein-1 [CDMP1]. This mutation was predicted to cause premature stop codon. The clinical presentation in this study broadens the range of phenotypes associated with CDMP1 mutation in Pakistani population.

## Myocardial Infarction

### blood

#### Relation between the serum ferritin level and the risk for acute myocardial infarction.

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**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 147-151

**Keywords:** Ferritins-blood; Risk Factors; Cross-Sectional Studies; Chest Pain; Coronary Care Units

**Abstract:** Background: Increased estimated body iron stores have been recently suggested to be associated with increased risk of acute myocardial infarction [AMI]; however the question of whether serum ferritin level as an indicator for estimating body iron is an independent risk factor for cardiac events is still questioned. In the present study, we assessed whether serum ferritin was associated with the incidence of AMI. Methods: The study population consisted of 100 consecutive male patients with first AMI, including 50 suffered from ST Elevation Myocardial infarction [STEMI] and 50 with non-ST Elevation Myocardial infarction [NSTEMI] diagnosis, admitted within 12 hours of the onset of chest pain to coronary care units [CCU] at Ekbatan hospital in the Hamadan, Iran in 2014. A control group [n = 50] was selected among men without history of AMI from

same hospital. Serum ferritin was measured using an ELISA assay at the first and fifth days after admission. Results: The first and fifth day serum ferritin concentrations averaged 56.75 and 112.5 micro g/dl in STEMI [ST Elevation Myocardial Infarction] group, 36.5 and 87.25 micro g/dl in NSTEMI [Non ST Elevation Myocardial Infarction] group and 22.5 and 42.0 micro g/dl in control group that was significantly higher in former group. In this regard, the medium level of ferritin in STEMI, NSTEMI, and control groups were 159, 146, and 32.5 micro g/dl, respectively that was significantly higher in those who suffered STEMI than in other study subgroups [ $p < 0.001$ ]. Multivariable logistic regression model showed that the elevated level of serum ferritin could predict occurrence of STEMI adjusted for initial ferritin concentration, patients' age and coronary disease risk factors [OR = 5.1,  $P = 0.017$ ]. Conclusions: Elevated serum ferritin can be a potent factor for predicting AMI especially STEMI.

## Myopia

### Four-year follow-up of corneal aberrations and visual functions of myopic patients after laser in situ keratomileusis.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1453-1456

**Keywords:** Cornea; Keratomileusis, Laser In Situ; Vision, Ocular; Surveys and Questionnaires; Corneal Wavefront Aberration

**Abstract:** Objective: To report on 4-year follow-up of corneal higher-order aberrations and daily visual functions of myopic patients after laser in situ keratomileusis [LASIK]. Methods: One hundred thirty four eyes of 67 patients who underwent LASIK guided by aspherical ablation were included in this study. The vision, corneal spherical aberration [SphA] and Coma were recorded before LASIK and at 6 month and 4 year after LASIK. The evaluation of the questionnaire about daily visual functions was performed by the same physician after LASIK. Results: No eye decreased the BCVA during 4 year follow-up. The effect index and safety index were 1.08 +/- 0.16, 1.11 +/- 0.17 and 1.12 +/- 0.16, 1.13 +/- 0.14 respectively at 6 month and 4 year post-LASIK. After LASIK the corneal SphA and Coma were significantly increased, however the difference between 6 month and 4 year post-LASIK was no statistical significance. Most patients [94.3%-92.4%] felt satisfaction or high satisfaction about the ability to perform each daily visual function after LASIK. Meanwhile there was still about 7.4%-9.2% patients who complained that they could not drive at night. Further analysis showed that the score of driving at night was negative correlation with corneal SphA [ $r = -0.645$ ,  $p = 0.040$ ;  $r = -0.688$ ,  $p = 0.040$  at 6 month and 4 year post-LASIK respectively]. Conclusions: Our four-year follow-up outcomes indicated that the myopic patients after LASIK had the long-term stable corneal aberration and satisfaction of daily visual functions.

## Nematode Infections

### Prevalence OF Anisakid Nematode larvae infecting some marine fishes from the libyan coast.

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 609-616

**Keywords:** Aquatic Organisms; Prevalence; Fishes

**Abstract:** This study examined eight hundred ninety six marine fishes belonging to nine different fish species; *Synodus saurus*; *Merluccius merluccius*; *Trachurus mediterraneus*; *Serranus cabrilla*; *Mullus surmuletus*; *Diplodus annularis*; *Spicara maena*; *Siganus rirulatus* and *Liza ramada*. The fishes were bought from fish markets at five different sites on Libyan coast, from January to December 2013, for study the anisakids larvae among them. The results showed that 344/896 fishes [38.4%] were infected with Anisakids larvae. *S. saurus* was the highly infected [80.9%], followed by *T. mediterraneus* [77.5%] but, *S. cabrilla*, *S. maena*, *M. merluccius*, *M. surmuletus*, and *D. annularis* were least anisakid infected showed rates of 58.2%, 53.8%, 43.7%, 36.7% and 3.6%, respectively. No parasites were in *S. rirulatus* and *L. ramada*. Ten species of Anisakids larvae was detected during the present study. Two *Pseudoterranova* sp. Larvae, two types of Anisakis larvae, *Anisakis simplex* larva and *Anisakis* sp. Larva, two types of *Contracaecum* sp. Larvae and four *Hysterothylacium* larvae. Females showed higher prevalence than males. The number of anisakid larvae varied according to body length and weight of infected fish, without significant difference between prevalence and seasons, but, a significant difference was between prevalence and regions.

## Neuroendocrine Tumors

### diagnosis

#### Primary neuroendocrine tumor of liver [rare tumor of liver]

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*Iranian Journal of Cancer Prevention* 2015; 8 (6): 45-47

**Keywords:** Liver Neoplasms; Ultrasonography; Carcinoid Tumor; Neoplasm Metastasis; Magnetic Resonance Imaging

**Abstract:** Introduction: A neuroendocrine tumor has known as a neuroendocrine system tumor. Rarely, neuroendocrines have found in other areas, like the liver, gallbladder, bile ducts, kidneys, ovaries or testicles. Case Presentation: We have a 41-year-old woman has referred to our medical center, complaining of fullness and vague pain on her right upper quadrant. The liver scan, sonography, MRI demonstrated multi lobular cysts in 6th and 7th segments of her liver and chest imaging was normal, octreotide scan has not shown metastatic neuroendocrine tumor of liver. Conclusions: Liver could be the location of metastatic neuroendocrine tumors, for example metastatic carcinoid tumor. Therefore, it was so important to differentiate primary neuroendocrine tumor from metastatic neuro-endocrine tumors.

## Nicotinamide Phosphoribosyltransferase

### blood

#### Increased concentration of circulating visfatin associates with post-challenged hyperglycaemia and insulin resistance in IGT subjects.

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Green Life Medical College - Department of Biochemistry

*Journal of Taibah University Medical Sciences* 2015; 10 (4): 481-487

**Keywords:** Hyperglycemia; Insulin Resistance; Prediabetic State; Diabetes Mellitus, Type 2

**Abstract:** Objectives: The cytokine visfatin is increased in obesity and type 2 Diabetes; however, its role in the development of diabetes is still unsettled. The present study aimed to investigate the serum visfatin levels in prediabetic subjects. Methods: Seventeen subjects with Impaired Fasting Glucose [IFG], 44 Impaired Glucose Tolerant [IGT], 16 IFG-IGT and 51 healthy subjects were recruited. Fasting insulin and visfatin were measured using enzyme-linked immunosorbent assay [ELISA] techniques. The Insulin sensitivity Homeostasis Model Assessment [HOMA%S] and B-cell secretory capacity [HOMA%B] were estimated using HOMA-CIGMA software. Results: HOMA%B was significantly lower in IFG [ $p = 0.0001$ ] and IFG-IGT [ $p = 0.001$ ] subjects. HOMA%S in IGT [ $p = 0.0001$ ] and IFG-IGT [ $p = 0.001$ ] subjects were significantly lower compared to controls. The fasting serum visfatin [ng/ml] level was significantly higher in IFG [ $5.08 \pm 2.16$ ,  $p = 0.0001$ ], IGT [ $4.75 \pm 2.81$ ,  $p = 0.0001$ ] and IFG-IGT subjects [ $4.33 \pm 2.68$ ,  $p = 0.013$ ] compared to controls [ $2.60 \pm 1.2$ ]. In binary logistic regression analysis, visfatin has found significantly associated with IFG [ $B = 0.198$ ,  $p = 0.040$ ], IGT [ $B = 0.162$ ,  $p = 0.043$ ] and IFG-IGT [ $B = 0.188$ ,  $p = 0.044$ ]. Visfatin was also found significantly correlated with postprandial serum glucose and blood pressure in IGT subjects. Frequency of IFG, IGT and IFG-IGT subjects increased with increasing visfatin concentrations. Conclusions: Serum visfatin appear to be associated with IFG, IGT and IFG-IGT. Postprandial serum glucose and blood pressure are positively associated with visfatin levels in IGT subjects.

## Non-alcoholic Fatty Liver Disease

#### Essential phospholipids as a supportive adjunct in the management of patients with NAFLD.

Dajani, Asad Izziddin Mustafa; Abu Hammour, Adnan M.; Zakaria, Mohammed A.; Al Jaber, Mazen R.; Nounou, Mohammed A.; Semrin, Abdul Ilah M.

ADSC

*Arab Journal of Gastroenterology* 2015; 16 (3-4): 99-104

**Keywords:** Phospholipids; Prospective Studies; Transaminases-blood; Phosphatidylcholines; Disease Management

**Abstract:** Background and study aims: Treatment of nonalcoholic fatty liver [NAFLD] is important because NAFLD patients have a 1.7-fold increase in standardised age and gender matched mortality. Currently treatment is based on life style modification and managing comorbid associating disease. Other medications remain experimental. Essential phospholipid [EPL] is a nutrient for the liver, helping to maintain vitality of cell membranes where the vast majority of liver activities are regulated. We performed a randomised open label

study to evaluate EPL as an adjuvant nutrient to the treatment of primary NAFLD or NAFLD with comorbid disease. Patients and method: Three groups of NAFLD patients were recruited: lone [n = 113], diabetes mellitus type 2 [n = 107] and mixed hyperlipidaemia [n = 104]. Diagnosis was established by excluding other chronic liver diseases. A standard diet and physical activity plan were advised to all patients. 1800 mg of EPL a day was given for 24 weeks, followed by 900 mg for 48 weeks. Results: Essential phospholipid EPL led to a significant improvement of symptoms and a mean reduction of ALT of 50.8 IU and AST of 46.1 IU per patient [p < 0.01]. Abdominal ultrasonography indicated normalisation in 4.6% and a shift from grade II to grade I in 24% of patients. Liver stiffness measurement indicated an improvement in 21.1%, with a mean reduction in the LSM of 3.1 K Pascal/patient. Reducing the dosage after six months led to a limited relapse in 43.8-63.2% of patients, for lone and NAFLD with co-morbid conditions. Conclusion: Essential phospholipid [EPL] as a nutritional supplement resulted in a significant improvement in clinical parameters and transaminases for all NAFLD patients. Ultrasound and LSM revealed modest improvement. There is a need for uninterrupted maintenance to avoid relapse.

## Obesity

### Increased Body Mass Index may lead to hyperferritinemia irrespective of body Iron stores.

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Aga Khan University - Department of Biological and Biomedical Sciences

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1521-1526

**Keywords:** Body Mass Index; Ferritins-blood; C-Reactive Protein; Peptide Fragments; Cross-Sectional Studies; Iron-blood; Inflammation

**Abstract:** Objective: Obesity causes subclinical inflammation which results in the secretion of various bioactive peptides that are key players in metabolic regulation of iron homeostasis. We sought to establish correlation of one such peptide [ferritin] with marker of subclinical inflammation [CRP] in various BMI. Methods: Total 150 subjects between the ages of 20-60 years were included in the cross-sectional study conducted at Basic Medical Sciences Institute, Jinnah Post Graduate Medical Centre, Karachi, Pakistan. Body Mass Index [BMI] was calculated by weight [kg] /height [m<sup>2</sup>]. The given values were used as reference for Group A: normal weight [18.0-22.9 kg/m<sup>2</sup>], Group B: overweight [23.0-24.9 kg/m<sup>2</sup>], Group C: obese [>25.0 kg/m<sup>2</sup>] according to South Asian criteria. Serum Iron, Total Iron Binding Capacity, serum Transferrin Saturation, serum Ferritin and C-reactive protein were measured by commercially available kits. ANNOVA with Tukey's minimum significant difference and Spearman Rho correlation were used considering p<0.05 significant. Results: The results identified an increased serum Ferritin and CRP in obese versus lean subjects [p < 0.001]. BMI showed significantly positive correlation with serum CRP [r = 0.815;p-value < 0.01] and Ferritin [r = 0.584; p-value < 0.01]. However, serum Iron levels and Transferrin saturation decreased in obese versus normal weight individuals [p < 0.001]. Conclusion: This integrated new data reveals that individuals with high BMI had high levels of Serum Ferritin despite low levels of iron with high levels of C- reactive protein. This might be caused due to inflammatory conditions prevailing in the presence of increased adipose tissue.

## Onchocerciasis

### The Arthropod-Borne Onchocerciasis: is it deserved to be neglected?

El Bahnasawy, Mamdouh M. M.; Morsy, Ayman T. A.; Morsy, Tosson A.  
Military Medical Academy

**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 639-654

**Keywords:** Neglected Diseases; Simuliidae; Blindness; Prevalence; Onchocerca volvulus; Filarioidea

**Abstract:** Onchocerciasis a filarial parasitic nematode, also known as river blindness and Robles disease, is a neglected tropical disease infecting more than 18 million people mainly in sub-Saharan Africa, the Middle East, South and Central America and many other countries. Disease infectivity initiates from *Onchocerca volvulus* [Filarioidea: Onchocercidae] transmitted by the blackfly, *Simulium* sp. which introduces the infective stage larva with its saliva into the skin. Within human body, adult females [macrofilaria] produce thousands of larvae [microfilariae] which migrate in skin and eye. Infection results in severe visual impairment or blindness for about 2 million, as being the world's second-leading cause of blindness after trachoma, as well as skin onchocerciasis.

## Oral Health

### Long-Term effects of school based oral health program on oral health knowledge and practices and Oral Health-Related quality of life.

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**Medical Principles and Practice** 2015; 24 (4): 362-368

**Keywords:** Oral Hygiene; Health Knowledge, Attitudes, Practice; Cross-Sectional Studies; Quality of Life; Surveys and Questionnaires; School Health Services

**Abstract:** Objective: To evaluate the effects of exposure to the School Oral Health Program [SOHP] during primary school years on the current oral health [OH] knowledge and practices and OH-related quality of life [OHRQoL] of Kuwait University students. Subjects and Methods: 300 university students, aged 17.6-24.3 years, completed a validated questionnaire that consisted of 5 sections about demographics, healthself-evaluation, OH knowledge and practices and OHRQoL. Of these students, 260 were female, 40 male, 262 single and 38 married. 189 participants had attended the SOHP, while 111 had not. Frequencies and means were used for data description. The Student t test was used to compare the means, while X<sup>2</sup> analysis was used for the associations between SOHP and non-SOHP attendance. The odds ratios [ORs] were calculated for significant factors. Results: The SOHP attendees were twice as aware of the relationship between gum problems and heart diseases than the non-SOHP [OR = 2, 95% CI = 1.15-3.48, p= 0.013]. The daily activities of the non-SOHP attendees were twice as likely to be affected by dental health issues compared to those of the SOHP attendees [OR = 2.28, 95% CI = 1.41-3.68, p < 0.001]. In addition, the SOHP attendees were 3 times as likely to describe their OH status as good/very good/excellent than the non-SOHP attendees [OR = 2.85, 95% CI = 1.31-6.18, p = 0.008]. Conclusions: The SOHP attendees had a better OHRQoL and overall self-satisfaction with their OH than the non-SOHP attendees with insignificant differences between the 2 groups in OH knowledge and practices.

## Oral Submucous Fibrosis

### Potentially significant biomarkers in oral submucous fibrosis.

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 49-53

**Keywords:** Biomarkers; Antioxidants; Trace Elements

**Abstract:** Oral submucous fibrosis [OSMF] is a chronic, irreversibly progressive and precancerous disease that affects oral, oropharyngeal and oesophageal mucosa. OSMF is characterised by the inflammation and progressive fibrosis of lamina propria that leads to difficulty in mastication, speech, swallowing and causes limited mouth opening. Arecoline [major alkaloid] in areca nut is the main aetiological factor in causing the disease. Prevalance of OSMF ranges from 0.2% to 0.5% in South India. The malignant rate of transformation over 17-year period was 7.6%. Trace elements [part of metalloenzymes] are recognised as versatile biomarkers which may be helpful in early detection, prognosis and can reduce the incidence of cancer. Copper, Iron, Zinc, Selenium, Cadmium, antioxidants [Superoxide Dimutase, Vitamin A, Vitamin C, Vitamin E], immunoglobulins and alternation in oncosuppressor genes and other genes have been emphasized as biochemical parameters that play an important role in its pathogenesis. These parameters can also serve as important biomarkers in early detection of a premalignant condition and cancer progression.

## Otolaryngology

### Otorhinolaryngology trainees and the alternatives to surgical tracheostomy: a survey study.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 501-503

**Keywords:** Tracheostomy; Cross-Sectional Studies; Surveys and Questionnaires; Training Support; Airway Management

**Abstract:** Objectives: Alternatives to surgical tracheostomy [AST] including submental [SMENI], submandibular [SMAN] and retromolar intubation [RMI] are fairly new and innovative airway procedures intended to avoid the complications of traditional surgical tracheostomy [ST]. The study aimed to document the responses of junior Otorhinolaryngologists, regarding the awareness and training of AST as well as dealing with its complications when performed by other specialty. According to our knowledge there is no similar survey in the English literature. Methods: Otorhinolaryngology residents/registrars in Ryad, Jeddah and Taif were surveyed between March 2013 and June 2014, enrolled and non-enrolled in Otorhinolaryngology-Head and Neck Surgery [ORL-HNS] training programs doctors were included, Consultants and Senior Consultants were excluded. it is a qualitative and cross sectional study. Senior consultants were excluded from this qualitative and cross-sectional survey. Results: A total of 59 participants responded to the questionnaire. Fifty-six [94.9%] were not familiar with AST, 52 [88.13%] supported the concept of AST, and 57 [96.6%] agreed the inclusion of AST in the ORL training programs. Thirty [50.8%] thought that AST will have a negative effects on ORL training, 47 [79.7%] would participate in any AST procedure, while 27 [45.8%] agreed to deal with AST complication if the procedure done by other specialty. Conclusion: The majority of the surveyed ORL residents and registrars were not familiar with AST, nevertheless, agreed to undergo further training and to included it in the training programs. However, reserved dealing with related complications once done by other specialty we recommend that the supervising training body training body consider including AST in the curriculum.



## Pain Measurement

### Is it possible to objectify the visual pain scale?

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*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1527-1532

**Keywords:** Renal Colic; Pain; Analgesia; Prospective Studies

**Abstract:** Objectives: To test our hypothesis that a new modified VAS [mVAS] is superior and more objective than VAS in evaluating pain perception and treatment response between genders who have renal colic pain. Methods: The individuals in patient and control groups were first asked to mark the pain perceived during access of IV line [VAS[IV] score]. Then the patients with renal colic were asked to mark the pain they experienced before treatment [VAS[RC] score] and at 15 and 30 minutes after the administration of the first analgesic drug. The modified VAS scores [mVAS score] were obtained by subtracting the VAS[IV] score from VAS[RC] score. Results: When VAS was used, the female patients had significantly higher level of pain at 0, 15, and 30th minutes than men [ $p = 0.012$ ,  $p = 0.001$ , and  $p = 0.003$ , respectively]. However, there was not any significant difference at 0 and 30[th] min between sexes while female patients had significantly higher level of pain scores only at 15[th] minute according to mVAS scores [ $p = 0.027$ ]. Conclusion: We think that the mVAS is superior and more objective than VAS in evaluating pain perception and abolished the difference in the perceived level of pain due to gender.

## Parasites

### Parasites transmitted to human by ingestion of different types of meat, El-Minia City, El-Minia Governorate, Egypt.

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 671-680

**Keywords:** Meat Products; Sarcocystis; Toxoplasma; Taenia saginata; Taenia solium; Trichinella spiralis; Meat-parasitology

**Abstract:** Meat-borne parasites are Sarcocystis species, Toxoplasma gondii, Taenia saginata, Taenia solium and Trichinella spiralis. A total of 300 animals including 100 cattle, 100 goat, and 100 pigs, slaughtered in El-Minia governmental slaughterhouses. From each animal, five samples were taken from different muscles [esophageal, tongue and cardiac] and different organs [liver and brain]. Meat samples were examined macroscopic and microscopic [direct, homogenization and H and E staining] for detection of the above-mentioned parasites. Serum samples were subjected to IHA for detection of T. gondii specific antibodies. This study revealed that Sarcocystis species were the highest parasites that could be detected, with overall prevalence of 80%, which was statistically significant [ $P \leq 0.001$ ]. The digestion method was more sensitive than direct method for detection of Sarcocystis species. On the other hand, T. gondii was only diagnosed by using IHA test as 50.9% serum samples were positive, which was statistically significant [ $P \leq 0.004$ ]. Besides, 20% of examined cattle were infected by Cysticercus bovis, and 12% of pigs were infected with C. cellulosa, but without statistical significant [ $P \leq 0.5$ ].

## Parasitic Diseases

### Parasitic infections: is male and female difference for anemia and growth retardation evident?

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 467-475

**Keywords:** Anemia; Cross-Sectional Studies; Clinical Laboratory Techniques; Growth; Parasitology

**Abstract:** Parasitoses are the commonest health problem among school age children, which impair children's growth and development and causing anemia. To detect the role of parasitic infections and both anemia and growth affection, on one hand, and if so the common complications among males and females on the other hand, a cross sectional descriptive study was carried out among the outpatient attended the Pediatrics Clinic, Al-Fayoum University's Hospitals. A total of 314 children aged from 1 to 13 years were subjected to clinical examination as well as stool analysis and CBC examination. The detected parasites were Entamoeba histolytica, Giardia lamblia [Protozoa] and Enterobius vermicularis, Hymenolepis nana, Ascaris lambricoides and Ancylostoma duodenale [Helminthes]. There was significance difference [ $P < 0.05$ ] between males and females regarding E. histolytica in females [60%] as to G. lamblia and H. nana in males [16.1%, and 11.5% respectively]. Also, there was significance difference [ $P < 0.05$ ] between males and females regarding to hemoglobin level, and weight percentiles with anemia [92%] and underweight and borderline weight [34.5%] in males. The overall anemia was 89.8%. However, there was no significance difference [ $P < 0.05$ ] regarding to height percentiles.

## Parathyroid Neoplasms

### therapy

#### Presentation and management of parathyroid tumors.

Wasty, Wahjat Hussain; Mahida, Khalid Hussain; Iqbal, Khalid  
Ziauddin University and Hospitals - Department of Surgery

**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 18-21

**Keywords:** Parathyroid Glands; Parathyroid Hormone; Adenoma; Disease Management

**Abstract:** Objective: To evaluate cases presenting with parathyroid tumors and the efficacy of treatments offered. Methods: Six cases presented with bony manifestations in mandible, femur, tibia and maxilla while one presented with an overt neck swelling. Renal calculi showed in one case. All cases were subjected to assessment of serum parathyroid hormone level and radionucleotide scan. Sonography was done in addition in two of the cases. In all cases parathyroid tumors were identified and subjected to exploratory parathyroid surgery. In addition bony pathologies were subjected to excisions of the lesions. Results: In all the cases serum parathyroid hormone levels were raised. MIBI scans picked parathyroid tumors in almost all the cases. Six of the excised tumors were parathyroid adenomas while one was adenocarcinoma. Additional surgeries done in these cases include excisions of mandibular growths, maxillectomy and osteotomies on tibia and femur. All were giant cell tumours. One case with adenocarcinoma expired. The other cases showed normalization of parathyroid hormone levels. Conclusion: Parathyroid adenoma is the common benign tumor of parathyroid gland usually presenting with exaggerated parathyroid hormone levels. Ultrasound scan screening with tc99 Sestamibi scanning are most helpful in establishing the diagnosis. Parathyroid surgery is safe in experienced hands and is the standard treatment modality to reverse the morbidity associated with pathologies. In all bony lesions with a doubtful clinical diagnosis screening for Parathyroid lesions is mandatory. Gross disfigurements, functional disabilities call for excision of bony lesions.

## Particulate Matter

#### Determination of the concentration and composition of PM10 during the Middle Eastern dust storms in Sanandaj, Iran.

Hosseini, Gilas; Teymouri, Pari; Shahmoradi, Behzad; Maleki, Afshin

Kurdistan University of Medical Sciences - Environmental Health Research Center and Student Research Committee

**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 182-188

**Keywords:** Middle East; Dust; Metals; Air Pollution

**Abstract:** Background: The present study investigated the effect of the Middle East dust storm episodes on the concentration and composition of PM[10] during April to September 2013 in Sanandaj City, western Iran. Methods: Sampling was once every six days, and on dusty days using an Omni air sampler. The PM[10] sample was collected on polytetrafluoroethylene filters. Average of 24 h values of PM[10] mass concentrations was determined. Half of each sample filter and blank filter was analyzed for water-soluble ions and the other half was digested for metal analysis. Results: The average PM[10] concentration was 160.63 micro g/m<sup>3</sup>. The lowest and highest concentrations of PM[10] were in May and June respectively. The average PM[10] concentration during the non-dusty days was 96.88 [micro g /m<sup>3</sup>]. Nevertheless, it increased by 4.8 times during the dusty days. Ca<sup>2+</sup>, Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, and Na<sup>+</sup> accounted for 71% of total water-soluble ions on the dusty days. During the dusty days, the dominant elements in PM[10] were Na, Ca, Mg, Al, and Fe contributing to 95.72% of total measured metals. The correlation coefficient and enrichment factor analysis have shown that on dusty days, Al, Ca, Fe, K, Mg, Na, Sr, and V were the elements with the crustal sources. Conclusions: Concentrations of PM[10] during dusty days were considerably higher than that during non-dusty days. In addition, concentrations of water-soluble ions and metals were also higher during dusty days.

## Peritonitis

#### Kodamaea [Pichia] ohmeri peritonitis in a nine-year-old child in Saudi Arabia treated with caspofungin.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 492-495

**Keywords:** Pichia; Echinocandins

**Abstract:** Kodamaea [Pichia] ohmeri is an emerging fatal opportunistic fungal infection. We describe the case of a 9-year-old boy known to have steroid-resistant nephrotic syndrome. The child, on peritoneal dialysis and cyclosporine, presented with peritonitis related to K. ohmeri. The patient's condition was cured by immediate removal of the peritoneal catheter and treatment with Caspofungin, which was prescribed for susceptible fungal infection.

## Phlebotomus

### Effect of different blood sources on the feeding time of sand fly, *Phlebotomus Papatasi*.

Roby, Noura Heikal; Hussein, Mohamed A.; Doha, Said A. M.; Abdel Ghany, Sanaa Abdel Sattar  
Ain Shams University - Faculty of Science

*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 555-558

**Keywords:** Psychodidae; Feeding Behavior; Blood

**Abstract:** The feeding time for sand fly females was determined experimentally by feeding of thirty females [3-5 days-old] sand fly *Phlebotomus papatasi* on different blood sources [human, pigeon, hamster and blab C mice]. Mean feeding time was longest on blab C mice, 8.55 minutes, followed by hamster, 7.05 minutes, then pigeon, 4.84 minutes, and finally human, 4.69 minutes. Significant difference was observed in the feeding time between females fed on hamster and balb c mice but there is no significant difference between females fed on human and pigeon.

### Sand-Fly *Phlebotomus Papatasi* [Phlebotominae]: a general review with special reference to Zoonotic Cutaneous Leishmaniasis in Egypt.

Saleh, Ahmad Megahed Ahmad; Labib, Nargis Albert; Abdel Fattah, Mohammad Saad; Bakr, Mohammad; Al Attar, Farag; Morsy, Tosson A.

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 525-544

**Keywords:** Psychodidae; Leishmaniasis, Cutaneous

**Abstract:** Leishmania are digenetic protozoa which inhabit two hosts, the sandfly where they grow as promastigotes in the gut, and the mammalian macrophage where they grow as amastigotes Sandfly [or sand fly] is a colloquial name for any species or genus of flying, biting, blood-sucking Dipteran encountered in sandy areas. In the United States, sandfly may refer to certain horse flies that are also known as "greenheads" [family Tabanidae], or to members of the family Ceratopogonidae, also known in Florida and elsewhere as a sand gnat, sandflea, no-see-um [no-see-em, noseem], granny nipper, chitra, punkie, or punky. Outside the United States, sandfly may refer to members of the subfamily Phlebotominae within the Psychodidae. Biting midges [Ceratopogonidae] are sometimes called sand flies or no-see-ums [no-see-em, noseem]. New Zealand sandflies are in the *Austrosimulium* genus, a type of black fly. Of 500 known phlebotomine species, only some 30 of them have been positively identified as vectors of the disease. Cutaneous leishmaniasis [ZCL] is a protozoan disease well documented not only in Egypt, but in nearly all the East Mediterranean Countries. It is prevalent in the Egyptian Sinai Peninsula with at least three identified foci.

## Pituitary Neoplasms

### diagnosis

### Invasive growth hormone producing pituitary adenoma with lymphocytic infiltration: a case report and literature review.

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*Iranian Journal of Cancer Prevention* 2015; 8 (6): 41-44

**Keywords:** Adenoma; Lymphocytes; Growth Hormone; Review Literature as Topic; Brain Neoplasms; Luteinizing Hormone

**Abstract:** Introduction: We have presented a rare case of growth hormone [GH] producing pituitary adenoma with lymphocytic infiltration and brain parenchyma invasion. Case Presentation: A 37-year-old woman has presented with complaints of headache, amenorrhea and acromegalic features. Her laboratory studies showed markedly elevated levels of Insulin-like Growth Factor 1 [IGF-1], and low levels of follicle stimulating hormone and luteinizing hormone. Computerized tomography has revealed a pituitary mass without extra-sellar extension. The tumor has completely excised via trans-nasal endoscopic approach. Histologically, the tumor has diagnosed as a pituitary adenoma with GH positive cells. The serum IGF1 levels have gradually decreased to the normal range and the patient was symptom free for three and a half years when she has returned with complaint of visual impairment. The brain MRI that time has shown a supra-sellar mass growing independently into the remaining sellar part. Subsequently, surgical operation has performed via trans-nasal endoscopic approach. Histopathological and immunohistochemistry examination have revealed a rare case of growth hormone producing pituitary adenoma with brain invasion and lymphocytic infiltration. Conclusions: The aim of this publication was to present a rare case of growth hormone producing pituitary adenoma with brain invasion and lymphocytic infiltration.

## Plants, Medicinal

### In vitro antibacterial efficacy of plants used by an Indian aboriginal tribe against pathogenic bacteria isolated from clinical samples.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 379-390

**Keywords:** Phytotherapy; In Vitro Techniques; Plant Extracts; Population Groups; beta-Lactamases; Molecular Docking Simulation

**Abstract:** Objectives: To evaluate antibacterial efficacies of 21 medicinal plants used by an Indian aboriginal tribe against infectious diseases caused by bacteria isolated from clinical samples. Methods: Standard biochemical procedures were followed for identifying bacteria that were isolated from several clinical samples. All of the bacterial strains were subjected to antibiotic sensitivity tests by Kirby-Bauer's disc diffusion method. From antibiograms of isolated Gram-positive and Gram-negative bacteria, it was discernible that samples were multidrug resistant [MDR]. The methanol leaf-extract of *Solanum xanthocarpum* was subjected to thin layer chromatography [TLC] for phytochemical analysis. Molecular docking of Beta-lactamase enzyme of *Escherichia coli* with phytochemicals of *S. xanthocarpum* was performed to locate effective compounds. Results: The most effective 5 plants, which caused the size of the zone of inhibition to range from 21 to 27 mm, were *Buchanania latifolia*, *Careya arborea*, *Ocimum tenuiflorum*, *Senna alata* and *S. xanthocarpum*, for MDR bacteria. *S. xanthocarpum* had the lowest MIC value of 0.67 mg/ml and the lowest MBC value of 1.51 mg/ml against *E. coli*. In the TLC study, 9 spots of methanol leaf-extract of *S. xanthocarpum* were recorded with two solvent systems. The phytochemicals of *S. xanthocarpum*, solasodine and stigmasterol glucoside had the highest docking score values, -10.868 kcal/mol and -10.439 kcal/mol, respectively, against Beta-lactamase. Conclusion: This study could prove in vitro antimicrobial efficacy of 5 uncommon plants against MDR pathogenic bacteria. Solasodine and stigmasterol glucoside were computationally recorded as the best controlling chemicals from the plant *S. xanthocarpum*.

### An investigation of the growth inhibitory capacity of several medicinal plants from Iran on tumor cell lines.

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Fasa University of Medical Sciences - School of Medicine

**Iranian Journal of Cancer Prevention** 2015; 8 (5): 53-58

**Keywords:** Growth Inhibitors; Cell Line, Tumor; Cytotoxins; Glycyrrhiza; Thymus Plant

**Abstract:** Background: Traditional herbal medicine is a valuable resource that provides new drugs for cancer treatment. Materials and Methods: We used the MTT colorimetric assay to evaluate the cytotoxic activities of the methanol extracts of these plants on various tumor cell lines. The IC<sub>50</sub> was calculated as a scale for this evaluation. Results: *Satureja bachtiarica*, *Satureja hortensis*, *Thymus vulgaris*, *Thymus daenensis* and *Mentha longifolia* showed the inhibitory effects on Jurkat cells with > 80% inhibition at 200 microg/mL. *Satureja hortensis* [IC<sub>50</sub>: 66.7 microg/mL] was the most effective. These plants also strongly inhibited K562 cell growth; *Satureja bachtiarica* [IC<sub>50</sub>: 28.3 microg/mL], *Satureja hortensis* [IC<sub>50</sub>: 52 microg/mL] and *Thymus vulgaris* [IC<sub>50</sub>: 87 microg/mL] were the most effective extracts. *Cichorium intybus*, *Rheum ribes*, *Alhagi pseudalhagi* and *Glycyrrhiza glabra* also showed notable effects on the leukemia cell lines. The Raji cell line was mostly inhibited by *Satureja bachtiarica* and *Thymus vulgaris* with approximately 40% inhibition at 200microg/ml. The influence of these extracts on solid tumor cell lines was not strong. Fen cells were mostly affected by *Glycyrrhiza glabra* [IC<sub>50</sub>: 182 microg/mL] and HeLa cells by *Satureja hortensis* [31.6% growth inhibitory effect at 200 microg/mL]. Conclusions: Leukemic cell lines were more sensitive to the extracts than the solid tumor cell lines; *Satureja hortensis*, *Satureja bachtiarica*, *Thymus vulgaris*, *Thymus daenensis* and *Mentha longifolia* showed remarkable inhibitory potential.

## Plasmacytoma

### diagnosis

### A 65- year old female with synchronous HIV and extramedullary plasmacytoma of maxillary sinus.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 18-23

**Keywords:** HIV; Maxillary Sinus; Head; Neck; Neoplasms, Multiple Primary; Maxillary Sinus Neoplasms

**Abstract:** Extramedullary plasmacytoma in the head and neck region is a rare malignant neoplasm comprising approximately 3% of all the plasma cell neoplasms and less than 1% of head and neck tumors. This extraskelatal lesion is a unifocal, monoclonal, neoplastic proliferation of plasma cells. Some investigators believe that this lesion represents the least aggressive part of the spectrum of plasma cell neoplasms which

extends to multiple myeloma. Therefore, plasmacytoma is believed to have clinical importance. We report a case of extramedullary plasmacytoma in the right maxillary sinus of a 65-year-old HIV positive female as a clinical rarity with review of the relevant literature.

## Plasmodium vivax

### Plasmodium Vivax causing acute kidney injury: a foe less addressed.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1472-1475

**Keywords:** Acute Kidney Injury; Malaria, Vivax; Cohort Studies; Retrospective Studies; Mortality

**Abstract:** objective: To report patients developing acute kidney injury [AKI] after Vivax malaria. Methods: An observational cohort of patients identified as having acute kidney injury [AKI] after Plasmodium vivax infection. AKI was defined according to RIFLE criteria with sudden rise in creatinine or decline in urine output or both. All patients had normal size non obstructed kidneys on ultrasonography, with no previous co morbid. Malarial parasite Vivax was seen on blood peripheral film in all patients. Results: From January 1990 - December 2014, total 5623 patients with AKI were registered in our institute, of these 671 [11.93%] developed AKI in association with malarial infection, furthermore, Vivax was species in 109 patients. Average age of patients was 33.49 +/- 14.67 [range 8-78 years] with 66 male and 43 female. Oligo-anuria and vomiting were most common associated symptoms with fever. Renal replacement therapy required in 82 [75.22%] patients. Complete recovery was seen in 69 [63.30%], while 14 [12.84%] expired during acute phase of illness. Jaundice, thrombocytopenia, central nervous system involvement, mechanical ventilation requirement and hematuria were the factors significantly associated with high mortality. Conclusion: Malaria still causing significant morbidity and mortality in our part of world. Vivax malaria can present with hemolysis, thrombocytopenia and kidney failure in remarkable number of patients.

## Pneumonia, Ventilator-Associated

### Ventilator-associated pneumonia in critically ill patients with intensive antibiotic usage.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1441-1446

**Keywords:** Intensive Care Units; Mortality; Prospective Studies; Anti-Bacterial Agents; Pneumonia; Critical Illness

**Abstract:** Objective: Ventilator-associated pneumonia [VAP] is an infection with high mortality and morbidity that prolongs the length of stay in the intensive care unit [ICU] and hospitalisation. VAP is one of the most common infections in critically ill patients. This study aimed to prospectively determine the VAP rate and associated factors in critically ill patients with intensive antibiotic usage during a one-year period. Methods: In total, 125 out of 360 patients admitted to the intensive care unit during the one-year study period [September 2010-2011] were included for follow-up for VAP diagnosis. Demographic data, APACHE II scores, diagnoses on admission, clinical pulmonary infection scores [CPIS], CRP, procalcitonin, risk factors for infection, time to VAP diagnosis, and bacteriological culture results were recorded. All data were assessed in terms of ICU, hospital and 28-day mortality. Results: In total, 56 [45%] out of 125 patients were diagnosed with VAP. In addition, 91% of patients diagnosed with VAP were administered antibiotics before diagnosis. In the VAP patients, the mortality rates were 48, 68 and 71% for 28-day, ICU and hospital mortality, respectively. Conclusion: The coexistence of clinical and microbiological parameters should not be sought when diagnosing VAP in patients who use antibiotics intensively. VAP can be diagnosed when CPIS  $\leq$  6 in cases with sufficient microbiological evidence. This strategy may decrease mortality by preventing a delay in therapy.

## Polyendocrinopathies, Autoimmune

### Schmidt's Syndrome.

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 40-42

**Keywords:** Hypothyroidism

**Abstract:** Schmidt's syndrome is a rare disease which is a one of the types of autoimmune polyglandular autoimmune syndrome. In these polyglandular autoimmune syndrome autoimmunity with auto-antibodies directed against different endocrine organs suggest in the pathogenesis of the disease. In addition there is role of genetic and familial predisposition of the disease. Autoimmune thyroid disease in combination with Addison

disease is the most common presentation. In addition Diabetes mellitus Hyperparathyroidism, Pernicious Anemia, Hypogonadism, Vitiligo, Chronic atrophic gastritis, Chronic autoimmune hepatitis, Alopecia, Myasthenia gravis, Rheumatoid arthritis, Sjogren's syndrome and Thrombocytopenic purpura may or may not be present. So in patients suffering from one endocrine hormone deficiency should be thoroughly looked for the deficiency of other hormones. We present a case of 23 year old man who present with symptoms of gastritis and was refractory to treatment and on further evaluation was diagnosed as a case of Schmidt syndrome.

## Polymyxins

### therapeutic uses

#### **Polymyxins: re-considering the disk diffusion susceptibility testing method in MALDI-TOF-identified gram negative bacilli.**

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 17-24

**Keywords:** Colistin; Gram-Negative Bacteria-isolation and purification; Disk Diffusion Antimicrobial Tests; Spectrometry, Mass, Matrix-Assisted Laser Desorption-Ionization; Drug Resistance, Multiple

**Abstract:** Background: The widespread multidrug-resistant Gram-negative bacilli [GNB] has necessitated the evaluation of the use of older antimicrobials such as polymyxins being the last resort drugs for the treatment of life-threatening nosocomial infections. Objectives: We conducted the present study to evaluate simple disk diffusion method [the routine method used in busy low resources hospitals] in comparison with MIC detection for polymyxin Band polymyxin E using the E-test according to the new Clinical and Laboratory Standards Institute [CLSI] guidelines and to find the level of polymyxins resistance of GNB in Kasr Alainy hospital. Methodology: A total of 50 Gram-negative bacterial isolates previously identified by matrix-assisted laser desorption ionization time-of-flight mass spectrometry [MALDI-TOF MS], and classified as 12 MDR by being resistant to three or more antimicrobial classes and 38 XDR by being non-susceptible to at least one agent in all but two or fewer antimicrobial categories. Antimicrobial susceptibility testing of polymyxin B and polymyxin E [colistin] v was done by the determination of MIC by E-test, along with disk diffusion testing v. Results: Comparison of the disk diffusion and the MIC method by E- test showed 100% correlation between both methods for all isolates of *Pseudomonas aeruginosa*, *Acinetobacter baumannii* and *Klebsiella* spp. All isolates were sensitive to both polymyxin B and colistin with MICs and disk zone diameters within the range proposed by the CLSI 2014. MIC 50 and MIC 90 of both polymyxin B and colistin were found to be 1 microg/ml. Conclusion: Polymyxins are a reliable option for the treatment of infections caused by MDR isolates of Gram negative bacilli with proper dose adjustment. There is good concordance between the Etest and the disk diffusion. The disk diffusion method can be used for initial screening in busy hospital laboratories.

## Prebiotics

#### **Effectiveness of prebiotic as an alternative to the antimicrobial growth promoter on growth performance, blood constituents, intestinal healthiness and immunity of broilers.**

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 13-25

**Keywords:** Chickens-growth and development; Chlortetracycline-therapeutic uses; Growth; Hematology; Biochemical Phenomena; Intestines; Antibody Formation; Chickens

**Abstract:** This study was designed to compare the effect of the prebiotic and antimicrobial growth promoter [AGP] on the growth performance, blood constituents, intestinal bacteriology and histomorphometric parameters as well as humeral immunity of broiler chicks. A total of 90 unsexed commercial Cobb chicks were randomly assigned to 3 dietary treatments [control, AGP and prebiotic groups], each group contains 30 chicks. Each group subdivided into 3 replicates, 10 chicks each, and was reared for 42 days. The prebiotic supplemented group showed a significant improvement in growth performance parameters in comparison to the control and AGP-supplemented groups. Total leukocytic count, lymphocyte percent, total protein, total globulin and gamma globulin were significantly increased in the broilers fed on prebiotics. Moreover, prebiotics supplementation significantly reduced heterophil percent, heterophil/ lymphocyte ratio [H/L ratio], albumin/globulin ratio, aspartate and alanine aminotransferase [AST and ALT], uric acid and creatinine compared to the AGP-supplemented and control groups. The AGP-supplemented group exhibited a significant reduction in the total aerobic count when compared to the control and prebiotic-supplemented groups. However, the prebiotic supplemented group showed a significant reduction in the coliform count when compared to the control and antibiotic supplemented groups. The prebiotic supplemented group induced a significant increase in the villus height [VH] all over the small intestine. In addition, it induced a significant increase in villus height: crypt depth ratio in the duodenum and jejunum in comparison to the control and antibiotic supplemented groups. However, there were no significant differences among the different groups regard to the crypt depth [CD] in the duodenum and jejunum. Prebiotics could be considered as safe and effective antimicrobial alternatives for broiler chicks' growth performance, immunity and intestinal bacteriology and morphology.

## Prenatal Care

### Factors associated with utilization of antenatal care services in Balochistan province of Pakistan: an analysis of the Multiple Indicator Cluster Survey [MICS] 2010.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1447-1452

**Keywords:** Cluster Analysis; Surveys and Questionnaires; Prenatal Education; Pregnancy

**Abstract:** Objective: The study was conducted to identify factors affecting the utilization of Antenatal Care [ANC] in Balochistan Province, Pakistan. Methods: Data on ANC utilization, together with social and economic determinants, were derived from a Multiple Indicator Cluster Survey [MICS] conducted in Balochistan in 2010. The analysis was conducted including 2339 women who gave birth in last two years preceding the survey. The researchers established a model to identify influential factors contributing to the utilization of ANC by logistic regression; model selection was by Akaike Information Criterion [AIC] and Bayesian Information Criterion [BIC]. Results: Household wealth, education, health condition, age at first marriage, number of children and spouse violence justification were found to be significantly associated with ANC coverage. Literate mothers are 2.45 times more likely to have ANC, and women whose newborns showed symptoms of illness at birth that needed hospitalization are 0.47 times less likely to access ANC. Women with an increase in the number of surviving children are 1.07 times less likely to have ANC, and those who think their spouse violence is socially justified are 1.36 times less likely to have ANC. The results draw attention towards evidence based planning of factors associated with utilization of ANC in the Balochistan province. Conclusion: The study reveals that women from high wealth index and having education had more chances to get ANC. Factors like younger age of the women at first marriage, increased number of children, symptoms of any illness to neonates at birth that need hospitalization and women who justify spouse violence had less chances to get ANC. Among components of ANC urine sampling and having tetanus toxoid [TT] in the last pregnancy increased the frequency of visits. ANC from a doctor decreased the number of visits. There is dire need to reduce disparities for wealth index, education and urban/rural living.

## Problem-Based Learning

### Perception of content and non-content expert facilitators of PBL according to students' performance levels.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1537-1541

**Keywords:** Perception; Biochemistry; Expert Testimony; Surveys and Questionnaires; Students, Medical; Cross-Sectional Studies

**Abstract:** Objective: Problem-based learning [PBL] is a student-centred learning system that involves multidisciplinary fields focused on problem solving. Facilitators of PBL are not necessarily content experts but little is known on how this concept has affected the outcomes of PBL sessions in learning Medical Biochemistry. We aimed to evaluate the impact of having the content expert as a facilitator in conducting PBL. Methods: A total of 150 first and second year medical students from the University Kebangsaan Malaysia were interviewed with a validated set of questions to acquire their views on the roles of facilitators in PBL in learning Medical Biochemistry. Their achievement were evaluated through their essay marks derived from various PBL packages. Results: All respondents agreed that PBL sessions associated with Medical Biochemistry are best appreciated when conducted by a content-expert facilitator. Their exam marks reflected well on their perception. Conclusion: PBL sessions related to Medical Biochemistry is best facilitated by Biochemistry lecturers as the content experts.

## Professionalism

### Shiraz medical students' perceptions of their colleagues' professional behavior.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 111-116

**Keywords:** Ethics, Medical; Surveys and Questionnaires; Schools, Medical; Cross-Sectional Studies; Perception; Professional Misconduct

**Abstract:** Introduction: Today, development of professionalism is a critical aim of medical schools. Studies have demonstrated that medical students' perceived level of professionalism is inadequate worldwide. This study aimed to investigate the medical students' perceptions of their colleagues' professional behavior. Methods: This study is a cross-sectional study with 280 medical students at Shiraz University of Medical Sciences in their fifth to seventh year of study as the sample. The study was performed during one month in 2013, using stratified random sampling method. The instrument of the study was the Persian version of the questionnaire of the American Board of Internal Medicine [ABIM]. The questionnaire includes demographic information, questions about the meaning of the professionalism, history of medical ethics education programs and 12 behavioral questions. The data were analyzed using student t-test and Pearson correlation test. The significance level was set as 0.05. Results: Forty percent of respondents did not know the meaning of professionalism. The mean  $\pm$  SD score of behavioral questions was 5.91  $\pm$  1.2 on a scale from 0 to 10. The mean  $\pm$  SD score of excellence questions was 4.94  $\pm$  1.7. It was 7.05  $\pm$  1.9 for 'honor/integrity', and 6.07  $\pm$  2.1 for 'altruism/respect' questions. There was a significant association between gender and excellence score [ $p=0.007$ ]. Conclusion: Medical students assessed their colleagues' professional behavior as poor. They did not have proper information about professionalism. Medical students are future general practitioners and respecting medical ethics by them is very important in a perfect health system. Universities should emphasize the importance of teaching professionalism to medical students and faculty members, using innovative education methods.

## Propolis

### therapeutic uses

#### Preventing and therapeutic effect of propolis in radiotherapy induced mucositis of head and neck cancers: a triple-blind, randomized, placebo-controlled trial.

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*Iranian Journal of Cancer Prevention* 2015; 8 (5): 47-52

**Keywords:** Mucositis-drug therapy; Mucositis-prevention and control; Radiotherapy; Head and Neck Neoplasms; Placebos; Mouthwashes

**Abstract:** Background: Mucositis is one of the acute complications of radiotherapy which can ulcerate oral mucosa and cause severe pain and discomfort which can affect oral normal function. Propolis is a natural source of flavenoid which has antiulcer, antibacterial, antifungal, healing and anti-inflammatory effects. Using such an affordable compound without any bad smell or taste that has reasonable price can help the radiotherapy undergoing patients. Objectives: Our goal is assessing the preventing and therapeutic effect of propolis in radiotherapy induced mucositis in patients with head and neck cancer. Patients and Methods: In a randomized triple blind clinical trial, 20 patients were selected randomly to swish and swallow 15 ml of water based extract of propolis mouth wash 3 times a day in the case group [ $n = 10$ ] and 15 ml placebo mouth wash in control group [ $n = 10$ ]. We use NCI-CTC scale for determining mucositis grading. Results: We use T-test, Man-Whitney, Chi-square, and Friedman as analyzing tests. Case group had significantly [ $P < 0.05$ ] lower grade of mucositis in all of the follow-ups, but xerostomia is not significantly different in two groups [ $P > 0.05$ ]. Conclusions: This is a pilot study which shows water based extract of propolis efficiently prevents and heals radiotherapy induced mucositis.

## Psychology, Educational

#### Educational environment and psychological distress of medical students: the role of a deep learning approach.

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*Journal of Taibah University Medical Sciences* 2015; 10 (4): 411-418

**Keywords:** Learning; Cross-Sectional Studies; Students, Medical; Education; Environment; Stress, Psychological

**Abstract:** Objectives: Studies concur that an optimal learning environment is a vital aspect for effective learning and for enhancing students' well-being. Conversely, medical training is reported to be a suboptimal environment, thereby compromising students' learning and well-being. This study aimed to explore the interrelations of the learning environment, learning approaches and psychological distress among medical students. Materials and Methods: A cross-sectional study was conducted on 656 medical students. The Dundee Ready Educational Environment Measurement, Learning Approaches inventory and 21-item Depression Anxiety Stress Scale were administered to measure the educational environment, learning approaches and psychological distress, respectively. Structural equation modelling was performed by Analysis of Moment Structure software. Results: The results showed that the proposed structural model had good model fit [Goodness of Fit Index [GFI] = 0.920, Root Mean Square of Error Approximation [RMSEA] = 0.048, Tucker-



Lewis Index [TLI] = 0.953, Comparative Fit Index [CFI] = 0.960, Normed Fit Index [NFI] = 0.924, Chi<sup>2</sup>/df = 2.020]. The effect of deep learning on psychological distress was fully moderated by the educational environment, while the effects of other learning strategies on psychological distress were not supported in our analysis. Conclusions: A positive educational environment has direct and positive influences on the psychological health of medical students. Strategic and deep learning approaches have positive influences on the perceived educational environment, but only the deep learning approach has indirect positive effects on psychological health. Improving the educational environment and promoting deep learning approaches for medical students will improve their psychological health during medical training.

## Pulmonary Disease, Chronic Obstructive

### Comparison of frequency of insulin resistance in patients with chronic obstructive pulmonary disease with normal controls.

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*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1506-1510

**Keywords:** Insulin Resistance; Case-Control Studies

**Abstract:** Objective: To compare mean homeostatic model assessment of insulin resistance [HOMA-IR] in patients with and without chronic obstructive pulmonary disease [COPD]. Methods: A Case control analytic study was conducted in medical outpatient department of Medial Unit-II of Dow University of Health Sciences from April 2013 to September 2013. All patients with the diagnosis of COPD were included as cases. Controls were age match healthy individuals with minor illnesses. Age, weight, height and forced expiratory volume in one second to forced vital capacity [FEV<sub>1</sub>/FVC] ratio were documented. Fasting blood glucose and fasting insulin levels were done. Body mass index [BMI] and IR was calculated using the formulas. HOMA-IR was compared between cases and controls. Results: Forty COPD patients were compared with thirty five age match controls. HOMA-IR was found to be higher in cases as compared to controls [2.85 v/s 2.00] with a p value <0.000. Conclusion: COPD is one of the chronic debilitating diseases in our region with various extra-pulmonary complications. We found IR to be present higher in COPD patients compared with healthy controls. Evaluating the pulmonary function as well as systemic metabolic parameters, may contribute to minimizing mortality and morbidity.

## genetics

### Association of IL-13 [-1055 C/T] and CYP1A1 [MspI] gene polymorphisms with chronic obstructive pulmonary disease in Egyptian patients in relation to disease severity.

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*EJMM-Egyptian Journal of Medical Microbiology [The]* 2015; 24 (4): 9-15

**Keywords:** Pulmonary Disease, Chronic Obstructive-pathology; Membrane Proteins; Interleukin-13-immunology; Cytochrome P-450 CYP1A1-genetics; Polymorphism, Genetic; Genotype

**Abstract:** Background: Chronic obstructive pulmonary disease [COPD] is one of the most important causes of morbidity and mortality worldwide, characterized by persistent and progressive airflow limitations. The etiology seems to be an interaction between genetic and environmental factors. Objectives: In this study, we aimed to identify the possible association of IL-13 [-1055 C/T] and CYP1A1 [MspI] gene polymorphisms with COPD in Egyptian patients and their relation to the severity of the disease. Methodology: Our study included 200 participants [100 COPD patients and 100 controls]. Pulmonary function tests were performed for patients, DNA extraction was done and the polymorphisms were analyzed using polymerase chain reaction- restriction fragment length polymorphism [PCR-RFLP] for serum samples from all participants. Results: IL-13 -1055 C/T polymorphism was significantly associated with COPD: CT and TT genotypes [P=0.01, 0.03 respectively] compared to CC genotype, with a significant association of the T allele with the disease [P=0.003], while CYP1A1 MspI polymorphism showed no significantly different distribution between patients and controls [P=0.11 and 0.068 for CT and CC respectively], while, a significant association between the C [m2] allele and COPD was found [P=0.04]. IL-13 -1055 T allele and CYP1A1 MspI C [m2] allele were found to be significantly associated with more severe cases of COPD when compared to the less severe ones [P=0.03 and 0.02, respectively]. Conclusions: IL-13 -1055 C/T polymorphism is associated with COPD, and the presence of IL-13 T allele and CYP1A1 MspI C [m2] allele are risk factors for developing more severe COPD.

## Rectal Neoplasms

### Evaluation of relationship between testicular dose and hormonal changes after radiotherapy in patients with rectal cancer.

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 7-10

**Keywords:** Radiotherapy; Colorectal Neoplasms; Testis

**Abstract:** Background: Colorectal cancer globally affects more than 1 million people every year. It is more common in men and it is the second most common cause of cancer mortality. Optimal treatment of colorectal cancer is a multidisciplinary approach which can be included of surgery, medical oncology, and radiation therapy. Objectives: The aim of this study was evaluation of relationship between testicular dose and hormonal changes after radiotherapy in male patients with rectal cancer. Patients and Methods: In this study 25 patients with rectal cancer were enrolled. The serum levels of luteinizing hormone [LH], follicle stimulating hormone [FSH], and testosterone [T] before and 3 - 6 weeks after chemoradiotherapy were compared and testicular dose was determined using a 3-dimension treatment planning system and relationship between hormonal changes and testicular dose was assessed. Results: 25 patients with rectal cancer with mean [ $\pm$  SD] age of 56.08 [ $\pm$  14.30] years were evaluated. The mean [ $\pm$  SD] testes dose was 2.35 [ $\pm$  2.32] Gy that was 6.09% of total dose. The levels of FSH and LH significantly increased [ $P = 0.001$ ], however, the level of testosterone non-significantly decreased after 3 - 6 weeks of radiation therapy [ $P = 0.79$ ]. No significant correlation was found between testes dose and sex hormones change [LH,  $P = 0.33$ ; FSH,  $P = 0.16$ ; testosterone,  $P = 0.95$ ]. Furthermore the testes dose did not correlate with the lower border of treatment field [ $P = 0.26$ ], total given dose to the patients [ $P = 0.81$ ] and tumor location [ $P = 0.09$ ]. Conclusions: The testes dose in this study was 6.09% of total dose. Radiotherapy of rectal cancer causes damage to the testis, as shown by increased levels of gonadotropins after radiotherapy. The radiation therapy significantly increased LH, FSH and non-significantly decreased testosterone level in patients with rectal cancer. No correlation could be found between changes of hormones and doses to the testis, probably due to the low number of evaluated patients. Larger studies are needed to establish the correlation between testicular radiation dose and hormonal changes in this group of patients.

## Reperfusion Injury

### An evaluation of the effects of perioperatively administered fluids on ischemia/reperfusion injury.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1349-1354

**Keywords:** Administration, Intravenous; Hydroxyethyl Starch Derivatives-pharmacology; Sodium Chloride-pharmacology; Arthroscopy; Knee; Anesthesia, Spinal; Tourniquets; Xanthine Oxidase-blood; Malondialdehyde-blood

**Abstract:** Objective: To investigate the effects of normal saline [0.9% NaCl] and 6% Hydroxyethyl Starch 130/0.4[HES] solution on Ischemia/Reperfusion [I/R] injury in patients undergoing knee arthroscopy operations with spinal anesthesia using a tourniquet. Methods: The study comprised 48 ASA I-II patients undergoing knee arthroscopy with spinal anesthesia using a tourniquet. The patients were randomized into two groups and after standard monitoring two venous lines were introduced to obtain blood samples and to give intravenous therapy. In the control group [Group A] [ $n=21$ ] 0.9% NaCl, 10 ml/kg/hours and in the study group [Group B] [ $n=19$ ] 6% Hydroxyethyl Starch 130/0.4, 10 ml/kg/hours infusion were administered. Spinal anesthesia was applied with 12.5 mg hyperbaric bupivacaine to all patients. The tourniquet was applied and the operation was started when the sensorial block level reached T10 dermatome. Blood xanthine oxidase [XO] and malondialdehyde [MDA] levels as an indicator of ischemia and reperfusion injury were measured in samples before fluid infusion [t1], before tourniquet application [t2], 1 minute before tourniquet release [t3], and at 5 [t4] and 15 [t5] minutes after tourniquet release. Results: No difference was observed between the two groups in respect of demographic parameters, the highest block level, duration before tourniquet application and tourniquet duration [ $p>0.05$ ]. The MDA level after tourniquet application and 15 minutes after tourniquet release was lower in Group B [ $p<0.05$ ]. XO levels were not different [ $p>0.05$ ]. Conclusion: In this study 6% Hydroxyethyl Starch 130/0.4 solution reduced MDA level which is an indicator of lipid peroxidation. 6% Hydroxyethyl Starch 130/0.4 solution may be beneficial for Ischemia/reperfusion injuries.

## Research

### A qualitative inquiry into the challenges and complexities of research supervision: viewpoints of postgraduate students and faculty members.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 91-98

**Keywords:** Ethics, Research; Qualitative Research; Students, Medical; Faculty, Medical; Surveys and Questionnaires

**Abstract:** Introduction: The supervision of academic theses at the Universities of Medical Sciences is one of the most important issues with several challenges. The aim of the present study is to discover the nature of problems and challenges of thesis supervision in Iranian universities of medical sciences. Methods: The study was conducted with a qualitative method using conventional content analysis approach. Nineteen faculty members, using purposive sampling, and 11 postgraduate medical sciences students [Ph.D students and residents] were selected on the basis of theoretical sampling. The data were gathered through semi-structured interviews and field observations in Shiraz and Isfahan universities of medical sciences from September 2012 to December 2014. The qualitative content analysis was used with a conventional approach to analyze the data. Results: While experiencing the nature of research supervision process, faculties and the students faced some complexities and challenges in the research supervision process. The obtained codes were categorized under 4 themes based on the characteristics; included [Conceptual problem], [Role ambiguity in thesis supervision], [Poor reflection in supervision] and [Ethical problems]. Conclusion: The result of this study revealed that there is a need for more attention to planning and defining the supervisory, and research supervision. Also, improvement of the quality of supervisor and students relationship must be considered behind the research context improvement in research supervisory area.

## Respiratory Distress Syndrome, Adult

### epidemiology

#### ARDS in Libya.

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World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (01-02): 1

**Keywords:** Influenza A Virus, H1N1 Subtype; Influenza, Human; Pneumonia; Influenza A Virus, H3N2 Subtype

**Abstract:** Recently, some severe cases of acute respiratory disease syndrome [ARDS] were reported from hospitals in Tobruk and Derna cities in Libya. Laboratory test conducted in Libya and re-tested at the National Influenza Centers [NICs] of Egypt and Tunisia detected influenza A [H1N1] pdm09 as the causative agent for these severe respiratory diseases amongst the hospitalized patients. Of the ten cases reported so far [until the end of December] six patients were fatal.

## Respiratory Tract Infections

### microbiology

### The prevalence of human Bocavirus, human Coronavirus-NL63, human Metapneumovirus, human Polyomavirus KI and WU in respiratory tract infections in Kuwait.

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**Medical Principles and Practice** 2015; 24 (4): 382-387

**Keywords:** Human bocavirus; Coronavirus NL63, Human; Coronavirus Infections; Metapneumovirus; Polyomavirus; Polyomavirus Infections; Polymerase Chain Reaction

**Abstract:** Objective: The aim of this study was to investigate the prevalence of human coronavirus [HCoV]-NL63, human metapneumovirus [hMPV], human bocavirus [Boca], human polyomavirus KI [KIV] and human polyomavirus WU [WUV] in respiratory tract infections [RTI] in Kuwait. Materials and Methods: Respiratory samples from 735 hospitalized patients with RTI from September 2010 to April 2013 were evaluated for the presence of HCoV-NL63, hMPV, Boca, KIV and WUV using molecular assays, polymerase chain reaction [PCR] and reverse-transcription PCR. Results: Of the 735 patients, 285 [38.8%] were diagnosed with viral

RTI. The distribution of respiratory viruses was hMPV: 15 [5.3%], Boca: 14 [4.9%], WUV: 10 [3.5%] and KIV: 4 [1.4%]. HCoV-NL63 was not detected in any of the samples. Conclusions: These newly discovered viruses were associated with the development of RTI in Kuwait. The rapid identification of these viral infections could aid in the control of nosocomial transmission, reduce the use of antibiotics and improve treatment and management strategies.

## Retropharyngeal Abscess

### microbiology

#### Microbiological profile of acute retropharyngeal abscesses in children: analysis of 26 Egyptian patients.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4):147-152

**Keywords:** Methicillin-Resistant Staphylococcus aureus; Retropharyngeal Abscess-surgery; Anti-Bacterial Agents; Pseudomonas aeruginosa; Staphylococcus aureus

**Abstract:** Objectives: this work aims to describe our experience in a tertiary centre for the diagnosis of acute retropharyngeal abscesses in children as regards the diagnosis, microbiological analysis and their management. Methodology: A prospective study that included 26 patients suffering from acute retropharyngeal abscess in children was done for a period of about 3 years from September 2011 to July 2014 on pediatric patients. CT was used for diagnosis of the abscess. Twenty patients were underwent surgical drainage of the abscess. Pus was aspirated from all patients and used for microbiological analysis. Data for clinical presentation, X-ray, CT scan findings, bacteriological profile and management of the cases were collected. Results: 26 patients were investigated in this study. Males were more commonly affected than females. Their ages ranged from 8month to 12 years [mean +/- 5.45 years]. The most common symptoms at time of investigation were fever followed by dysphagia/odynophagia and neck swelling. The most common clinical sign was cervical lymphadenopathy. Positive microbial cultures were detected in 84.6%. Polymicrobial growth was recorded in 34.6%. The most common isolated organism was MRSA [38.5%] followed by Staphylococcus aureus [26.9%] and Pseudomonas aeruginosa [19.2%]. Conclusion: The used antibiotics in the retropharyngeal abscesses to be used should cover mainly Gram positive bacteria especially MRSA. This may substitute surgical intervention in many cases. MRSA found to be a rising causative agent of acute retropharyngeal abscess in children in our locality. Obtaining samples may be difficult for microbiological culture. Antibiotics should be prescribed immediately according to the antibiotic guide in each locality to reduce the morbidity rate of the acute retropharyngeal abscess.

## Rhinitis, Allergic

### etiology

#### Nasal carriage of superantigen producing Staphylococcus aureus and its role in pathogenesis of allergic rhinitis and bronchial asthma.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 105-111

**Keywords:** Asthma-etiology; Staphylococcus aureus-immunology; Staphylococcus aureus-pathogenicity; Staphylococcus aureus-isolation and purification; Enterotoxins; Superantigens

**Abstract:** Staphylococcal enterotoxins can act as allergens and stimulate production of specific IgE with subsequent development of allergic manifestations. In addition, they act as superantigens that induce cytokine secretion with more increase of IL-4/IFN-gamma ratio causing augmentation of allergic reactions. Herein we tested the hypothesis that exposure to Staphylococcus aureus and its enterotoxins induces immunological changes that contribute to the pathogenesis of allergic rhinitis and bronchial asthma. This study included 45 air way allergic patients, and 45 controls. The following were done: intradermal allergy skin testing, invitro effect of staphylococcal enterotoxin B [SEB] on cytokine secretion from separated peripheral blood mononuclear cells, detection of nasal carriage of S. aureus and its enterotoxin production by ELISA and serum levels of total IgE, SEB-specific IgE and eosinophil cationic protein [ECP] were measured. We found that nasal carriage of enterotoxin producing S. aureus in allergic patients was significantly higher than in control. Blood eosinophilia, total IgE and ECP levels were significantly higher in S. aureus nasal carrier than non-carrier patients. On in vitro exposure of PBMCs to [SEB], IFN-gamma secretion was significantly less in patients than control and IL-4 secretion was significantly more in patients than control. SEB-specific IgE was detected in 15.6% of patients and not detected in control. There was a significant positive correlation between SEB-specific IgE level in patients and markers of severity of allergic reaction including blood eosinophilia, ECP and total IgE level. This study suggests that nasal carriage of enterotoxin producing S. aureus has a potential role in the development and severity of allergic airway diseases.

## Ribavirin

### therapeutic uses

#### **Low dose ribavirin has been effective in the treatment of incapacitating muco-cutaneous extrahepatic manifestations in patients with hepatitis C with contraindication or no access for approved antiviral treatment.**

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 125-128

**Keywords:** Hepatitis C, Chronic-drug therapy; Hepatitis C, Chronic-complications; Mucous Membrane; Prevalence; Skin; Antiviral Agents

**Abstract:** Background and study aims: Chronic hepatitis C virus [HCV] is a major public health problem and represents a common cause of chronic liver disease worldwide. The Egyptian Demographic Health Survey [EDHS] has estimated HCV prevalence in Egypt to be 14.7%. HCV can affect multiple organ systems and cause a variety of extrahepatic manifestations. Most of extrahepatic manifestations affect the skin and mucous membranes; such as lichen planus [LP], psoriasis, and leucocytoclastic vasculitis. The treatment of extrahepatic manifestations has been disappointing in patients not indicated for interferon with no access for the new costly all oral treatments. Patients and methods: In 2014, thirty Egyptian patients with incapacitating mucocutaneous extrahepatic manifestations due to chronic HCV infection, not indicated for interferon, have been randomised into two groups; group I treated with ribavirin [5-10 mg/kg daily divided into 2 doses], and group II treated with local steroids for 3 months. Patients were followed up for 3 months. Dermatology life quality index score has been measured before and after treatment for all patients. Results: A significant improvement of mucocutaneous lesions has been accomplished in group I in comparison to group II [p < 0.01]. All lesions in group I showed a significant improvement except psoriasis [p > 0.05]. A significant improvement of dermatology life quality index score has been found in patients in group I when compared to group II [p < 0.05]. Conclusion: We conclude that low dose ribavirin was effective in the treatment of incapacitating mucocutaneous extrahepatic manifestations of chronic HCV infection in patients with contraindication or no access to the approved antiviral treatments.

## Saliva

#### **Salivary urea: a marker for chronic renal disease.**

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**Pakistan Journal of Medicine and Dentistry** 2015; 4 (2): 3-6

**Keywords:** Urea-blood; Cross-Sectional Studies; Kidney Failure, Chronic; Developing Countries; Creatinine-blood; Renal Insufficiency, Chronic

**Abstract:** Background: Salivary urea, correlates well with serum urea, can be utilized as a low-cost, easily accessible and noninvasive diagnostic tool for screening patients in early stages of kidney disease, especially for developing countries with limited resources. Saliva for diagnostic purpose, is inexpensive, non-invasive, easy to collect, use, store and transport, contain high amount of disease biomarkers and shows efficient and reliable results. Objective: To assess and prove the salivary diagnostics as reliable alternate to serum in renal diseases. Methods: A cross-sectional validation study of 1 year duration from June 2012 to June 2013 was conducted. Non-probability consecutive sampling technique was employed on the patients attending the Nephrology OPD or those who were admitted to Jinnah Postgraduate Medical Centre Karachi. Results: Significant correlation [.00] was found between the levels of serum and salivary urea and creatinine. A slight increase in the level of serum urea and creatinine results in a significant increase in the level of salivary urea and creatinine. Almost 63.2% and 64.6% of changes in serum urea and creatinine can be explained by the changes in salivary urea and creatinine levels respectively. Conclusion: Saliva can be developed as a diagnostic fluid that is an alternative to blood. It is non invasive, less expensive and collection procedure does not require technicians. The use of salivary assay for diagnostics of chronic renal failure [urea and creatinine] can be established as a cost effective test for developing countries.

## Schistosomiasis mansoni

#### **Blockade of PGE2, PGD2 receptors confers protection against prepatent Schistosomiasis Mansoni in mice.**

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 511-520

**Keywords:** Dinoprostone; Prostaglandin D2; Receptors, Prostaglandin E; Receptors, Prostaglandin; Mice

**Abstract:** Schistosomiasis is a chronic disease with considerable social impact. Despite the availability of affordable chemotherapy, drug treatment has not significantly reduced the overall number of disease cases. Among other mechanisms, the parasite produces PGE2 and PGD2 to evade host immune defenses. To investigate the role of PGE2 and PGD2 in schistosomiasis, we evaluated the effects of L-161,982, Ah6809 [PGE2 receptor antagonists alone or combined with each other] and MK-0524 [PGD2 receptor antagonist] during prepatent *Schistosoma mansoni* infection. Drugs were administered intraperitoneally an hour before and 24 hours after infection of C57BL/6 mice with 100 *Schistosoma mansoni* cercariae. L-161,982, Ah6809, their combination and MK-0524 caused partial protection against pre-patent *S. mansoni* infection which was mediated by biasing the immune response towards Th1 phenotype. These results showed that blockade of PGE2 and PGD2 receptors confers partial protection against pre-patent *S. mansoni* infection in mice and that they may be useful as adjunctive therapy to current anti-schistosomal drugs or vaccines.

## Self-Expandable Metallic Stents

### Placement of multiple metal stents for malignant intrahepatic biliary obstruction via an endoscopic ultrasound-guided choledochoduodenostomy fistula.

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*Arab Journal of Gastroenterology* 2015; 16 (3-4): 145-147

**Keywords:** Fistula; Endoscopic Ultrasound-Guided Fine Needle Aspiration; Pancreatic Neoplasms; Choledochostomy

**Abstract:** Endoscopic ultrasound-guided choledochoduodenostomy [EUS-CDS] using a fully-covered self-expandable metal stent [SEMS] is increasingly used as an alternative to failed endoscopic retrograde cholangiopancreatography. An EUS-CDS fistula can provide endoscopists with a new approach route for intrahepatic bile ducts. Here, we present successful placement of multiple SEMS for intrahepatic biliary obstruction via an EUS-CDS fistula.

## Self-Medication

### Evaluation of knowledge, attitude and practice of self-medication among selected medical and non-medical students of Peshawar, Pakistan.

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*Journal of Medical Students* 2015; 1 (1): 31-35

**Keywords:** Health Knowledge, Attitudes, Practice; Students, Medical; Cross-Sectional Studies; Surveys and Questionnaires; Health Education

**Abstract:** Introduction: Self-medication is a part of self-care and is a primary source of public health in a health care system. In Pakistan it is a common practice as a majority of population is underprivileged, economically unstable and medicines are freely available as and when desired. Self-medication is intended for quick relief in common illnesses with a resultant benefit of economy, convenience and saving on time. However, self-medication should not be taken lightly as it involves serious health risks. Material and Methods: A cross-sectional study was carried out from June-August 2014 based on convenience sampling of 200 undergraduate medical and non-medical students from Rehman Medical College and University of Engineering and Technology, Peshawar, respectively. A self-administered questionnaire was used to collect data which were analyzed using SPSS v. 22. Comparisons were done using Chi Square test, keeping  $p=0.05$ . Results: 185 students participated [age 22.5 +/- 2.6 years; Male: Female ratio 2.36:1] in the study. The practice of self-medication among students was 93% [n=172] of which 92 were medical students and 80 were non-medical students. "Previous experience with similar symptoms" [50.8%] and "convenience" [27.6%] were common factors for self-medication. The commonest indications for self-medication were "cough/sore throat" [61.1%], "runny nose/nasal congestion" [56.8%] and "fever" [56.29%]. Analgesics [71.4%], antibiotics [62.2%] and anti-allergic [48.1%] drugs were the most common types of self-medication used. Selection of medicine was based on "friends and family's opinion" [40%] and "previous experience" [34.1%]. Participants showed positive attitude towards self-medication; however 32.4% considered it as not an acceptable practice. There was no significant difference between self-medication practice between medical and non-medical students [ $p=0.34$ ]. Conclusion: Only justifiable rationale for self-medication would be 'urgency of the problem' but amongst our participants this was not the most popular reason. Students of health profession are under the influence of self-medication at the same rate as that of non-health profession. To prevent the growing trend of self-medication, strong policies should be applied prohibiting the supply of medicines and promoting education regarding the implications of self-medication.

## Serum Amyloid P-Component

### Serum Pentraxin-3 level in patients who underwent coronary angiography and relationship with coronary atherosclerosis.

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**Medical Principles and Practice** 2015; 24 (4): 369-375

**Keywords:** C-Reactive Protein; Coronary Artery Disease; Coronary Angiography; Atherosclerosis

**Abstract:** Objectives: To evaluate the role of pentraxin-3 [PTX-3] in determining the presence and severity of coronary atherosclerosis in patients with coronary artery disease [CAD]. Subjects and Methods: Ninety-five patients [77 males and 18 females] who underwent elective coronary angiography were enrolled in this study. Patients with heart failure, renal failure, diabetes and thyroid disease were excluded. The study population was divided into 3 groups: individuals with normal coronary arteries, patients with critical CAD [n = 35] and patients with noncritical CAD [n = 36]. The association of PTX-3 levels with the presence and severity of CAD and the number of involved vessels were analyzed. Results: The mean age was 53.40 +/- 10.25 years. The PTX-3 levels were significantly higher in patients with CAD than without CAD [146.48 +/- 48.52 vs. 109.83 +/- 49.06 pg/ml, p < 0.001]. A statistically significant difference was found among the 3 groups regarding the severity of CAD [165.66 +/- 49.10, 127.83 +/- 40.51 and 109.83 +/- 49.06 pg/ml, p < 0.001, respectively]. The serum PTX-3 levels in normal arteries were 110.4 +/- 48.11 pg/ml, in single-vessel disease 132.35 +/- 32.96 pg/ml, in 2-vessel disease 142.57 +/- 55.88 pg/ml, in 3-vessel disease 156.07 +/- 50.53 pg/ml, and in 3-vessel disease 160.50 +/- 30.41 pg/ml. After adjusting for baseline confounders, older age [OR = 1.107, 95% CI = 1.027-1.193, p = 0.008] and higher PTX-3 levels [OR = 1.017, 95% CI = 1.003-1.032, p = 0.021] were detected as significant predictors for the presence of CAD. Conclusions: Higher PTX-3 levels were associated with the presence of CAD and its increased severity in clinically stable patients. Higher PTX-3 levels may be regarded as a novel diagnostic predictor and may offer therapeutic options in the clinic.

## Sexually Transmitted Diseases

### epidemiology

### Estimation of prevalence and incidence of sexually transmitted infections in Iran; a model-based approach.

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**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 168-174

**Keywords:** Prevalence; Incidence; Cross-Sectional Studies; Syphilis; Neisseria gonorrhoeae; Chlamydia trachomatis

**Abstract:** Background: Routine reporting of sexually transmitted infections [STIs] in Iran is one of the main information sources on STIs, endures some diminution under influence of several factors. We aimed to adjust registered STI data with a model-based approach and estimate the incidence and prevalence of STIs in Iran. Methods: In this cross-sectional study, we developed a stochastic compartmental model considering effects of influential factors on STI reporting process to adjust registered STI data. We reviewed literature and used Delphi method to collect data and estimate model parameters. We calibrated the model using Monte Carlo simulation with 95% confidence interval [CI]. Finally, we validated the models by comparing their output with investigational data. Results: The estimated prevalence of male urethral discharge was 0.40% [95% CI: 0.26%, 0.65%]; the prevalence of genital ulcers was 3.68% [95% CI: 2.31%, 6.43%] in women and 0.16% [95% CI: 0.10%, 0.27%] in men. The estimated incidence for Neisseria gonorrhoeae, Chlamydia trachoma and syphilis per 1000 women was 2.44 [95% CI: 1.17, 6.65], 5.02 [95% CI: 2.78, 10.16] and 0.04 [95% CI: 0.02, 0.05] respectively; the corresponding figures per 1000 men were 0.43 [95% CI: 0.26, 0.80], 0.82 [95% CI: 0.42, 1.92] and 0.005 [95% CI: 0.003, 0.008]. Conclusions: Various factors are responsible for the obvious underestimation in the number of STIs registered in Iran. Notwithstanding this underestimation, our models offer an indirect method of estimating the prevalence of STIs in the country. Providing policymakers and STI experts with more realistic estimates might prompt policymakers and STI experts to recognize the importance of STIs in Iran and help them to develop appropriate prevention and control programs.

## Sleep Apnea, Obstructive

### Association of Fragmented QRS with subclinical left ventricular dysfunction in patients with obstructive sleep apnea.

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**Medical Principles and Practice** 2015; 24 (4): 376-381

**Keywords:** Ventricular Dysfunction, Left; Polysomnography; Electrocardiography

**Abstract:** Objective: We aimed to investigate whether fragmented QRS [fQRS] is associated with subclinical left ventricular [LV] dysfunction in patients with obstructive sleep apnea [OSA]. Subjects and Methods: A total of 141 patients with OSA who had normal LV ejection fraction [LVEF] were included in the study. The fQRS was defined as the presence of an additional R wave, notching of R or S wave or the presence of fragmentation in 2 contiguous electrocardiography [ECG] leads. Subclinical LV dysfunction was defined as the presence of a tissue Doppler-derived Tei index of  $\geq 0.5$  in the absence of impaired LVEF [ $<50\%$ ] as assessed by transthoracic echocardiography. Results: Of the 141 patients, 71 [50.4%] had subclinical LV dysfunction. Overall, the prevalence of the fQRS was 61% [86/141]. Patients with fQRS had significantly higher Tei indices than those without fQRS [median 0.66, interquartile range [IQR] 0.39 vs. median 0.40, IQR 0.15,  $p < 0.001$ ]. The presence of fQRS on ECG predicted subclinical LV dysfunction in univariate logistic regression analysis [odds ratio [OR] 6.69, 95% confidence interval [CI] 3.10-14.43]. The association remained significant after adjusting for all potential confounders [OR 4.59, 95% CI 1.94-10.87]. Conclusion: fQRS on ECG was an independent predictor of subclinical LV dysfunction in patients with OSA. This simple tool might help to identify OSA patients who could be at risk for developing overt cardiac dysfunction.

## Sleep Initiation and Maintenance Disorders

### etiology

### Causes of Insomnia and its effects on day to day activities of Rehman Medical College students.

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**Journal of Medical Students** 2015; 1 (1): 20-25

**Keywords:** Activities of Daily Living; Cross-Sectional Studies; Students, Medical

**Abstract:** Introduction: The aim of this research is to identify the magnitude of self-reported insomnia in medical student in Rehman Medical College, Peshawar; to characterize sleeping habits of medical students; to identify the basic causes of insomnia and to determine how subjective sleep quality affects their day to day activities. Material and Methods: It was a cross sectional survey conducted at Rehman Medical College Peshawar. A total number of 200 students from both 1st year and 2nd year MBBS were enrolled. Participants completed a self-reported questionnaire. The variables of questionnaire were derived from National Sleep Foundation [USA]. Data were entered in MS Excel and Data analysis was done on SPSS version 15 for descriptive statistics. Results: Response rate was 81.5%, amongst them 65.0% were day scholars while 35.0% were boarders; 22 students were found insomniac according to the National Sleep Foundation [USA] criteria for adult sleep, of these 13 insomniacs were Day scholars and 9 were boarders. Major causes for decreased sleep among the insomniac students were, Stress 14 [73.68%], Studies 14 [73.68%], Exams 13 [68.42%], load shedding 11 [57.89%], and disturbing events around them 6 [31.57%]. A sizable number of students, 17 [80.95%] believed that their performance was affected because of the sleep disturbance; also 17 [80.95%] students got irritated due to lack of sleep, 15 [71.42%] students thought that their concentration and retention of lessons in classrooms was greatly affected, 14 [66.67%] students thought that their studies and diet got affected due to less sleep, 13 [61.90%] felt that their personal appearance got affected, 12 [57.14%] students observed that their punctuality was affected by decreased sleep, whereas 7 [33.33%] mentioned that their relationship with friends and family got affected due to decreased sleep. Conclusion: Insomnia is fairly common among medical students in Rehman Medical College and is associated with stress, exam tension, load shedding, and medical studies. The preliminary data on insomnia categorizes student sleep disturbance as day scholars and borderline. The study provides data on causes and effect of insomnia, which may be used to guide sleep hygiene promotion and intervention among college students.



## Sleep Wake Disorders

### Daytime sleepiness and chronic sleep deprivation effects on academic performance among the Sudanese medical students.

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*Arab Journal of Taibah University Medical Sciences* 2015; 10 (4): 467-470

**Keywords:** Surveys and Questionnaires; Cross-Sectional Studies; Cultural Deprivation; Students, Medical; Work Performance

**Abstract:** Objectives: The literature has shown a negative impact of daytime sleepiness on the academic performance of medical students. This study explored the relationship between academic performance, sleep deprivation, and daytime sleepiness among Sudanese medical students. Methods: This cross-sectional study was conducted on 108 medical students from Omdurman University during the period from June to August 2014. Male and female students with excellent [A] and average [C] grades in the clinical phases of their studies were chosen. A self-administered questionnaire was used to collect data. The questionnaire contained questions about the following: subjective feelings of insufficient sleep, feelings of sleepiness during class time, sleeping less than 6 h for six nights in a row, smoking status, medical or neurological diseases, and daytime sleepiness as assessed by the Epworth sleepiness scale. Result: A significant difference [ $p < 0.001$ ] was found between the A [excellent] and C [average] groups regarding daytime sleepiness, insufficient sleep, sleeping less than 6 h per night, and falling asleep while reading [ $p < 0.005$ ]. No significant difference was reported regarding snoring or the subjective feeling of sleepiness during study hours. Conclusion: Our study underscores the enormous effects of sleep deprivation and daytime sleepiness on academic performance among medical students. Larger multicenter studies are needed to examine the causes and to implement preventive measures for the serious effects of these significant health problems.

## Space Maintenance, Orthodontic

### Effects of fixed and removable space maintainers on plaque accumulation, periodontal health, candidal and enterococcus faecalis carriage.

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*Medical Principles and Practice* 2015; 24 (4): 311-317

**Keywords:** Dental Plaque; Dental Care; Candida; Candidiasis, Oral; Enterococcus faecalis

**Abstract:** Objective: To evaluate the effects of space maintainers on plaque accumulation, periodontal health and oral microflora. Subjects and Methods: The study participants comprised 38 patients aged 4-10 years requiring either fixed or removable space maintainers. Plaque index, gingival index, bleeding on probing index, candidal colonization and Enterococcus faecalis were recorded just before the application of space maintainers [T0] and during treatment at the 1[st] [T1], 3[rd] [T2] and 6[th] [T3] month. Results: The gingival and bleeding on probing index scores increased significantly [gingival index from 0.20 +/- 0.254 to 0.54 +/- 0.417 and bleeding on probing index from 7.18 +/- 9.946 to 18.07 +/- 14.074] in the regions with fixed space maintainers at T3 [ $p < 0.01$ ]. The mean Candida counts also increased [for removable appliances from 1.90 +/- 3.638 to 1.98 +/- 3.318,  $p < 0.05$ , and for fixed appliances from 4.25 +/- 4.587 to 4.52 +/- 4.431,  $p < 0.001$ ]. The salivary E. faecalis counts at T3 also increased significantly with the use of fixed and removable appliances [for removable appliances from 5.93 +/- 2.65 to 85.53 +/- 34.1 and for fixed appliances from 4.95 +/- 2.94 to 123.59 +/- 29.51,  $p < 0.001$ ]. A positive correlation was found between the plaque [ $r = 0.67$ ], gingival [ $r = 0.76$ ] and bleeding on probing index scores [ $r = 0.76$ ] and the candidal colonization for the fixed space maintainers [ $p < 0.01$ ,  $p < 0.001$ ]. Conclusions: In this study, both fixed and removable space maintainers led to an increase in the number of microorganisms in the oral cavity as well as to increases in the periodontal index scores. Patients should be informed that space maintainers may serve as a source of infection and that special attention must be given to their oral hygiene.

## Sphincterotomy, Endoscopic

### Critical points related to the complications after endoscopic sphincterotomy in liver transplant recipients.

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*Arab Journal of Gastroenterology* 2015; 16 (3-4): 83-83

**Keywords:** Liver Transplantation; Retrospective Studies; Critical Pathways; Transplant Recipients

## Staphylococcus

### drug effects

#### Performance of Vitek-2 system for detection of inducible clindamycin resistance among clinical isolates of Staphylococci in comparison to the D-Test.

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 99-104

**Keywords:** Staphylococcus-isolation and purification; Clindamycin; Drug Resistance, Microbial; Bacterial Proteins; Staphylococcus-genetics

**Abstract:** Background: Clindamycin resistance among clinically significant staphylococcal isolates is now increasing. Routine testing of staphylococcal isolates for inducible clindamycin resistance [ICR] is advocated by the Clinical Laboratory Standards Institute [CLSI]. Automated system Vitek 2 offers a panel that detects inducible clindamycin resistance directly. It is easy and more cost-effective than the more labor-intensive CLSI reference methods. Objectives: The aim of this study was to assess the performance of Vitek-2 system for ICR detection against the reference D-test, as well as to detect the presence of erm-A and erm-C genes among these isolates. Methodology: 22 clinical staphylococcal isolates [15 Staph aureus and 7 coagulase negative Staph [CoNS] were examined for ICR both by D- test and Vitek-2 system. multiplex PCR was performed for the isolates to detect ermA and ermC genes. Results: Out of the 22 isolates, ICR was detected by Vitek-2 in 6 isolates [27.7%]. Five of the 6 isolates were confirmed by D-test. Sensitivity, specificity, positive and negative predictive values were calculated as 100%, 94.1%, 83.33% and 100% respectively. ermC gene was detected in 20/22 isolates, 5 isolates were positive for both genes. Conclusion: Vitek-2 is considered a potentially reliable test for detection of ICR, further studies are recommended on large number of isolates.

## Stents

#### Is the duration of dual antiplatelet therapy after implantation of drug-eluting stents the longer the better?

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**Medical Principles and Practice** 2015; 24 (4): 398-398

**Keywords:** Drug Therapy, Combination; Platelet Aggregation Inhibitors

## Stomach Neoplasms

#### The predictive factors for lymph node metastasis in early gastric cancer: a clinical study.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1437-1440

**Keywords:** Lymph Nodes; Neoplasm Metastasis; Retrospective Studies

**Abstract:** Objective: To detect the clinicopathological factors associated with lymph node metastases in early gastric cancer. Methods: We retrospectively evaluated the distribution of metastatic nodes in 198 patients with early gastric cancer treated in our hospital between May 2008 and January 2015, the clinicopathological factors including age, gender, tumor location, tumor size, macroscopic type, depth of invasion, histological type and venous invasion were studied, and the relationship between various parameters and lymph node metastases was analyzed. Results: In this study, one hundred and ninety-eight patients with early gastric cancer were included, and lymph node metastasis was detected in 28 patients. Univariate analysis revealed a close relationship between tumor size, depth of invasion, histological type, venous invasion, local ulceration and lymph node metastases. Multivariate analysis revealed that the five factors were independent risk factors for lymph node metastases. Conclusion: The clinicopathological parameters including tumor size, depth of invasion, local ulceration, histological type and venous invasion are closely correlated with lymph node metastases, should be paid high attention in early gastric cancer patients.

### **Tight junction protein claudin 4 in gastric carcinoma and its relation to lymphangiogenic activity.**

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**Arab Journal of Gastroenterology** 2015; 16 (3-4): 105-112

**Keywords:** Claudin-4; Tight Junctions; Lymphangiogenesis

**Abstract:** Background and study aims: Gastric cancer is the second most common cause of cancer-related death worldwide. Claudins are a family of tight junction proteins that are biologically relevant in many cancer progression steps. This study aimed to investigate the expression of the intestinal claudin [claudin 4] in gastric carcinoma and to evaluate its relation to the different clinicopathologic prognostic parameters, especially lymphangiogenesis [production of new lymphatic vessels, measured by lymphovascular density [LVD]] and lymphovascular invasion [LVI]. Patients and methods: Fifty-five gastric carcinoma specimens were immunohistochemically stained for claudin 4 and D2-40 [for detection of lymphatic vessel endothelium]. Results: High expression of claudin 4 was detected in 26 of 55 [47.3%] cases. Low expression of claudin 4 was related to poorly differentiated type [ $p = 0.001$ ], non-intestinal [diffuse] type [ $p = 0.001$ ], deeper tumour invasion [ $p < 0.001$ ], lymph node metastasis [ $p = 0.001$ ], and higher stage [ $p = 0.001$ ]. In addition, higher LVD was related to poorly differentiated types [ $p = 0.001$ ], non-intestinal type [ $p = 0.001$ ], lymph node metastasis [ $p = 0.015$ ], and higher tumour, node, metastasis [TNM] stage [ $p = 0.001$ ]. LVI was related to lymph node metastasis [ $p = 0.025$ ], higher TNM stage [ $p = 0.001$ ], and LVD [ $p = 0.001$ ]. Claudin 4 significantly correlated with both LVD [ $p = 0.009$ ] and LVI [ $p = 0.009$ ]. Conclusions: High expression of claudin 4 was associated with the more differentiated intestinal-type gastric carcinoma and lost in poorly differentiated diffuse type. So, claudin 4 may be used as one of the differentiating markers between the two major types of gastric carcinoma [intestinal vs. diffuse]. LVD and LVI were related to higher incidence of lymph node metastasis and therefore could be used as predictive markers for lymph node metastasis in limited specimens during early gastric carcinoma to determine the need for more invasive surgery. Low expression of claudin 4 was related to lymphangiogenesis. This may shed light on the relation of tight junction protein expression and lymphangiogenesis.

## **Stomatitis**

### **prevention and control**

#### **Efficacy of topical and systemic vitamin E in preventing chemotherapy-induced oral mucositis.**

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 15-18

**Keywords:** Antineoplastic Agents; Drug-Related Side Effects and Adverse Reactions; Vitamin E-pharmacology

**Abstract:** Background: There is still no consensus regarding the optimum treatment of chemotherapy-induced oral mucositis and its management is still mainly supportive. Vitamin E has been shown to be effective in reducing the symptoms of oral mucositis. Objectives: Aim of this study was to assess the efficacy of prophylactic systemic and topical vitamin E in reducing the signs and symptoms of oral mucositis in patients receiving chemotherapy. Patients and Methods: We conducted a placebo-controlled randomized clinical trial among 76 patients with a hematologic malignancy treated with chemotherapy. Patients were randomly assigned into three groups: supplementation with vitamin E paste [group 1] and 200 mg/d vitamin E pills [group 2]. Group 3 received placebo paste, identical in appearance and taste to the vit E paste, but consisting of the vehicle only. Patients were advised to use the administered medication from two days before each cycle of chemotherapy till at least 20 days after completion of each cycle. Oral exam was performed 10-14 days after each cycle of chemotherapy. Results: Patients in group 2 and 3 did not show any difference in degree of mucositis or severity of pain. However, after the second cycle, patients who were treated with topical vitamin E showed significantly less oral pain, and had fewer cases of severe mucositis compared to groups 2 and 3. Conclusions: Topical vitamin E could be beneficial in reducing the severity of oral mucositis, but no therapeutic gain would be achieved by using systemic vitamin E in this regard.

## **Streptococcus pneumoniae**

#### **Prevalence of nasopharyngeal carriage of Streptococcus pneumonia in Iran: a meta-analysis.**

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**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 141-146

**Keywords:** Carrier State; Pneumococcal Infections; Nasopharynx; Prevalence; Meta-Analysis as Topic; Child; Drug Resistance, Microbial

**Abstract:** Background: Streptococcus pneumoniae is a major cause of childhood morbidity and mortality worldwide. Several studies have explored the nasopharyngeal carriage of S. pneumoniae in Iran. This meta-analysis is aimed at exploring the overall prevalence of nasopharyngeal carriage of S. pneumoniae among healthy children and its resistance to antibiotics. Method: We have systematically reviewed published studies from international databases [PubMed, Web of Science, and Scopus] and national databases [Iranmedex, Magiran, Medlib, SID and Irandoc] and reference lists of articles published up to May 2015. Only cross-sectional studies supported with sensitivity test on samples collected from nasopharyngeal area were included and heterogeneity was assessed using Q-test and I<sup>2</sup> test statistic. Publication bias was explored using the Egger's and Begg's tests and the funnel plot. The overall prevalence of analyzed data were reported with 95% confidence intervals [CI] using the random-effects model. Results: A total of 16 studies were included in the final analysis. The pooled prevalence of S. pneumoniae nasopharyngeal carriage was 18% [95% CI: 14% - 23%]. Antibiotic resistance rates were 26% [95% CI: 15% - 37%] to penicillin, 30% [95% CI: 10% - 49%] to erythromycin and 34% [95% CI: 10% - 57%] to tetracycline respectively. Conclusion: This study could be able effectively estimate the overall prevalence of nasopharyngeal carriage of S. pneumoniae and its antibiotics resistance rate among healthy children in Iran. In addition, the findings evidenced the role of pneumococcal vaccination in reducing the prevalence of S. pneumoniae carriage among healthy children in Iran.

## drug effects

### Are Pneumococci resistant to macrolides?

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**EJMM-Egyptian Journal of Medical Microbiology [The]** 2015; 24 (4): 59-65

**Keywords:** Pneumococcal Infections; Drug Resistance, Microbial; Macrolides; Streptococcus pneumoniae-pathogenicity; Tetracycline; Clindamycin

**Abstract:** Background: Streptococcus pneumoniae is the most common cause of acute community-acquired pneumonia and accounts for 30-40% of lower respiratory tract infections. It accounts also for about 50% of hospital-acquired pneumonia. Macrolides remain the primary antibiotic of choice for physicians treating such infections. Macrolide resistance in Strept. pneumoniae is primarily due to two mechanisms; target site modification [encoded by the erm [B] gene] and efflux pump expulsion [encoded by the mef gene]. Objectives: The aim of this study was to identify the incidence of Strept. pneumoniae among acute and chronic otitis media cases; to perform the antimicrobial sensitivity tests for such isolates, to determine the percentage of Strept. pneumoniae resistant to erythromycin, clarithromycin and azithromycin, to assess the antibiotic susceptibility profile of macrolide-resistant Strept. pneumoniae and lastly to detect the frequency of common macrolide resistant genes [The mefE and ermB genes] among erythromycin resistant Strept. pneumoniae by PCR technique. Methodology: 317 patients suffering from acute or chronic otitis media, attended to pediatric and ENT- Outpatient Clinics at Al- Azhar University Hospital of Assiut, were isolated and tested for Strept. pneumoniae and for antibiotics sensitivity pattern. Resistant strains for erythromycin, clarithromycin and azithromycin were assayed for MIC using E test. PCR for erm[B] and mef[E] resistant determinant genes by multiplex PCR was applied. Results: 78 [24.6%] isolates of Strept. pneumoniae were isolated. Of them 66 and 12 isolates from acute and chronic otitis media respectively. Cefoperazone was the most sensitive drug, followed by Cefotaxime, Azithromycin and Amoxicillin-clavulanate. Tetracycline was the most resistant drug followed by Clindamycin and Apramycin. The E- test confirmed the results of disc diffusion test. By PCR, 10 [41.7%] isolates have both erm B and mef E genes, while 8 [33.3%] isolates have mef E gene only and 2 [8.3%] isolates showed erm B gene only. Conclusion: There is a high prevalence of erythromycin resistant Strept. pneumoniae. So macrolides cannot be recommended for the treatment of pneumococcal infections without susceptibility testing. Results point to the importance of detection of erm B and mef E genes for epidemiological aspects and to track possible presence of macrolide resistance.

## Stress, Psychological

### Perceived stress, triggering factors and coping strategies among first year MBBS students: a case Of Rehman Medical College Peshawar, Pakistan.

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**Journal of Medical Students** 2015; 1 (1): 15-19

**Keywords:** Surveys and Questionnaires; Curriculum; Students, Medical

**Abstract:** Introduction: Every individual experiences some type of stress, but life of a medical student is relatively more stressful. Rehman Medical College adapted to the integrated modular system in order to expose its students to clinical environment right from the first year, hence adding more to an already stressful environment. This study aimed to evaluate stress levels, triggering factors and coping strategies among first year MBBS students at Rehman Medical College Peshawar, Pakistan. Material and Methods: It was a cross-sectional survey based on self-administered questionnaire, where Perceived Stress was measured using the Perceived Stress Scale [PSS-14]. A total number of 47 medical undergraduates from the first year MBBS

participated in the study. SPSS version 15 was used for data analysis. Result: Ninety percent of students reported some level of stress; 14 [30%] were in very much stressful condition with significant difference among male and female students [ $p=0.004$ ]. The major triggering factors among students were difficulty in coping with integrated curriculum, frequent examinations, environment of institute and economical support. Ignoring the stress, going to sleep, indulging in games and sharing of problems were the main coping strategies adopted by the students for managing their stress levels. Conclusion: Stress among medical students was frequent, triggered by high parental expectations, difficulty in coping with modular curriculum, frequent examinations, institutional environment and worries of economic support. Ignoring the stress, going to sleep, indulging in games, sharing the problem with relatives or friends were the major coping strategies.

## Students, Medical

### Assessment of learning environment among the first year Malaysian medical students.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 454-460

**Keywords:** Surveys and Questionnaires; Learning; Perception; Environment; Educational Status

**Abstract:** Objectives: The quality of the learning environment has been identified to be crucial for effective learning. Medical students' perceptions of learning environments provide a useful foundation for modifying and improving the quality of medical education. The aim of this study was to assess first-year medical students' perceptions of the learning environment in Universiti Kebangsaan Malaysia [UKM]. Methods: The Dundee Ready Educational Environment Measure [DREEM] questionnaire was distributed to all 213 first-year medical students of UKM. The questionnaire contained 50 items scored on a 0-4 Likert scale [total scores could range from 0 to 200]. There were five subscales in the questionnaire, including students' perceptions about learning, teachers, atmosphere, academic self-perceptions, and social self-perceptions. Results: The total DREEM score recorded in this study was 135.6/200, which indicated that medical students' perceptions of the learning environment at UKM were more positive than negative. Students' perceptions of learning, students' perceptions of teachers, students' academic self-perceptions, students' perceptions of atmosphere and students' social self-perceptions scores were 33.04/48, 29.68/44, 22.16/32, 33.11/48 and 17.62/28, respectively. The total DREEM score was significantly higher among female [137.02/200] than male medical students [130.84/200] [ $p < 0.05$ ]. There was no relationship between the students' perceptions of the learning environment and their academic performance [ $R = -0.06$ ,  $p > 0.05$ ]. Conclusion: The study showed that first-year medical students at UKM positively perceived their learning environment. Some low-scoring areas of the learning environment were also identified, which require improvement in the future.

### A survey of the effective factors in students' adherence to university dress code policy, using the theory of reasoned action.

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**Journal of Advances in Medical Education and Professionalism** 2015; 3 (3): 133-141

**Keywords:** Behavior; Cross-Sectional Studies; Surveys and Questionnaires; Attitude

**Abstract:** Introduction: Recognizing the determinants of behavior plays a major role in identification and application of effective strategies for encouraging individuals to follow the intended pattern of behavior. The present study aimed to analyze the university students' behaviors regarding the amenability to dress code, using the theory of reasoned action [TRA]. Methods: In this cross sectional study, 472 students were selected through multi-stage random sampling. The data were collected using a researcher-made questionnaire whose validity was confirmed by specialists. Besides, its reliability was confirmed by conducting a pilot study revealing Cronbach's alpha coefficients of 0.93 for attitude, 0.83 for subjective norms, 0.94 for behavioral intention and 0.77 for behavior. The data were entered into the SPSS statistical software and analyzed using descriptive and inferential statistics [Mann-Whitney, correlation and regression analysis]. Results: Based on the students' self-reports, conformity of clothes to the university's dress code was below the expected level in 28.87% of the female students and 28.55% of the male ones. The mean scores of attitude, subjective norms, and behavioral intention to comply with dress code policy were 28.78+/- 10.08, 28.51 +/- 8.25 and 11.12 +/- 3.84, respectively. The students of different colleges were different from each other concerning TRA constructs. Yet, subjective norms played a more critical role in explaining the variance of dress code behavior among the students. Conclusion: Theory of reasoned action explained the students' dress code behaviors relatively well. The study results suggest paying attention to appropriate approaches in educational, cultural activities, including promotion of student-teacher communication.

## Submandibular Gland Neoplasms

### Polymorphous low-grade adenocarcinoma of submandibular gland.

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**Reports of Radiotherapy and Oncology** 2015; 2 (1): 27-30

**Keywords:** Submandibular Gland; Salivary Glands; Adenocarcinoma

**Abstract:** Introduction: Polymorphous low-grade adenocarcinoma [PLGA] occurs mostly in minor salivary glands, and there are only a few reports of major salivary gland origin. Case Presentation: We herein report a case of de novo PLGA arising in a submandibular gland in an 88 years-old woman. On examination, a large firm and non-tender mass was palpable in the submandibular region. Conclusions: Neither lymphadenopathy nor enlargement of any other salivary glands was present. CT showed a well-defined mass with irregular enhancement in the submandibular gland.

## Surgery, Plastic

### Experiences and attitude among Saudi female University students towards cosmetic surgery.

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**Journal of Taibah University Medical Sciences** 2015; 10 (4): 427-431

**Keywords:** Surveys and Questionnaires; Cross-Sectional Studies; Students

**Abstract:** Objectives: This study aimed to estimate the prevalence of cosmetic surgery among Saudi female University students and to assess their experiences and attitudes toward cosmetic surgery. Methods: During 2012, a cross-sectional comparative study at King Abdulaziz University. Initially, a simple random sampling technique was employed to select relevant colleges from within the University. In the second stage, two to three courses from each graduating class were randomly selected. Finally, using the systematic random sampling strategy, each 4th student in the class was selected until the desired sample size was achieved. Two self-administered questionnaires were used for data collection: the Multidimensional Body-Self Relations Questionnaire and the Cosmetic Surgery Attitudes Questionnaire. Results: The response rate was 99.3%. Thirteen students [2.2%] had received cosmetic surgery, and 11.4% were potential cosmetic surgery candidates. Fifty-two percent of students agreed that the cost of cosmetic surgery would be a waste of money; however, 15.3% supported those who wanted to undergo surgery. The highest mean score of 3.93 +0.47 was recorded for appearance orientation followed by appearance evaluation [3.86 + 0.68]. Students who had been subjected to cosmetic surgery were significantly more concerned about overweight preoccupation [ $p < 0.05$ ]. Almost half of the students who had undergone cosmetic surgery agreed that social media had influenced their decisions. Conclusions: In this study, a small number of undergraduate University students had been subjected to cosmetic surgery, and 16% indicated that they would consider surgery later in life. Social media has a major impact on decision-making regarding cosmetic surgery.

## Temporomandibular Joint Disorders

### therapy

### Experience in the management of the true ankylosis of the temporomandibular joint: a suggested protocol for treatment.

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**Zanco Journal of Medical Sciences** 2015; 19 (1): 894-901

**Keywords:** Ankylosis; Disease Management; Osteotomy; Arthroplasty; Jaw

**Abstract:** Background and objectives: True ankylosis of the temporomandibular joint may be defined as joint surfaces fusion. It can affect the function adversely and when occurs during childhood, it can adversely affect mandibular growth. The treatment is usually surgical, but, unfortunately, poses a significant challenge because of the high recurrence rate. The objective of this paper is to evaluate the outcome of following a definitive protocol in the treatment of temporomandibular joint ankylosis. Methods: Seventy-seven patients, 36 unilateral and 41 bilateral ankylosis [118 ankylosed joints] were diagnosed clinically and radiologically as having true ankylosis of the temporomandibular joint during the period between 2001 and 2013. Resection of the ankylosed bone or horizontal ramus osteotomy of the affected side with interpositional autogenic or alloplastic material, with possible ipsilateral and/or contralateral coronoidectomy to achieve the definitive interincisal opening of not less than 35mm. Results: The postoperative measurement of interincisal opening of  $\geq 35$ mm with lateral and protrusive movement was the criteria for success of surgery. Reankylosis occurred in 7 unilateral and 12 bilateral cases. Conclusion: Postoperative jaw opening exercises are crucial for lasting success and failure of patient compliance is the cause of reankylosis.

## Thyroid Hormones

### blood

#### Association between thyroid hormone levels and insulin resistance and body mass index.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1417-1420

**Keywords:** Insulin Resistance; Body Mass Index; Obesity; Tertiary Healthcare

**Abstract:** Objective: Previous studies have shown an association between thyroid function and insulin resistance and obesity. We compared insulin resistance and body mass index [BMI] in patients with normal TSH levels [2.5-4.2 microIU/mL], patients diagnosed with subclinical hypothyroidism, and healthy controls. Methods: The study included 104 subjects and was conducted at the Taksim Education and Research Hospital. The subjects were divided into three groups according to TSH levels: Group 1 [high-normal], TSH levels were 2.5-4.2 microIU/mL [n=33]; Group 2 [subclinical hypothyroidism], TSH levels were 4.2-10 microIU/mL [n=42]; and Group 3 [healthy control], TSH levels were 0.27-2.5 microIU/mL [n=29]. The fT3 and fT4 levels were within normal limits in all groups. Insulin resistance and BMI were compared among groups. The homeostasis model assessment of insulin resistance [HOMA-IR] was used to estimate insulin resistance. Results: HOMA-IR and BMI were not significantly different among groups [p>0.05]. A significant positive correlation was found between BMI and HOMA-IR in the high-normal TSH [p>0.059] and subclinical hypothyroidism [p>0.05] groups. Conclusions: HOMA-IR and BMI are important for the assessment of diabetes and cardiovascular diseases. We found no significant difference in HOMA-IR and BMI values among the three TSH reference range groups.

## Thyroid Neoplasms

### radionuclide imaging

#### [111] In-pentetreotide scintigraphy and 18F FDG PET-CT in differentiated thyroid carcinoma metastases with negative whole body radioiodine scan.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 7-13

**Keywords:** Somatostatin; Radionuclide Imaging; Neoplasm Metastasis; Fluorodeoxyglucose F18; Positron-Emission Tomography

**Abstract:** Metastases of differentiated thyroid cancer [DTC] can lose affinity to radioiodine with the passage of time, with resultant difficulty in management. Thyroid tumors are known to express somatostatin receptors and therefore [111]In-pentetreotide, somatostatin analogue, can visualize tumors with high concentration of somatostatin receptors. We report a case of I-131 whole body scan [WBS] negative recurrent metastatic papillary thyroid carcinoma with positive 18F FDG PET-CT and [111]In-pentetreotide scan. Somatostatin receptor scintigraphy [SRS] with [111]In-pentetreotide may be useful both in the staging and monitoring of patients with non-iodine avid carcinoma of the thyroid. [111]In-pentetreotide scan positive patients are potential candidates for somatostatin receptor-targeted therapy.

## Tissue Expansion

#### Reconstruction of post burn scalp alopecia by using expanded hair-bearing scalp flaps.

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**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1405-1410

**Keywords:** Burns; Scalp; Alopecia

**Abstract:** Background and Objective: Tissue expansion is a time-tested and frequently used procedure for utilizing local tissue to replace large defects. We aimed to assess the success and complications of tissue expansion in correction of post burn scalp alopecia. Methods: In this study, 30 patients of scalp burn alopecia of 5 to 35 years age group were treated with tissue expansion of the scalp at Bahawal-Victoria Hospital from January 2013 to December 2014. The area of the scalp loss was within 1/5 to 2/5. Our technique employed an insertion site distal to the area needed to be expanded, attempting to minimize complication like extrusion and wound dehiscence. The patients were followed-up weekly during first month and then fortnightly for next four

months. Result: Our study involved 8 male [26.67%] and 22 female subjects [73.33%] with a mean age of 21 years. Flame burn accounted for the mostly 53.3% [n=16] of scalp burns and parieto-temporal region was most commonly affected in 33.4% [n=10] of subjects. Desired aesthetic results were achieved in all the patients without any major complication. Minor complication included mild infection in 8 [26.67%], seroma in 4 [13.33%] and wound dehiscence in 2 [6.67%] patients. Conclusion: Tissue expansion is a simple, safe, and efficient technique for aesthetic scalp reconstruction. With a simple modification of distal incision and tunneling, we succeeded in minimizing complications. Versatile design of the expanded scalp flap can distribute the expanded hair-bearing scalp properly in the reconstructed recipient site.

## Tobacco Use

### epidemiology

#### High prevalence of tobacco use and associated oral mucosal lesion among interstate male migrant workers in Urban Kerala, India.

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*Iranian Journal of Cancer Prevention* 2015; 8 (6): 15-18

**Keywords:** Mouth Mucosa-pathology; Prevalence; Transients and Migrants; Cross-Sectional Studies; Surveys and Questionnaires

**Abstract:** Background: Kerala is a highly urbanized state in India and interstate migrant laborers working there forms a marginalized community. It was generally perceived that use of tobacco and alcohol was high among the workers, but there are no epidemiological studies assessing the actual burden. Objectives: To estimate the prevalence of use of tobacco and also the prevalence of oral mucosal lesions associated with such use consumption among the adult male interstate migrant workers in North Kerala. Materials and Methods: A cross sectional study was carried out among male migrant workers above 18 years working in different factories in urban parts of Kannur district. Total of 244 participants attending routine health check-up camp were assessed for the use of tobacco/alcohol, type, frequency and duration of their use by a questionnaire. The trained dental interns conducted oral cavity examination for detecting oral mucosal lesions associated with tobacco use. Results: The prevalence of current use of smoked tobacco, smokeless tobacco and alcohol use were 41.8%, 71.7% and 56.6%, respectively among migrants. Oral mucosal lesions [OML] were seen in 36.3% of participants. Among smokeless tobacco users, 44.6% had lesions. Adjusted odds ratio for OML was 4.5 [CI: 1.9 - 19.84] among smokeless tobacco users. Conclusions: The current use of smokeless tobacco and oral mucosal lesions are highly prevalent among migrant workers.

## Total Quality Management

#### Implementation of total quality management in hospitals.

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*Journal of Taibah University Medical Sciences* 2015; 10 (4): 461-466

**Keywords:** Surveys and Questionnaires; Cross-Sectional Studies; Health Plan Implementation; Hospitals; Nurses; Health Services

**Abstract:** Objectives: The aims of the study were to explore the extent of Total Quality Management [TQM] implementation in hospitals and its association with demographic variables. Methods: This cross-sectional study collected data from 332 nurses using a self-developed questionnaire. The participants were recruited from government, military, university and private health sectors. Results: The results of this study showed that 70% of variance in implementing TQM can be achieved by following the principles of TQM. These principles include continuous improvement, teamwork, training, top management commitment and customer focus. Continuous improvement was the most significant factor in explaining variance in implementing TQM principles. TQM was implemented in Jordanian hospitals at a level approximately less than 60%. The most implemented principle was customer focus, and the least implemented was continuous improvement. The private sector implemented all of these five principles more than other sectors did. Conclusion: Efforts should be focused on establishing a foundation that can inspect and accredit quality in the health care system.



## Toxoplasma

### genetics

#### Direct genotyping of toxoplasma gondii in blood samples from pregnant women in Jazan, Saudi Arabia.

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*Journal of the Egyptian Society of Parasitology* 2015; 45 (3): 603-608

**Keywords:** Genotype; Pregnant Women; Toxoplasmosis-blood; Polymorphism, Restriction Fragment Length; Polymerase Chain Reaction; Antigens, Protozoan; Protozoan Proteins

**Abstract:** Toxoplasma gondii [T. gondii] is divided three main clonal lineages designated as type I, II, and III and atypical genotypes were also detected. The distribution of T. gondii genotypes varied from one geographic area to another. This study characterized of T. gondii isolates from pregnant women in Jazan. Genetic analysis of the GRA6-coding fragment was performed for T. gondii genotyping using PCR-RFLP method. The seropositive for Toxoplasma-specific antibodies were determined using ELISA and were 27.9% in pregnant women in Saudi Arabia. Women seropositive for Toxoplasma IgG and IgM [GI=30] and for specific IgG [GII=30] were included. Among pregnant women, 83.3% of GI [women seropositive for IgG and IgM] and 90% of GII [women seropositive for IgG] were asymptomatic and observed clinical symptoms were fever [n=4] and cachexia [n=2] and lymphadenopathy [n=1]. GRA6-nested PCR was positive in 8 blood samples [13.3%], 5 of GI and 3 of GII seropositive women. RFLP analysis showed the detection of genotype I in 8 samples with no cases coinciding to pattern of type II or type III.

## Toxoplasmosis

#### Toxoplasma gondii infection in patients with schizophrenia.

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*Zanco Journal of Medical Sciences* 2015; 19 (1): 874-879

**Keywords:** Toxoplasma; Schizophrenia-parasitology; Case-Control Studies; C-Reactive Protein; Surveys and Questionnaires; Immunoglobulin G

**Abstract:** Background and Objectives: Schizophrenia is a complex chronic neuropsychiatric disease of the central nervous system, believed to have multiple etiologies. Toxoplasma gondii has emerged as an interesting candidate as a possible cause of some cases of schizophrenia. As there is scarce information about the seroprevalence of T. gondii infection in psychiatric patients in Erbil; we investigated the seroprevalence of T. gondii in schizophrenic patients and compared with that obtained from control individuals in Erbil correlated with inflammatory marker C-reactive protein. Method: This case control study included 93 schizophrenic patients seeking medical advice at Hawler Psychiatric Hospital and private clinics with 93 non psychiatric control were screened for the presence of anti-toxoplasma IgG, IgM [by ELISA test] and C-reactive protein using qualitative methods. A questionnaire was used to collect socio-demographic and behavioral data among the respondents. Results: In chronic cases anti-Toxoplasma gondii IgG antibodies were seropositive in 30/93 [32.3%] of the schizophrenic patients and 4/93 [4.3%] of control [P<0.001]. The seropositive rate of IgM antibodies was 9.7% and 1.1% among schizophrenic patients and control, respectively [P = 0.006]. The result of C-reactive protein positivity among patients and control was 23.6% and 3.22%, respectively [P <0.001]. Conclusion: Our results delineate that association might exist between Toxoplasma gondii infection and schizophrenia etiology.

## Tranexamic Acid

### pharmacology

#### Longtime soaking of high concentration tranexamic acid in total hip arthroplasty: a prospective randomized controlled trial in 224 patients.

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*Pakistan Journal of Medical Sciences* 2015; 31 (6): 1306-1311

**Keywords:** Arthroplasty, Replacement, Hip; Prospective Studies; Double-Blind Method; Injections, Intra-Articular; Blood Loss, Surgical

**Abstract:** Objectives: To evaluate the efficacy and safety of intra-articular Soaking of high concentration Tranexamic Acid [TXA] in total hip arthroplasty. Methods: From March 2013 to March 2014, 224 patients who underwent unilateral primary THA in our hospital was enrolled in this randomized, prospective double-blinded study. The patients were allocated into two groups according to intra-articular solution received:

Intra-articular soaking of TXA group, Control group [physiologic saline]. The solution was injected from intermuscular space following fixation of the implants and closure of articular capsule, short external rotators. Total blood loss, total volume of drainage and transfusion were recorded. Postoperative deep vein thrombosis and other complications was also measured. Results: The mean total blood loss was 730 +/- 296 ml in intra-articular soaking of TXA group compared with 1048 +/- 295ml in control group [P<0.05]. The postoperative mean total volume of drainage was 93 +/- 50 mL in intra-articular soaking of TXA group versus 312 +/- 136 mL in control group. 22 patients [19.8%, control] and 6 patients [5.3%, Intra-articular soaking of TXA] required transfusion [P=0.001]. Postoperative deep vein thrombosis and other complications were no statistical significance between the two groups. Conclusions: Intra-articular soaking of high concentration TXA with 2-hour clamping drain can reduce the total blood loss and transfusion rates in primary THA without significant increase in postoperative thrombotic complications.

## Travel

### Health advisories for travelers to Saudi Arabia, Umrah and Hajj, 1436 H.

WHO Eastern Mediterranean Regional Office

[E-mail:emrgoped@who.int](mailto:emrgoped@who.int)

World Health Organization. Regional Office for the Eastern Mediterranean - Communicable Diseases Prevention and Control - Pandemic and Epidemic Diseases

**Weekly Epidemiological Monitor** 2015; 08 (07-08): 1

**Keywords:** Pilgrimage; Health; Consultants; Islam; Middle East Respiratory Syndrome Coronavirus; Coronavirus Infections; Hemorrhagic Fever, Ebola

**Abstract:** The Ministry of Health of the Kingdom of Saudi Arabia [KSA] has issued health requirements and recommendations for travellers to Saudi Arabia in connection with performing Hajj and Umrah for the year 2015 [1436 H].

## Tuberculosis, Pulmonary

### Concomitant presence of culture-proven active pulmonary tuberculosis in patients with chronic obstructive pulmonary disease - a hospital based study.

Liaquat, Aneela; Iram, Shagufta; Hussain, Shahida; Yusuf, Noshin Wasim; Azeem, Hassan

Govt. College University Lahore

**Pakistan Journal of Medical Sciences** 2015; 31 (6): 1344-1348

**Keywords:** Pulmonary Disease, Chronic Obstructive; Culture Media; Bacillus; Cross-Sectional Studies

**Abstract:** Objective: To find out the prevalence of concomitant active pulmonary Tuberculosis [TB] in patients of Chronic Obstructive Pulmonary Disease [COPD] using the gold standard liquid and solid culture media for the detection of acid fast bacillus. Methods: Eighty clinically and radiologically diagnosed cases of COPD of any severity, >/= 40 years of age with no previous history of anti-tuberculous therapy were selected from department of Pulmonology, Jinnah Hospital, Lahore. Detailed demographic profile, clinical symptomatology and history of smoking were recorded. Sputum samples of these patients were subjected to Ziehl Neelsen [ZN] stain and culture on Lowenstein-Jensen [L.J] medium and Mycobacterium Growth Indicator Tube [MGIT] for the detection and isolation of Mycobacterium tuberculosis [MTB]. Results: Out of 80 COPD patients, 6 [7.5%] were culture positive for acid fast bacillus consistent with active tuberculous infection. The concomitance was more prevalent in elderly, male, smokers. MGIT was a more sensitive and a rapid technique to detect the presence of mycobacterium as compared to LJ culture media and ZN stain. Conclusion: The prevalence of active TB in COPD patients was 7.5%. Detection was improved when liquid culture media was employed for the detection of acid fast bacillus. Regular monitoring and screening of patients with COPD for PTB should be routinely carried out in susceptible cohort to avoid cross spreading of infection and appropriate management.

## Turtles

### growth and development

### Morphometry and body mass index to assess health condition in captive population of Greek tortoise, *Tesudo greaca*.

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**Alexandria Journal of Veterinary Science [AJVS]** 2015; 45 (April): 57-62

**Keywords:** Body Mass Index; Health Impact Assessment

**Abstract:** Body mass and morphometric data from a sample of captive Greek tortoise, *Testudo graeca* were collected to assess body condition based on linear association. Mass- length linear relationship differed between the sexes where mass-straight carapace length was strongly associated in males while mass- curved carapace length was strongly associated in females compared with other morphometric measures. Females were heavier, deeper and longer than males. Mass-length linear relationship was used to calculate the condition index  $\log [M/m]$ , where  $[M]$  is the observed mass and  $[m]$  is the predicted mass. The loss in body condition was recorded in 47% of females and 50% of males. The percentage of body condition loss ranged between 1.5 to 13% and 2.7 to 15.9% in females and males, respectively. The mass-length technique is a useful means of evaluating health and growth in tortoises.

## Urinary Bladder Neoplasms

### epidemiology

#### Characteristics of patients with transitional cell carcinoma of the urinary bladder in Kermanshah province, Iran.

Payandeh, Mehrdad; Sadeghi, Masoud; Sadeghi, Edris  
Kermanshah University of Medical Sciences - Department of Hematology and Medical Oncology  
**Iranian Journal of Cancer Prevention** 2015; 8 (6): 11-14

**Keywords:** Urinary Bladder Neoplasms-pathology; Carcinoma, Transitional Cell; Retrospective Studies; Neoplasm Metastasis

**Abstract:** Background: In Iran, bladder cancer is one of the most common malignancy sites among men, ranking as the fifth with age-specific incidence rate of about 11.2 per 100,000 males. It causes 8% of all malignancies in men and 3% of all malignancies in women. Objectives: The aim of this study was to report the epidemiological, clinical, and pathological features of bladder cancer in Western Iran compared to other studies. Patients and Methods: This is a retrospective study between 2003 and 2014 when forty-four patients with bladder cancer referred to Hematology Clinic of Kermanshah, Kermanshah, Iran. Transitional cell carcinoma [TCC] was in 39 patients. Results: In the patients with TCC, the mean age in diagnosis for them was 65.43 years +/- [ 11.64], range of age 42 to 88 years, thirty-three patients [84.6%] were male, and six patients [15.4%] were female. Of 39 patients with TCC, 16 patients [41%] had metastasis. 21 patients [53.8%] were smoker and 16 patients [41%] had muscle invasive. 35 patients [89.7%] were histological high grade and the rest of patients were low grade. In the TCC patients with increasing age, metastasis and muscle invasive increased. Conclusions: The age presentation of TCC in West Iran was similar to other studies. Percentage of patients with high grade is more than other studies, and also the number of patients with bladder cancer has increased during last 4 years. For better results, studies must be conducted with more patients in this area, and other areas of Iran with checking of genetics, race and environmental factors.

## Ventricular Dysfunction, Left

### epidemiology

#### Echocardiographic diastolic dysfunction among hypertensive patients.

Ahmed, Halgurd F.  
Rozh Halat Emergency Hospital - Department of Internal Medicine  
**Zanco Journal of Medical Sciences** 2015; 19 (1): 853-858

**Keywords:** Hypertension; Echocardiography; Diastole

**Abstract:** Background and objective: Hypertension is a very common medical disorder, affecting nearly 40% of our population. Diastolic dysfunction is one of complications that happens and is regarded as a predictive of subsequent heart failure. The aim of this study was to determine the frequency of left ventricular diastolic dysfunction by echocardiography among hypertensive patients. Methods: This study involved 150 hypertensive cases [82 female and 68 male] age from 25-81 years old. Transthoracic echocardiography approach, using SIEMENS SONOLINE Omnia 2005 machine with the probe of p4-2 was used by the researcher. A comparative 150 normal non-hypertensive healthy adults with hypertensive patients are examined again by echocardiography. The parameter for the diastolic dysfunction measurement is E/A ratio. Results: It was found that 88 [58.7%] of hypertensive patients have diastolic dysfunction, while 4.9% of non-hypertensive group have diastolic dysfunction with significant statistical differences between both groups [P <0.001], who were age >60years have 79%, while age 25-35years old have 21% [P <0.001]. Among left ventricular hypertrophy patients, 87.5%, versus 12.5% have diastolic dysfunction [P <0.001]. Females are more liable for diastolic dysfunction, who have 70.7% than males who have 44.1% [P <0.001]. Conclusion: Diastolic dysfunction is common among hypertensive patients, particularly among females, aged, and who have echocardiographic criteria of left ventricular hypertrophy, represent risk factors for diastolic dysfunction.

## Vitamin D Deficiency

### Are growing pains related to Vitamin D deficiency? efficacy of Vitamin D therapy for resolution of symptoms.

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**Medical Principles and Practice** 2015; 24 (4): 332-338

**Keywords:** Vitamin D-therapeutic uses; Pain; Prospective Studies; Cohort Studies

**Abstract:** Objectives: The aim of this study was to investigate the 25-hydroxyvitamin D [25(OH)D] status of children with growing pains and to evaluate the efficacy of vitamin D treatment on the resolution of pain symptoms. Subjects and Methods: One hundred and twenty children with growing pains were included in a prospective cohort study. Serum 25(OH)D and bone mineral levels were measured in all subjects at the time of enrollment. The pain intensity of those with vitamin D deficiency was measured using a pain visual analog scale [VAS]. After a single oral dose of vitamin D, the pain intensity was remeasured by means of the VAS at 3 months. The 25(OH)D levels and VAS scores before and after oral vitamin D administration were compared by means of a paired Student's t test. Results: In the 120 children with growing pains, vitamin D insufficiency was noted in 104 [86.6%]. Following vitamin D supplementation, the mean 25(OH)D levels increased from 13.4 +/- 7.2 to 44.5 +/- 16.4 ng/ml, the mean pain VAS score decreased from 6.8 +/-1.9 to 2.9 +/- 2.5 cm [a mean reduction of -3.8 +/- 2.1, p < 0.001] and the difference was statistically significant. Conclusion: Supplementation with oral vitamin D resulted in a significant reduction in pain intensity among these children with growing pains who had hypovitaminosis D.

## Wilms Tumor

### surgery

### Primary surgery in treatment of stages II and III Wilms' Tumour: a developing countries' experience.

Zakaria, O.M.; Hokkam, E.N.; Al Sayem, K.; Daoud, M.Y.I.; Zakaria, H.M.; Al Wadaani, H.A.

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**GJO-Gulf Journal of Oncology [The]** 2015; (19): 44-49

**Keywords:** DNA-Binding Proteins; Nuclear Proteins; Developing Countries; Kidney Neoplasms

**Abstract:** Background: Treatment options for Wilms' tumour [WT] are costly and it affects the country's health budget and resources if adopted and implemented at the national level especially in developing countries with low or resource-challenged settings. Aim: The objective of this study is to evaluate the role and effectiveness of primary surgery in the treatment of stage II and III pediatric WT following the schedule indicated in the National Wilms' Tumor Study [NWTS-4] in the institutes of two developing countries. Patients and Methods: The study enrolled 40 children who were primarily diagnosed as stage II and III WT. They were divided into 2 equal groups. Group I [n = 20] included those children who have undergone neoadjuvant chemotherapy followed by surgery and postoperative chemotherapy, while group II [n = 20] included those children who have undergone primary surgery as an initial management followed by chemotherapy. After a mean postoperative follow-up period of 20+/-5 months, clinical and radiological evaluation was performed for all patients. Results: In group I, 15 patients were preoperatively diagnosed as stage II and 5 patients as stage III while in group II, 16 patients were proved to be stage II and 4 patients were stage III. After a follow up period, clinical and radiological evaluation using CT was performed on all patients. In patients with stage II, evidence of recurrence was noted in 4 patients of group I whereas no patient showed any evidence of recurrence in group II. In patients with stage III, rebound increase in size was seen in 2 patients in group I and only one patient in group II. Conclusion: Primary surgery with appropriate adjuvant therapy improves the treatment results compared to the neoadjuvant chemotherapy and delayed surgery for children primarily diagnosed as stage II and III WT. It may be used as a safe and effective tool in treating WT patients with relatively no changes from the long administration schedules. This will have a highly positive impact in lowering treatment cost in developing countries.

## Wound Closure Techniques

### Prospective comparison of primary wound closure with tissue- adhesive versus suture materials.

Marbin, Rasim Yousif; Fattah, Jalal Hamasalih

Hawler Medical University - College of Medicine - Department of Plastic Surgery

**Zanco Journal of Medical Sciences** 2015; 19 (1): 859-865

**Keywords:** Tissue Adhesives; Sutures; Suture Techniques; Prospective Studies; Cyanoacrylates

**Abstract:** Background and Objectives: Nowadays the final outcome of wound closure using tissue adhesives and suture material is making a real competition for better results. Cosmetic outcome is regarded as the first demand for the patients. The aim of this study was to make a comparison between the two closure methods in terms of cosmetic outcome, complication and patients' satisfaction. Method: A prospective comparative study was conducted at Rizgary Teaching Hospital and West Erbil Emergency Hospital in Erbil city from March 2012 to March 2013. A total of 105 patients were included in the study. The method of closure was selected alternatively between tissue adhesive [octylcyanoacrylate] and suture material. Analysis for cosmetic outcome, complications and patients' satisfaction were done using the statistical package for the social sciences [version 19]. Results: The complications were 25% [13 patients] in the tissue adhesive group and 18% [9 patients] in the sutured group. Of the 44 patients in the tissue adhesive group, 86.4% [38 patients] were satisfied; while of the 61 patients in the sutured group, 88% [54 patients] were satisfied with the end result. Excellent cosmetic outcome achieved in 77.3% in the tissue adhesive group and 80.3% in the sutured group. Conclusion: Tissue adhesive [octylcyanoacrylate] is effective and reliable in primary skin closure, yielding similar cosmetic results to standard suturing method. Tissue adhesive is faster and offers several practical advantages over suture repair.

## Zinc

### blood

#### **The serum levels of zinc in school children: a crosstalk with stunting and giardiasis.**

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**Journal of the Egyptian Society of Parasitology** 2015; 45 (3): 587-592

**Keywords:** Growth Disorders; Giardiasis; Giardia lamblia; Cross-Sectional Studies; Schools; Child

**Abstract:** Zinc deficiency is an increasing public health problem. It may be related to compromised neurobehavioral function in children and adolescents. An association between giardiasis and zinc levels in human hosts had been reported. The occurrence of recurrent intestinal infection by Giardia lamblia may reflect a failure to correct an undefined specific nutrient deficiency, for example, the need for adequate zinc repletion. This study estimated the level of serum zinc in a sample of primary school children and to study the associations between it and height for age and giardiasis. A cross section study was carried out on randomly selected primary schools in Dubai and Ajman. They were 500 school children with age range from 6-12 years in Dubai and Ajman. The level of serum zinc, height for age and giardia infection were estimated. The results showed that the prevalence of zinc deficiency was 23% with no relationship to age or gender. The low serum zinc was significantly associated with stunting and giardiasis. Regression analysis showed that stunting and giardiasis were significant predictors for low serum zinc [Beta = 0.365, 0.684 respectively].

## Zinc Oxide

#### **Respiratory symptoms and pulmonary function tests among Galvanized workers exposed to zinc oxide.**

Aminian, Omid; Zeinodin, Hamidreza; Sadeghniai Haghighi, Khosro; Izadi, Nazanin

Tehran University of Medical Sciences - Center for Research on Occupational Diseases

**Journal of Research in Health Sciences [JRHS]** 2015; 15 (3): 159-162

**Keywords:** Occupational Exposure; Respiratory Function Tests; Respiratory System; Retrospective Studies; Cohort Studies

**Abstract:** Background: Galvanization is the process of coating steel or cast iron pieces with a thin layer of zinc allowing protection against corrosion. One of the important hazards in this industry is exposure to zinc compounds specially zinc oxide fumes and dusts. In this study we evaluated chronic effects of zinc oxide on the respiratory tract of galvanizers. Method: 188 workers were selected from a galvanization plant, 71 galvanizers as exposed group and 117 workers from other departments of plants as control group. Information was collected using American Thoracic Society [ATS] standard questionnaire, physical examination and demographic data sheet. Pulmonary function tests were measured for all subjects. Exposure assessment was done with NIOSH 7030 method. Results: The Personal Breathing Zone [PBZ] air sampling results for zinc ranged from 6.61 to 8.25 mg/m<sup>3</sup> above the permissible levels [Time weighted average; TWA: 2 mg/m<sup>3</sup>]. Results showed that the prevalence of the respiratory symptoms such as dyspnea, throat and nose irritation in the exposed group was significantly more than the control group. Decreasing in average percent in all spirometric parameters were seen in the galvanizers who exposed to zinc oxide fumes and dusts. The prevalence of obstructive respiratory disease was significantly higher in the exposed group. Conclusions: Results suggest that high workplace zinc levels are associated with an increase in respiratory morbidity in galvanizers.

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- Aliyev, Bahtiyar**  
ANKLE INJURIES (therapy)
- Aljasser, Abdulrahman A.**  
CULTURE MEDIA
- Alkaabi, Salem**  
DEFIBRILLATORS, IMPLANTABLE
- Alkindy, Sami A.**  
OTOLARYNGOLOGY
- Allam, Enas Hassan**  
MENINGITIS, BACTERIAL (diagnosis)
- Almoammar, Khalid**  
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- Almontashiri, Naif A.**  
CONSANGUINITY
- Almoussa, Raed M.**  
CULTURE MEDIA
- Almusaad, Abdulmohsen M.**  
DEFIBRILLATORS, IMPLANTABLE
- Alnami, Abdulaziz Y.**  
CULTURE MEDIA
- Alqahtani, Nasser D.**  
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- AlSaif, Abdul Aziz**  
BREAST NEOPLASMS
- Alsheikh Ali, Alawi A.**  
DEFIBRILLATORS, IMPLANTABLE
- Alsumait, Aishah**  
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- Alswilem, Mohammed**  
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- Altawalah, Haya**  
RESPIRATORY TRACT INFECTIONS (microbiology)
- Ambar, Akashah**  
TISSUE EXPANSION
- Amer, Amr A.**  
DAIRY PRODUCTS (microbiology)
- FISHES (microbiology)
- Amer, Mohammed B.**  
OTOLARYNGOLOGY
- Ameri, Ahmad**  
HEAD AND NECK NEOPLASMS (pathology)
- Ameri, Pegah**  
STREPTOCOCCUS PNEUMONIAE
- Amin, Maryam**  
ORAL HEALTH
- Amin, Mohammad**  
DEFIBRILLATORS, IMPLANTABLE
- Amin, Mohammad Mughees**  
TISSUE EXPANSION
- Amin, Salwa Ahmed**  
KIDNEY (ultrasonography)
- Amini, Mitra**  
ETHICS, INSTITUTIONAL  
EDUCATION, MEDICAL

**Aminian, Omid**  
ZINC OXIDE

**Amirghofran, Zahra**  
PLANTS, MEDICINAL

**Anand, Sury**  
INTUBATION

**Aneel, Geeta**  
MANDIBULAR CONDYLE (pathology)

**Anila, K. R.**  
LYMPHATIC DISEASES (diagnosis)

**Anis, Reham H.**  
RHINITIS, ALLERGIC (etiology)

**Anoushirvani, Ali Arash**  
LYMPHOMA, B-CELL

**Anum, Madeeha**  
STRESS, PSYCHOLOGICAL

**Arafa, Roshdan M.**  
ASTHMA (genetics)

**Aramian, Leila Moradi**  
DIABETES MELLITUS, TYPE 1 (epidemiology)

**Arasteh, Hamid Reza**  
EDUCATION, PROFESSIONAL

**Ardic, Sukru**  
ANKLE INJURIES (therapy)

**Arefnezhad, Masoud**  
HEALTH

**Arif, Bilawal Ali**  
IMMUNIZATION

**Arifin, Khaizurin Tajul**  
PROBLEM-BASED LEARNING

**Arifin, Wan N.**  
PSYCHOLOGY, EDUCATIONAL

**Arikan, Volkan**  
SPACE MAINTENANCE, ORTHODONTIC

**Arishi, Haider M.**  
ANEMIA, SICKLE CELL

**Asaad, Nidal**  
DEFIBRILLATORS, IMPLANTABLE

**Asad, Munazza**  
HEPATITIS B (epidemiology)

**Asadullah, Mian**  
EDUCATION, MEDICAL (trends)

**Asal, Fatheyah Elsayed**  
RIBAVIRIN (therapeutic uses)

**Asem, Noha**  
HELICOBACTER PYLORI

**Ashraf, Bushra**  
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**Askarian, Mehrdad**  
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**Aslam, Mobeena Saba**  
SELF MEDICATION

**Aslesh, Ottapura Prabhakaran**  
TOBACCO USE (epidemiology)

**Atallah, Sanad T.**  
DAIRY PRODUCTS (economics)

**Athayde, Margareth L.**  
BASSIA SCOPARIA

**Atiba, Ayman**  
BURNS (veterinary)

**Atta, Lyba**  
HAND DISINFECTION

**Attallah, Dalia A.**  
ACNE VULGARIS (therapy)

**Attaur Rasool, Sohail**  
TISSUE EXPANSION

**Augustynowicz, Alina**  
INTESTINAL DISEASES, PARASITIC  
(epidemiology)

**Avand, Abolghasem**  
EDUCATION, MEDICAL

**Avci, Fazil**  
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**Awad, Ashraf**  
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**Ayan, Nilhan Nurlu**  
THYROID HORMONES (blood)

**Aydogan, Umit**  
SERUM AMYLOID P-COMPONENT

**Aydogdu, Aydogan**  
SERUM AMYLOID P-COMPONENT

**Azab, Marwa M.**  
CROSS INFECTION (etiology)

**Azeem, Hassan**  
TUBERCULOSIS, PULMONARY

**Azim, Hamdy A.**  
COLORECTAL NEOPLASMS

**Aziz, Hossam A.**  
RHINITIS, ALLERGIC (etiology)

**Aziz, Muhammad Nazri**  
ACINETOBACTER BAUMANNII

**Azizi, Arash**  
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- Azma, Zohre**  
RECTAL NEOPLASMS
- Azouz, Mohamed M.**  
GASTRIC OUTLET OBSTRUCTION
- Azzam, Ahmed M.**  
ANTIPARASITIC AGENTS
- Azzazy, Ensaf A.**  
RHINITIS, ALLERGIC (etiology)
- Azzeh, Firas Sultan**  
METABOLIC SYNDROME X (epidemiology)
- Aïssaoui, L.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Baddour, Manal**  
DIARRHEA (veterinary)
- Badr, Rawia Ibrahim**  
DIABETIC FOOT (microbiology)
- Baig, Mirza Ahmad Raza**  
AORTIC DISEASES
- Bakarman, Marwan A.**  
SURGERY, PLASTIC
- Bakhshandeh, Mohsen**  
RECTAL NEOPLASMS
- Bakr, Mohammad**  
PHLEBOTOMUS
- Bakre, Hawre M.**  
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- Baloglu, Ali**  
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- Balta, Ahmet Ziya**  
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- Baneshi, Mohammd Reza**  
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(epidemiology)
- Bannon, Aidan**  
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- Barakat, Eman**  
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- Barakat, Ghada I.**  
RETROPHARYNGEAL ABSCESS (microbiology)
- Barakat, Waleed**  
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- Barati, Mehdi**  
BREAST NEOPLASMS
- Barcin, Cem**  
SERUM AMYLOID P-COMPONENT
- Bardi, Fouad A.**  
DIABETES, GESTATIONAL
- Barnwal, K.**  
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- Barough, Mahdieh Shokrollahi**  
BREAST NEOPLASMS
- Basit, Sulman**  
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- Bassura, Mohammed A.**  
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- Bastani, Zahra**  
LYMPHOMA (epidemiology)
- Batool, Fatima**  
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- Bauer, Hartmut**  
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- Bayatiyani, Zohreh Fathi**  
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- Bayoumy, Iman**  
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- Bazid, Abdel Hameed I.**  
HEMORRHAGIC DISEASE VIRUS, RABBIT  
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- Bazmamoun, Hassan**  
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- Bazrafkan, Leila**  
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- Bazyar, Mohammad**  
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- bd Karim, Norwahidah**  
PROBLEM-BASED LEARNING
- Behbehani, Nasser**  
RESPIRATORY TRACT INFECTIONS  
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- Bektas, Huseyin**  
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- Ben Mansour, Imed**  
GASTRIC OUTLET OBSTRUCTION
- Bhandari, R.**  
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- Bhatia, Taruna**  
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- Bhesham, Indra**  
MANDIBULAR CONDYLE (pathology)
- Bhimani, Amyna**  
ANALGESIA
- Bhugio, Sanober**  
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- Bidari Zerehpoosh, Farahnaz**  
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- Bilgic, Serkan**  
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- Bin Saeedan, Mnahi**  
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- Bin Salamah, Fahad**  
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- Binesh, Fariba**  
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- BinSaeed, Abdulaziz A.**  
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- Bista, Madhab**  
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- Boghdadi, Ghada**  
HEPATITIS C, CHRONIC (genetics)
- Bokhari, Fayez A.**  
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- Bokhary, Nada A.**  
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- Bolhassani, Azam**  
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- Boligon, Aline A.**  
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- Bolouri, Abbas Javadzadeh**  
PROPOLIS (therapeutic uses)
- Boo, Yang Liang**  
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- Bor, Canan**  
PNEUMONIA, VENTILATOR-ASSOCIATED
- Born, Peter**  
ESOPHAGEAL PERFORATION
- Bouassida, Mahdi**  
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- Bowashi, Salem Mohamed**  
NEMATODE INFECTIONS
- Bulbul, Yilmaz**  
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- Calik, Goknil Sanije**  
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- Cankayali, Ilkin**  
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- Canpolat, O.**  
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- Casim, Hasan**  
SLEEP APNEA, OBSTRUCTIVE
- Cayci, Tuncer**  
SERUM AMYLOID P-COMPONENT
- Chaabouni, H.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Chachar, Aijaz Zeeshan Khan**  
GRANULOMATOSIS WITH POLYANGIITIS
- Chalabi, Dlair A. K.**  
APPENDICITIS (diagnosis)
- Changela, Kinesh**  
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- Changizi, Vahid**  
BREAST NEOPLASMS (diagnosis)
- Chase, David**  
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- Chen, Qiu Sheng**  
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- Chen, Shi Ming**  
EPISTAXIS (therapy)
- Chen, Yong Tao**  
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- Chu, Guang**  
MAGNETIC RESONANCE IMAGING
- Chu, Haifeng**  
ENTERAL NUTRITION
- Chung, Kuet Jun**  
KIDNEY FAILURE, CHRONIC
- Ciraci, M.Z.**  
REPERFUSION INJURY
- Coskun, Ali Kagan**  
SPHINCTEROTOMY, ENDOSCOPIC
- Cuhadar, Mehmet**  
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- Dag, Hande**  
ADAPTATION, PSYCHOLOGICAL
- Dagriri, Khaled**  
DEFIBRILLATORS, IMPLANTABLE
- Dahesh, Salwa M. A.**  
MALARIA
- Dajani, Asad Izziddin Mustafa**  
NON-ALCOHOLIC FATTYLIVER DISEASE
- Damanhuri, Mohd Hanafi A.**  
PROBLEM-BASED LEARNING
- Dan, Ting ting**  
MYOPIA
- Danaei, Mina**  
PROFESSIONALISM

- Daneshmand, Mohammad Ali**  
LYMPHOMA, B-CELL
- Daoud, M.Y.I.**  
WILMS TUMOR (surgery)
- Daoulah, Amin**  
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- Davoodabadi, Abdoulhossein**  
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- Dawani, Narendar**  
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- Dawlatly, Ezzat S.**  
OTOLARYNGOLOGY
- Dawood, Shawnm Nasih**  
KIDNEY (ultrasonography)
- Dayal, Madhukar**  
BUDD-CHIARI SYNDROME
- Dehghan, Habibollah**  
HEAT STRESS DISORDERS
- Dehghani, Mehdi**  
LYMPHOMA (drug therapy)
- Dehghani, Seyed Mohsen**  
LIVER DISEASES (pathology)
- Delavarian, Zahra**  
PROPOLIS (therapeutic uses)
- Demirag, Kubilay**  
PNEUMONIA, VENTILATOR-ASSOCIATED
- Deng, Yu Qin**  
EPISTAXIS (therapy)
- Dikmen, B.**  
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- Ding, Chuan Hun**  
ENTEROBACTERIACEAE
- Doganer, Yusuf Cetin**  
SERUM AMYLOID P-COMPONENT
- Doha, Said A. M.**  
PHLEBOTOMUS
- Doroh, Vajihe Ramezani**  
HEALTH
- Dowlatkah, Hamid Reza**  
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- Duddempudi, Sushil**  
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- Dundar, Zerrin Defne**  
PAIN MEASUREMENT
- Durusu, Murat**  
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- Dwedar, Reham A.**  
POLYMYXINS (therapeutic uses)
- Egici, Mehmet Taskin**  
PAIN MEASUREMENT
- Eid, Asmaa Mustafa Mohammed**  
STOMACH NEOPLASMS
- Eida, Amany M.**  
TOXOPLASMA (genetics)
- Ejakpovi, Isaac I.**  
BASSIA SCOPARIA
- El Ahwany, Eman**  
SCHISTOSOMIASIS MANSONI
- El Araby, Iman E.**  
MILK
- El Bagoury, Abd El Rahman M.**  
MEAT PRODUCTS (microbiology)
- El Bahnasawy, Mamdouh M. M.**  
ONCHOCERCIASIS
- El Bayomi, Khairy M.**  
MILK
- El Behedy, Eman M.**  
ENTEROCOLITIS, PSEUDOMEMBRANOUS (diagnosis)
- El Beshbishy, Hesham A.**  
DIABETES, GESTATIONAL
- El Bialy, Safaa M.**  
FISHES (microbiology)
- El Desouky, Mohamed Ali Mohamed**  
HEPATITIS B (diagnosis)
- El Gaml, Ahmed M.**  
DAIRY PRODUCTS (microbiology)
- El Gazar, Mohamed Mordy Ahmed**  
HEPATITIS B (diagnosis)
- El Gindy, Eman M.**  
MENINGITIS, BACTERIAL (complications)
- El Gindy, Eman Mohamed**  
MENINGITIS, BACTERIAL (diagnosis)
- El Hennawy, Ahmed**  
LIPID METABOLISM, INBORN ERRORS
- El Hofi, Hanaa R.**  
LIVER CIRRHOSIS (veterinary)
- El Karaksy, Hanaa**  
LIPID METABOLISM, INBORN ERRORS
- El Ktany, Eman M.**  
DAIRY PRODUCTS (economics)
- El Leboudy, Ahlam A.**  
DAIRY PRODUCTS (microbiology)

- EI Mokhtar, Mohamed Ahmed**  
ACNE VULGARIS (therapy)
- EI Morshedy, Amany M.S.E.**  
LIVER CIRRHOSIS (veterinary)
- EI Mosallamy, Wafaa A.**  
ASTHMA (genetics)
- EI Nagdy, Magda Mohammad**  
DIABETIC FOOT (microbiology)
- EI Nahas, Mamdouh Radwan El Nahas**  
DIABETIC FOOT (microbiology)
- EI Rouby, Mahmoud N.**  
HEPATITIS C, CHRONIC
- EI Sayed, Emad A.**  
ENTEROCOLITIS, PSEUDOMEMBRANOUS (diagnosis)
- EI Sayed, Hanan M.**  
ENTEROCOLITIS, PSEUDOMEMBRANOUS (diagnosis)
- EI Sayed, Omaira A.**  
RETROPHARYNGEAL ABSCESS (microbiology)
- EI Sayed, Rasha A.**  
ASTHMA (genetics)
- EI Sayed, Rokaya**  
LIPID METABOLISM, INBORN ERRORS
- EI Sharkawy, Asser A.**  
RETROPHARYNGEAL ABSCESS (microbiology)
- EI Shewehy, Dina Magdy M.**  
CRYPTOSPORIDIUM PARVUM (immunology)
- Elakel, Wafaa**  
HEPATITIS C, CHRONIC
- Elbadawi, Abdulateef S.**  
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- Elbarmelgi, Mohamed Yehia**  
COLORECTAL NEOPLASMS
- Elbaz, Ahmed**  
HYPERTENSION, PORTAL
- Elbaz, Hosam S.**  
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- Eldash, Hanaa H.**  
PARASITIC DISEASES
- Eldesoky, Fatma**  
DERMATITIS, ATOPIC (microbiology)
- Elfert, Asem Ahmed**  
RIBAVIRIN (therapeutic uses)
- Elhag, Omer**  
DEFIBRILLATORS, IMPLANTABLE
- Elmahdy, Mohamad A.**  
ASTHMA (genetics)
- Elmosalami, Dalia M.**  
HEPATITIS B VIRUS
- Elsaïdy, Nagham**  
CICHLIDS (growth and development)
- Elsalhy, Mohamed**  
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- Elshehemy, Tharwat M.**  
HORSE DISEASES (etiology)
- Elshehemy, Tharwat M.**  
MASTITIS, BOVINE (diagnosis)
- Elshehery, Rasha H.**  
POLYMYXINS (therapeutic uses)
- Embarek, Mona Sallam**  
ACNE VULGARIS (therapy)
- Enany, Shymaa**  
HELICOBACTER PYLORI (pathogenicity)
- Enjoo, Seyed Ali**  
ETHICS, INSTITUTIONAL
- Ennis, Madeleine**  
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- Ergin, Mehmet**  
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- Errihani, H.**  
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- Ersen, Omer**  
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- Ersoy, Murat**  
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- Ertas, Izzettin**  
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- Esfandiary, Ali**  
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- Esmailbeig, Maryam**  
PLANTS, MEDICINAL
- Esmailpour, Mansour**  
LUNG NEOPLASMS
- Esmail, A.**  
THYROIDNEOPLASMS (radionuclideimaging)
- Esmail, Eslam Saber**  
RIBAVIRIN (therapeutic uses)
- Esmat, Gamal**  
HEPATITIS C, CHRONIC
- Esmat, Mamdouh M.**  
KIDNEY FAILURE, CHRONIC (complications)
- Esmat, Mamdouh, M.**  
CANDIDA (isolation and purification)



**Essa, Sahar**  
RESPIRATORY TRACT INFECTIONS  
(microbiology)

**Etedadialiabadi, Maryam**  
BREAST NEOPLASMS (radiotherapy)

**Ezzine, Heykal**  
GASTRIC OUTLET OBSTRUCTION

**FadulElahi, Thoraya**  
DIABETES, GESTATIONAL

**Fahmi, Abd El Gawad A.**  
HEPATITIS B (diagnosis)

**Faidah, Hani S.**  
INTESTINAL DISEASES, PARASITIC

**Faizul, Puteri N.A. Kamal**  
STUDENTS, MEDICAL

**Fallahzadeh, Hossein**  
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**Faller, Garrey**  
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**Farag, Ahmed**  
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**Faraji, Saba**  
HEAD AND NECK NEOPLASMS (pathology)

**Farhan, Farshid**  
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**Fariba, Farnaz**  
MYOCARDIAL INFARCTION (blood)

**Farjam, Arman**  
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**Farman, Sabir**  
HEPATITIS B (epidemiology)

**Farooq, Anum**  
DEPRESSIVE DISORDER, MAJOR (diagnosis)

**Farooq, Imran**  
ANXIETY

**Faruque, M. Omar**  
NICOTINAMIDE  
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**Fathala, Ahmed L.**  
CARDIOMYOPATHY, DILATED (diagnosis)

**Fatima, Syeda Sadia**  
OBESITY

**Fattah, Jalal Hamasalih**  
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**Filiz, Ali Ilker**  
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**Fiore, Joseph**  
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**Forgione, Antonello**  
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**Furkan, Aamir**  
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**Gad Allah, Alaa F.**  
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**Gad, Doaa M.**  
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**Galal, Fatma H.**  
CULEX

**Gamal, Rasha**  
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**Gamanagatti, Shivanand**  
BUDD-CHIARI SYNDROME

**Gamli, M.**  
REPERFUSION INJURY

**Gandomkar, Roghayeh**  
CURRICULUM

**Gawish, Awny A.**  
ENTEROCOLITIS, PSEUDOMEMBRANOUS  
(diagnosis)

**George, P.S.**  
LYMPHATIC DISEASES (diagnosis)

**George, S.A.**  
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**Gerges, Marian A.**  
DERMATITIS, ATOPIC (microbiology)

**Gerges, Shawkat S.**  
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**Ghadimi, Zahra**  
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**Ghaffar, Abdul**  
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**Ghaffar, Najma**  
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**Ghafoor, Rahat**  
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**Ghafouri Fard, Soudeh**  
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**Ghazvini, Ali**  
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**Ghazy, Alaa**  
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**Ghissassi, I.**  
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- Ghonemy, Soheir**  
DERMATITIS, ATOPIC (microbiology)
- Ghorpade, Arun G.**  
CARDIOVASCULAR DISEASES (epidemiology)
- Ghédira, H.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Gianluca, Sampogna**  
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- Girisgin, Abdullah Sadik**  
PAIN MEASUREMENT
- Goel, S.**  
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- Goh, Bak Leong**  
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- Gohar, Maha K.**  
RHINITIS, ALLERGIC (etiology)
- Gonnella, Joseph S.**  
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- Guild, Ralph T.**  
GASTROINTESTINAL HEMORRHAGE
- Gul, Pashmina**  
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- Gulec, Bulent**  
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- Gupta, S.**  
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- Gurav, Abhijit N.**  
DULOXETINE HYDROCHLORIDE (adverse effects)
- Guraya, Salman Y.**  
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- Haas, Thomas A.**  
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- Habib, Adnan A.**  
DENTAL PULP CAVITY
- Habibian, Mostafa**  
LYMPHOMA (drug therapy)
- Haddad, Fares Halem**  
METABOLIC SYNDROME X (epidemiology)
- Haddad, Peyman**  
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- Hadi, Naila Irum**  
ORAL SUBMUCOUS FIBROSIS
- Haghdoost, Ali Akbar**  
SEXUALLY TRANSMITTED DISEASES (epidemiology)
- Haghighat, Mahmood**  
LIVER DISEASES (pathology)
- Hagrass, Hoda A.**  
DERMATITIS, ATOPIC (microbiology)  
PULMONARY DISEASE, CHRONIC  
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- Haider, Irfan**  
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- Hajar, Rachel**  
HISTORY OF MEDICINE
- Hajir, M.**  
ACUTE KIDNEY INJURY
- Hamad, Adel K. S.**  
DEFIBRILLATORS, IMPLANTABLE
- Hamad, Rabab Salem**  
SCHISTOSOMIASIS MANSONI
- Hamada, Shadia F.**  
CRYPTOSPORIDIUM PARVUM (immunology)
- Hamada, Tsuyoshi**  
SELF EXPANDABLE METALLIC STENTS
- Hamano, Tetsuya**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE
- Hamed, Mohamed R.**  
HEPACIVIRUS (genetics)
- Hamoda, Hassan A.**  
MASTITIS, BOVINE (diagnosis)
- Hamzaoui, Lamine**  
GASTRIC OUTLET OBSTRUCTION
- Hamzeh, Behrooz**  
ACCIDENTS, TRAFFIC (mortality)
- Han, Yue**  
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- Hannan, Mohammed**  
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- Haqawi, Ibrahim A.**  
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- Haque, Anwar Ul**  
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- Haque, Muhammad Faiyaz Ul**  
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- Hasan, Mujtaba**  
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- Hasanzadeh, Hadi**  
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- Hashemi, Farnaz Amouzgar**  
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- Hashemi, Neda**  
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- Hassan, Amal A.**  
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- Hassan, Azza**  
HELICOBACTER PYLORI
- Hassan, Ehsan H.**  
HELICOBACTER PYLORI
- Hassan, Hosam A.**  
ANXIETY
- Hassan, Ihsan Abdel Sabour**  
ACNE VULGARIS (therapy)
- Hassan, Mona Amin**  
ACNE VULGARIS (therapy)
- Hassan, Rania A.**  
STAPHYLOCOCCUS (drug effects)
- Hassan, Sehar un Nisa**  
MATERNAL HEALTH
- Hassan, Zahid**  
NICOTINAMIDE  
PHOSPHORIBOSYLTRANSFERASE (blood)
- Hassanin, Zakaria H.**  
MEAT PRODUCTS (microbiology)
- Hatam, Nahid**  
LYMPHOMA (drug therapy)
- Hatanak, Simon Aiko**  
DIABETES MELLITUS, TYPE 1
- Hayat, Aliasghar**  
EDUCATION, PROFESSIONAL
- Helal, Mohamed S.**  
PREBIOTICS
- Hersi, Ahmad S.**  
DEFIBRILLATORS, IMPLANTABLE
- Hesampour, Maryam**  
STUDENTS, MEDICAL
- Hisam, Aliya**  
ANOREXIA NERVOSA (epidemiology)
- Hodhod, Ahmed A.**  
FOOT-AND-MOUTH DISEASE (genetics)
- Hojat, Mohammadreza**  
EMPATHY
- Hokkam, E.N.**  
WILMS TUMOR (surgery)
- Honar, Naser**  
LIVER DISEASES (pathology)
- Hoo, Fan Kee**  
ACINETOBACTER BAUMANNII
- Horasanli, E.**  
REPERFUSION INJURY
- Hosseini, Ahmad Zavarán**  
COLONIC NEOPLASMS
- Hosseini, Gilas**  
PARTICULATE MATTER
- Hosseini, Seyed Mehdi**  
STREPTOCOCCUS PNEUMONIAE
- Hosseini, Seyed Vahid**  
COLITIS, ULCERATIVE
- Hu, Liang**  
ENTERAL NUTRITION
- Huang, Qing Yu**  
STENTS
- Hussain, Ghulam**  
AORTIC DISEASES
- Hussain, Ibrahim B.**  
PERITONITIS
- Hussain, Saeed K.**  
TOXOPLASMOSIS
- Hussain, Shahida**  
TUBERCULOSIS, PULMONARY
- Hussein, Heba A.**  
FOOT-AND-MOUTH DISEASE (immunology)
- Hussein, Hussein A.**  
HEMORRHAGIC DISEASE VIRUS, RABBIT  
(genetics)
- Hussein, Mohamed A.**  
PHLEBOTOMUS
- Hussien, Salah M. M.**  
ENTEROBIOSIS
- Ibrahim, Abdallah**  
BABESIOSIS
- Ibrahim, Madiha S.**  
DIARRHEA (veterinary)  
FOOT-AND-MOUTH DISEASE (genetics)
- Ibrahim, Maggie A.**  
STREPTOCOCCUSPNEUMONIAE (drug effects)
- Ibrahim, Nahla Khamis**  
DYSMENORRHEA (epidemiology)
- Ibrahim, Nasrien**  
ANEURYSM, FALSE (diagnosis)
- Ibrahim, Siti F.**  
STUDENTS, MEDICAL
- Ibrahim, Wesam A.**  
MENINGITIS, BACTERIAL (complications)
- Iftikhar, Syeda Fatima**  
HAND DISINFECTION
- Ihsan, Sara**  
MOUTH NEOPLASMS

**Ihtesham, Rabiya**  
HAND DISINFECTION

**Ikarashi, Yuichi**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE

**Imaduddin, Syed**  
CHOLECYSTECTOMY

**Imanieh, Mohammad Hadi**  
LIVER DISEASES (pathology)

EDUCATION, MEDICAL

**Imran, Muhammad**  
HEPATITIS C, CHRONIC

**Inal, Berrin Belcik**  
VITAMIN D DEFICIENCY

**Inam, Faiza**  
HAND DISINFECTION

**Iqbal, Amina**  
SLEEP INITIATION AND MAINTENANCE  
DISORDERS (etiology)

**Iqbal, Erum**  
STRESS, PSYCHOLOGICAL

SELF MEDICATION

**Iqbal, Khalid**  
PARATHYROID NEOPLASMS (therapy)

**Iqbal, Mohammad Perwaiz**  
BIOMEDICAL RESEARCH

**Iqbal, Shaukat**  
IMMUNIZATION

**Iram, Shagufta**  
TUBERCULOSIS, PULMONARY

**Irfan, Farhana**  
CONTRACEPTION, POSTCOITAL

**Isayama, Hiroyuki**  
SELF EXPANDABLE METALLIC STENTS

**Ishaque, Aiesha**  
INFLUENZA, HUMAN

**Ishratullah**  
HEART BLOCK

**Ismail, Mohamed I.**  
MASTITIS, BOVINE (diagnosis)

**Ismail, Noor Akmal Shareela**  
PROBLEM-BASED LEARNING

**Ismail, Shaiful B.**  
HEALTH PROMOTION

**Iyioku, Ugah Uchenna**  
IVERMECTIN (therapeutic uses)

**Izadi, Nazanin**  
ZINC OXIDE

**Jadhav, Prashant D.**  
DULOXETINE HYDROCHLORIDE (adverse  
effects)

**Jafari, Abdosaleh**  
LYMPHOMA (drug therapy)

**Jafari, Mohamad Javad**  
HEAT STRESS DISORDERS

**Jafari, Sattar**  
GASTROINTESTINAL NEOPLASMS

**Jahan, Farhana A.**  
NICOTINAMIDE  
PHOSPHORIBOSYLTRANSFERASE (blood)

**Jalali, Farzad**  
GENETIC THERAPY

**Jalili, Mohammad**  
CURRICULUM

**Jamali, Raza**  
STRESS, PSYCHOLOGICAL  
SELF MEDICATION

**Jamil, Humera**  
BODY MASS INDEX

**Jan, Muneebullah**  
IMMUNIZATION

**Janahiraman, Sivakami**  
ACINETOBACTER BAUMANNII

**Javaherizadeh, Hazhir**  
LIVER DISEASES (pathology)

**Jawadi, Ayman H.**  
CLUBFOOT

**Jayasree, Anandabhavan Kumaran**  
TOBACCO USE (epidemiology)

**Jayasree, K.**  
LYMPHATIC DISEASES (diagnosis)

**Jnr., G.O. Abdulrahman**  
BREAST NEOPLASMS (drug therapy)

**Jooya, Parisa**  
LIVER DISEASES (pathology)

**Julka, PK**  
LUNG NEOPLASMS

**Jurair, Humaira**  
ANALGESIA

**Kabir, Fahmida**  
NICOTINAMIDE  
PHOSPHORIBOSYLTRANSFERASE (blood)

**Kacem, K.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL

- Kadam, Nilima S.**  
DULOXETINE HYDROCHLORIDE (adverse effects)
- Kaka, Wesam Amjad**  
APPENDICITIS (diagnosis)
- Kalaji, Mohammad N.**  
DENTAL PULP CAVITY
- Kaleli, Suleyman**  
DIABETES MELLITUS
- Kamal, Amany Mohamed**  
PARASITES
- Kamali, Kianoush**  
SEXUALLY TRANSMITTED DISEASES (epidemiology)
- Kamali, Koorosh**  
ALZHEIMER DISEASE (genetics)
- Kammeruddin, Karim**  
HEPATITIS C, CHRONIC
- Kaplanoglu, Mustafa**  
FASTING
- Kapoor, Aditya**  
CARDIOMYOPATHY, HYPERTROPHIC
- Karami, Manoochehr**  
STREPTOCOCCUS PNEUMONIAE
- Karateke, Atilla**  
FASTING
- Karim, Syed Irfan**  
CONTRACEPTION, POSTCOITAL
- Karimi, Niloofer**  
BREAST NEOPLASMS
- Karimpourian, Arezo**  
DIABETES MELLITUS, TYPE 1 (epidemiology)
- Kasem, Samy**  
FOOT-AND-MOUTH DISEASE (genetics)
- Kassem, Hamed H.**  
NEMATODE INFECTIONS
- Kausar, Rukhsana**  
DEPRESSIVE DISORDER, MAJOR (diagnosis)
- Kaveh, Mohammad Hossein**  
STUDENTS, MEDICAL
- Kaviani, Ahmad**  
BREAST NEOPLASMS
- Kavlak, Oya**  
ADAPTATION, PSYCHOLOGICAL
- Kavosi, Zahra**  
ETHICS, INSTITUTIONAL HEALTH
- Khadadah, Mousa**  
RESPIRATORY TRACT INFECTIONS (microbiology)
- Khader, Adel M.**  
HORSE DISEASES (etiology)
- Khadr, Adel M.**  
MASTITIS, BOVINE (diagnosis)
- Khalid, Adeela**  
DEPRESSIVE DISORDER, MAJOR (diagnosis)
- Khalid, Mohamad Azrul**  
KIDNEY FAILURE, CHRONIC
- Khalid, Najeab**  
ANXIETY
- Khalifa, Reham Ali Ahmed**  
MENINGITIS, BACTERIAL (diagnosis)
- Khalil, Marwa M.**  
ZINC (blood)
- Khalil, Samy A.**  
FOOT-AND-MOUTH DISEASE (immunology)
- Khalil, Waleed F.**  
PREBIOTICS
- Khan, Aftab Ahmed**  
COMPOSITE RESINS
- Khan, Aimal**  
SELF MEDICATION
- Khan, Imran**  
NICOTINAMIDE PHOSPHORIBOSYLTRANSFERASE (blood)
- Khan, Junaid Ali**  
SLEEP INITIATION AND MAINTENANCE DISORDERS (etiology)
- Khan, M Shahbaz**  
IMMUNIZATION
- Khan, Muhammad**  
BURSITIS (therapy)
- Khan, Nashi**  
DEPRESSIVE DISORDER, MAJOR (diagnosis)
- Khan, Shahul Hameed**  
DEFIBRILLATORS, IMPLANTABLE
- Khan, Shandana Ali**  
EDUCATION, MEDICAL (trends)
- Khan, Soban Q.**  
ANXIETY
- Khan, Tehmas**  
BODY MASS INDEX
- Kharwar, Rajiv Bharat**  
MITRAL VALVE (abnormalities)

- Khatab, Mona A.**  
STAPHYLOCOCCUS (drug effects)
- Khedr, Mohammed A.**  
HEPATITIS C, CHRONIC (genetics)
- Khorrami, Samaneh**  
COLONIC NEOPLASMS
- Khorshid, Hamid Reza Khorram**  
ALZHEIMER DISEASE (genetics)
- Khoshhal, Khalid I.**  
CONSANGUINITY
- Khuder, Saadia Ahmed**  
DIABETES MELLITUS
- Kilci, O.**  
REPERFUSION INJURY
- Kim, Dae Yoo**  
FEMORAL NECK FRACTURES
- Kim, Joo Yong**  
FEMORAL NECK FRACTURES
- Kiran, Zareen**  
PULMONARY DISEASE, CHRONIC  
OBSTRUCTIVE
- Kiris, Abdul Kadir**  
SLEEP APNEA, OBSTRUCTIVE
- Kirrella, Ghada A.**  
CICHLIDS (growth and development)
- Kizilci, Esra**  
SPACE MAINTENANCE, ORTHODONTIC
- Koc, Bayram**  
SERUM AMYLOID P-COMPONENT
- Koike, Kazuhiko**  
SELF EXPANDABLE METALLIC STENTS
- Kokhaei, Parviz**  
BREAST NEOPLASMS
- Kong, Gyu Min**  
FEMORAL NECK FRACTURES
- Kong, Yong Gang**  
EPISTAXIS (therapy)
- Korzeniewski, Krzysztof**  
INTESTINAL DISEASES, PARASITIC  
(epidemiology)
- Kostecka, Malgorzata**  
FATTY ACIDS
- Kouhpayeh, Seyed Amin**  
PLANTS, MEDICINAL
- Krimmel, Jeffrey D.**  
ACIDOSIS, LACTIC
- Kumar, Dileep**  
INTRA-ARTICULAR FRACTURES
- Kumbhare, S.**  
PLASMACYTOMA (diagnosis)
- Kurt, Raziye Keskin**  
FASTING
- Labib, Nargis Albert**  
PHLEBOTOMUS
- Lakhal, R.B.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Lankarani, Kamran Bagheri**  
ACCIDENTS, TRAFFIC (mortality)
- Larizadeh, Mohammad Hassan**  
HEAD AND NECK NEOPLASMS
- Lass, Anna**  
INTESTINAL DISEASES, PARASITIC  
(epidemiology)
- Latif, Razia**  
INFLUENZA, HUMAN
- Latiff, Latiffah A.**  
KIDNEY FAILURE, CHRONIC
- Lebda, Mohamed A.**  
LIVER CIRRHOSIS (veterinary)
- Li, Hai xiang**  
MYOPIA
- Li, Xiaofeng**  
TRANEXAMIC ACID (pharmacology)
- Li, Zhonghua**  
BURNS
- Liaquat, Aneela**  
TUBERCULOSIS, PULMONARY
- Lim, Christopher Thiam Seong**  
KIDNEY FAILURE, CHRONIC
- Linghu, Shao rong**  
MYOPIA
- Liu, Tai xiang**  
MYOPIA
- Liu, Wei**  
TRANEXAMIC ACID (pharmacology)
- Lopez Candales, Angel**  
BUNDLE-BRANCH BLOCK  
ANEURYSM, FALSE (diagnosis)
- Lv, Peng Ju**  
LUNG NEOPLASMS (genetics)
- Maddah, Afsane**  
BREAST NEOPLASMS
- Madkour, Lamiaa A.**  
POLYMYXINS (therapeutic uses)
- Mafi, Ahmad Reza**  
STOMATITIS (prevention and control)

- Mahboobi, Nastaran**  
MULTIPLE SCLEROSIS (diagnosis)
- Mahbudi, Ali**  
ETHICS, INSTITUTIONAL
- Mahida, Khalid Hussain**  
PARATHYROID NEOPLASMS (therapy)
- Mahmood, Ayesah**  
MATERNAL HEALTH
- Mahmood, Laila**  
SLEEP INITIATION AND MAINTENANCE DISORDERS (etiology)
- Mahmoud, Abdel Kerim A.**  
MASTITIS, BOVINE (diagnosis)
- Mahmoud, Mostafa A.**  
TURTLES (growth and development)  
ANIMALS, ZOO (microbiology)
- Mahmoud, Olaa**  
SCHISTOSOMIASIS MANSONI
- Majeed, Numan**  
PULMONARY DISEASE, CHRONIC  
OBSTRUCTIVE
- Majid, N.**  
BEVACIZUMAB (adverse effects)
- Maleki, Afshin**  
PARTICULATE MATTER
- Malekzadeh, Mona**  
RECTAL NEOPLASMS
- Malekzadeh, Reza**  
COLONIC NEOPLASMS
- Malik, A.**  
LUNG NEOPLASMS
- Malik, Mohammad**  
HELICOBACTER PYLORI
- Malik, Sajid**  
MUSCULOSKELETAL ABNORMALITIES
- Mamji, Farooqi**  
INTRA-ARTICULAR FRACTURES
- Mandour, Abdel Wahab A.**  
LIVER CIRRHOSIS (veterinary)
- Mani, Aliyu U.**  
FOOT-AND-MOUTH DISEASE (prevention and control)
- Mansouri, R.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Maracy, Mohamad Reza**  
HEAT STRESS DISORDERS
- Marafi, F.**  
THYROID NEOPLASMS (radionuclide imaging)
- Marbin, Rasim Yousif**  
WOUND CLOSURE TECHNIQUES
- Mashhadi, Syed Fawad**  
ANOREXIA NERVOSA (epidemiology)
- Mashour, Abdrabou N.**  
COLORECTAL NEOPLASMS
- Matin, Behzad Karami**  
ACCIDENTS, TRAFFIC (mortality)
- Maziar, Asghar**  
BREAST NEOPLASMS (diagnosis)
- Meddeb, B.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Medhioub, Mouna**  
GASTRIC OUTLET OBSTRUCTION
- Mehmood, Abid**  
SALIVA
- Mehmood, Tahir**  
PRENATAL CARE
- Mehrjoo, Zohreh**  
ALZHEIMER DISEASE (genetics)
- Mehrzaad, Raman**  
DIVERTICULUM
- Memar, Bahram**  
LYMPHOMA, NON-HODGKIN (pathology)
- Memon, Abdul Shakoor**  
OBESITY
- Memon, Babar**  
DIVERTICULUM
- Metkari, Suryakant**  
DULOXETINE HYDROCHLORIDE (adverse effects)
- Metwally, Ali**  
DIARRHEA (veterinary)
- Mikhail, Hany M.S.**  
COLORECTAL NEOPLASMS
- Miller, Brian Edward**  
BUNDLE-BRANCH BLOCK
- Mirghani, Hyder O.**  
SLEEP WAKE DISORDERS
- Mirshafiey, Abbas**  
HUMAN PAPILLOMAVIRUS 16
- Mirzazadeh, Azim**  
CURRICULUM
- Mishra, Suprav**  
DIVERTICULUM
- Mitsunaga, Atsushi**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE

- Mitsunaga, Yutaka**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE
- Mizuno, Suguru**  
SELF EXPANDABLE METALLIC STENTS
- Mogahed, Engy A.**  
LIPID METABOLISM, INBORN ERRORS
- Moghadam, Reza Nafis**  
SUBMANDIBULAR GLAND NEOPLASMS
- Moghadam, Saede Atarbashi**  
LYMPHOMA (epidemiology)
- Moghim, Minoosh**  
GASTROINTESTINAL NEOPLASMS
- Mohagheghi, Fathollah**  
LYMPHOMA, B-CELL
- Mohagheghi, Taher**  
LYMPHOMA, B-CELL
- Mohamed, Mai**  
CROSS INFECTION (etiology)
- Mohamed, Radi A.**  
CICHLIDS (growth and development)
- Mohamed, Tamer**  
CANDIDA (isolation and purification)  
KIDNEY FAILURE, CHRONIC (complications)
- Mohamed, Tan Lucien H.**  
CARDIOMYOPATHY, DILATED (diagnosis)
- Mohammad, Abdallah E.**  
DICROCOELIASIS
- Mohammad, Abeer**  
BABESIOSIS
- Mohammad, Haya**  
ORAL SUBMUCOUS FIBROSIS
- Mohammadbeigi, Abolfazl**  
HEALTH
- Mohammed, Ibrahim D.**  
FOOT-AND-MOUTH DISEASE (prevention and control)
- Mohasseli, Ali Sadeghi**  
MYOCARDIAL INFARCTION (blood)
- Moheet, Imran A.**  
ANXIETY
- Mohran, Zakaria**  
HYPERTENSION, PORTAL
- Mohseni, Marzieh**  
ALZHEIMER DISEASE (genetics)
- Mohsin, Syed Fareed**  
COMPOSITE RESINS
- Mohtashami, Azade**  
PROPOLIS (therapeutic uses)
- Moinuddin**  
ANEMIA, IRON-DEFICIENCY
- Mokhtari, Sepideh**  
LYMPHOMA (epidemiology)
- Momayyezi, Mahdieh**  
LIFE STYLE
- Momayyezi, Mohammad**  
LIFE STYLE
- Momeni, Mohsen**  
PROFESSIONALISM
- Moneer, M.**  
BREAST NEOPLASMS
- Montasser, Iman Fawzy**  
MENINGITIS, BACTERIAL (diagnosis)
- Moosavizadeh, Ahmad**  
RECTAL NEOPLASMS
- Moradi, Leila**  
STUDENTS, MEDICAL
- Moradi, Mehdi**  
MYOCARDIAL INFARCTION (blood)
- Morsy, Ayman T. A.**  
ONCHOCERCIASIS
- Morsy, Tosson A.**  
PHLEBOTOMUS  
CRYPTOSPORIDIUM PARVUM (immunology)  
ONCHOCERCIASIS
- Morsy, Tosson Aly**  
BABESIOSIS
- Mortazavi, Nafiseh**  
HEAD AND NECK NEOPLASMS (pathology)  
PITUITARY NEOPLASMS (diagnosis)
- Mortzavi, Seyed Bagher**  
HEAT STRESS DISORDERS
- Moslemi, Dariush**  
GENETIC THERAPY
- Mostafa, Amr B.**  
ANTIPARASITIC AGENTS
- Mostafa, Heba I.**  
MALARIA
- Mostafa, Zeinab M.**  
HELICOBACTER PYLORI
- Motevalli, Fatemeh**  
HUMAN PAPILLOMAVIRUS 16
- Moursi, Mohamed K.**  
PREBIOTICS



- Mousavi, Seyed Reza**  
NEUROENDOCRINE TUMORS (diagnosis)
- Mowla, Seyed Javad**  
COLONIC NEOPLASMS
- Mrabti, H.**  
BEVACIZUMAB (adverse effects)
- Mumtaz, Sara**  
MUSCULOSKELETAL ABNORMALITIES
- Muttaqillah, Najihan Abdul Samat**  
ENTEROBACTERIACEAE
- Nafee, Amany M.**  
STREPTOCOCCUS PNEUMONIAE (drug effects)
- Nagy, Faten**  
SCHISTOSOMIASIS MANSONI
- Najafi, Farid**  
ACCIDENTS, TRAFFIC (mortality)
- Najafi, Mohsen Fathi**  
PROPOLIS (therapeutic uses)
- Najmabadi, Amin**  
ALZHEIMER DISEASE (genetics)
- Najmabadi, Hossein**  
ALZHEIMER DISEASE (genetics)
- Nakai, Yousuke**  
SELF EXPANDABLE METALLIC STENTS
- Naqvi, Rubina**  
PLASMODIUM VIVAX
- Narain, Varun Shankar**  
MITRAL VALVE (abnormalities)  
CORONARY VESSEL ANOMALIES (diagnosis)
- Narciso, Sckiavon Janainaluz**  
DIABETES MELLITUS, TYPE 1
- Naseer, Uzma**  
TISSUE EXPANSION
- Nasirian, Maryam**  
SEXUALLY TRANSMITTED DISEASES  
(epidemiology)
- Nayak, N.**  
LYMPHATIC DISEASES (diagnosis)
- Naz, Sadia**  
EDUCATION, MEDICAL (trends)
- Nazaraian, Morteza**  
GASTROINTESTINAL NEOPLASMS
- Nazer, L.**  
ACUTE KIDNEY INJURY
- Nedae, Hasnali**  
BREAST NEOPLASMS
- Nejad, Leili Hashemi**  
GASTROINTESTINAL NEOPLASMS
- Neji, H.B.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Nerkiz, Polat**  
SERUM AMYLOID P-COMPONENT
- Ngo, Elmar**  
ESOPHAGEAL PERFORATION
- Nia, Mohammad Javad Ebrahimi**  
PROFESSIONALISM
- Nishino, Takayoshi**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE
- Nizamani, Waseem Mehmood**  
KIDNEY (ultrasonography)  
MANDIBULAR CONDYLE (pathology)  
BREAST NEOPLASMS
- Nnaemeka, Alo Moses**  
IVERMECTIN (therapeutic uses)
- Nolden Hoverath, Silke**  
MULTIPLE SCLEROSIS (diagnosis)
- Noman, Muhammad**  
SLEEP INITIATION AND MAINTENANCE  
DISORDERS (etiology)
- Norozi, Amir**  
BREAST NEOPLASMS (radiotherapy)
- Nounou, Mohammed A.**  
NON-ALCOHOLIC FATTY LIVER DISEASE
- Novin, Kambiz**  
HEAD AND NECK NEOPLASMS (pathology)  
PITUITARY NEOPLASMS (diagnosis)
- Obeidat, Ahmad Abdallah**  
METABOLIC SYNDROME X (epidemiology)
- Oboh, Ganiyu**  
BASSIA SCOPARIA
- Ofori, Emmanuel A.**  
INTUBATION
- Okcu, Ozlem**  
PNEUMONIA, VENTILATOR-ASSOCIATED
- Okpara, Elom Michael**  
IVERMECTIN (therapeutic uses)
- Okwara, Benson Uchekukwu**  
HIV
- Omar, Khairani**  
HEALTH PROMOTION
- Omar, Nesreen Salah Omar**  
DIABETIC FOOT (microbiology)
- Omran, Eman Kh.**  
ENTEROBIASIS
- Omranipour, Ramesh**  
BREAST NEOPLASMS

- Onalan, Orhan**  
SLEEP APNEA, OBSTRUCTIVE
- Oresanja, Omobolaji Oluwole**  
HIV
- Orimadegun, Adebola Emmanuel**  
MALARIA, FALCIPARUM (blood)
- Orimadegun, Bose Etaniamhe**  
MALARIA, FALCIPARUM (blood)
- Ornek, D.**  
REPERFUSION INJURY
- Osime, Evarista Odaburhine**  
HIV
- Osman, Ahmed**  
HEPATITIS C, CHRONIC
- Othman, Noordin**  
HEALTH PROMOTION
- Othman, Noralim A.**  
STUDENTS, MEDICAL
- Owais, Komal**  
HEART BLOCK
- Owayed, Abdullah**  
RESPIRATORY TRACT INFECTIONS  
(microbiology)
- Oyeeye, Sunday I.**  
BASSIA SCOPARIA
- Ozalp, Nurhan**  
SPACE MAINTENANCE, ORTHODONTIC
- Ozcelik, Berrin**  
SPACE MAINTENANCE, ORTHODONTIC
- Ozciftci, S.**  
REPERFUSION INJURY
- Ozdemir, Yavuz**  
COLONIC NEOPLASMS
- Ozgurhan, Gamze**  
VITAMIN D DEFICIENCY
- Ozkan, Zeynep**  
THYROID HORMONES (blood)
- Ozkeskin, Ali**  
THYROID HORMONES (blood)
- P'ng, Hon Shen**  
ACINETOBACTER BAUMANNII
- Packer, Clifford D.**  
ACIDOSIS, LACTIC
- Padhy, Rabindra N.**  
PLANTS, MEDICINAL  
FLUOROQUINOLONES
- Pak, Fatemeh**  
BREAST NEOPLASMS
- Pakfetrat, Atessa**  
PROPOLIS (therapeutic uses)
- Pan, Jirong**  
LEIOMYOMA
- Pande, Arindam**  
CATHETERIZATION, PERIPHERAL (adverse effects)
- Pande, SC**  
BREAST NEOPLASMS (pathology)
- Parate, A.**  
PLASMACYTOMA (diagnosis)
- Park, Dae Hyun**  
FEMORAL NECK FRACTURES
- Parlak, Adem**  
SERUM AMYLOID P-COMPONENT
- Patil, Rahul A.**  
DULOXETINE HYDROCHLORIDE (adverse effects)
- Patil, Shailesh K.**  
CATHETERIZATION, PERIPHERAL (adverse effects)
- Paul, Lipsy**  
TOBACCO USE (epidemiology)
- Paul, Sam**  
TOBACCO USE (epidemiology)
- Payandeh, Mehrdad**  
URINARY BLADDER NEOPLASMS  
(epidemiology)
- Pedram, Pardis**  
STOMATITIS (prevention and control)
- Pekgor, Ahmet**  
DIABETES MELLITUS
- Pongpanich, Sathirakorn**  
PRENATAL CARE
- Poorolajal, Jalal**  
STREPTOCOCCUS PNEUMONIAE
- Pourtaghi, Gholamhossein**  
LUNG NEOPLASMS
- Pradhan, Akshyaya**  
MITRAL VALVE (abnormalities)  
CORONARY VESSEL ANOMALIES (diagnosis)
- Premratan**  
MITRAL VALVE (abnormalities)
- Pugliese, Raffaele**  
MINIMALLY INVASIVE SURGICAL PROCEDURES
- Qamar, Khansa**  
ANEMIA, IRON-DEFICIENCY
- Qari, Faiza**  
DIABETIC KETOACIDOSIS

**Qiu, Huiying**  
FACTOR VIIA

**Qiu, Yan**  
BURNS

**Qu, Qi**  
BURNS

**Qureshi, Riaz**  
CONTRACEPTION, POSTCOITAL

**Rabia, Ibrahim**  
SCHISTOSOMIASIS MANSONI

**Radi, Dina Mohammed Adel**  
STOMACH NEOPLASMS

**Rafique, Kashif**  
GRANULOMATOSIS WITH POLYANGIITIS

**Raheel, Anjum**  
IMMUNIZATION

**Rahman, Mahmood Ur**  
ANOREXIA NERVOSA (epidemiology)

**Rahman, Md Mostafizur**  
ENTEROBACTERIACEAE

**Rajsheker, Srinivas**  
BUNDLE-BRANCH BLOCK

**Rakhsha, Afshin**  
GLIOMA (radiotherapy)

**Ramachandran, Vasudevan**  
ACINETOBACTER BAUMANNII

**Rashdan, Nagwa A.**  
CULEX

**Rashed, Reda**  
ANALGESIA, EPIDURAL (veterinary)

**Rath, GK**  
LUNG NEOPLASMS

**Rath, Shakti**  
FLUOROQUINOLONES

**Raza, Farheen**  
KIDNEY (ultrasonography)

BREAST NEOPLASMS

**Razavi, Zahra**  
DIABETES MELLITUS, TYPE 1 (epidemiology)

**Razzak, Rahila**  
CHOLECYSTECTOMY

**Rehman, Amra**  
POLYENDOCRINOPATHIES, AUTOIMMUNE

**Reiazi, Reza**  
BREAST NEOPLASMS (radiotherapy)

**Rezaei Tavirani, Mostafa**  
BREAST NEOPLASMS

**Rezaei, Satar**  
ACCIDENTS, TRAFFIC (mortality)

**Riaz, Ayesha**  
SELF MEDICATION

**Riaz, Hafiza Fizzah**  
MUSCULOSKELETAL ABNORMALITIES

**Rieker, Olaf**  
MULTIPLE SCLEROSIS (diagnosis)

**Roby, Noura Heikal**  
PHLEBOTOMUS

**Roshan, Suad**  
SALIVA

**Roshan, Valiollah Dabidi**  
BREAST NEOPLASMS

**Roughead, Elizabeth E.**  
HEALTH PROMOTION

**Roy, S.**  
LUNG NEOPLASMS

**Ruan, Changgeng**  
FACTOR VIIA

**Saad, Abdel Halim A.**  
ANTIPARASITIC AGENTS

**Saad, Mohammed A.**  
FOOT-AND-MOUTH DISEASE (immunology)

**Saad, Motaz**  
HELICOBACTER PYLORI

**Sabah, Ahmed Aly**  
DIABETES MELLITUS (parasitology)

**Sabbour, Hani**  
DEFIBRILLATORS, IMPLANTABLE

**Saber, Mahboobeh**  
EDUCATION, MEDICAL

ETHICS, INSTITUTIONAL

**Saber, Sameh**  
SCHISTOSOMIASIS MANSONI

**Sabir, H.**  
PLASMACYTOMA (diagnosis)

**Sabir, Omer**  
GRANULOMATOSIS WITH POLYANGIITIS

**Saboor, Muhammad**  
ANEMIA, IRON-DEFICIENCY

**Sabry, Reham**  
HEPACIVIRUS (pathogenicity)

**Sadeghi, Edris**  
URINARY BLADDER NEOPLASMS  
(epidemiology)

- Sadeghi, Masoud**  
URINARY BLADDER NEOPLASMS  
(epidemiology)
- Sadeghipur, Fatemeh**  
PROFESSIONALISM
- Sadeghniaat Haghighi, Khosro**  
ZINC OXIDE
- Sadek, F.M.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Sadighpour, Leyla**  
CURRICULUM
- Safal, Safal**  
CORONARY VESSEL ANOMALIES (diagnosis)
- Safar, Hebatalla H.**  
PARASITIC DISEASES
- Safarpour, Ali Reza**  
COLITIS, ULCERATIVE
- Safdar, Saba**  
INFLUENZA, HUMAN
- Sahito, Badaruddin**  
INTRA-ARTICULAR FRACTURES
- Sahu, Mahesh C.**  
AMYLOIDOSIS (diagnosis)
- Sajid, Nida**  
HEPATITIS C, CHRONIC
- Sajjad, Yumna**  
SLEEP INITIATION AND MAINTENANCE  
DISORDERS (etiology)
- Sakr, Mohamed**  
HYPERTENSION, PORTAL
- Salama, Iman I.**  
HEPATITIS B VIRUS
- Salarpour, Fatemeh**  
GASTROINTESTINAL NEOPLASMS
- Saleh, Ahmad Megahed Ahmad**  
BABESIOSIS  
PHLEBOTOMUS
- Salehi, Alireza**  
EDUCATION, MEDICAL
- Salem, George A.**  
GASTROINTESTINAL HEMORRHAGE
- Salim, Rania**  
HEMORRHAGIC DISEASE VIRUS, RABBIT  
(genetics)
- Salimi, Maryam**  
GASTROINTESTINAL NEOPLASMS
- Sallam, Thikra A.**  
ANEMIA, SICKLE CELL
- Samaha, Ibrahim A.**  
FISHES (microbiology)
- Sami, Samia M.**  
HEPATITIS B VIRUS
- Samiee, Farhad**  
BREAST NEOPLASMS
- Saqeb, Mohammad Mehdi**  
EDUCATION, MEDICAL
- Sari, Oktay**  
SERUM AMYLOID P-COMPONENT
- Sarkar, Achyut**  
CATHETERIZATION, PERIPHERAL (adverse  
effects)
- Schiavon, Leonardo de Iucca**  
DIABETES MELLITUS, TYPE 1
- Schmidt, Imre**  
HELICOBACTER PYLORI
- Schock, Bettina C.**  
CYSTIC FIBROSIS
- Seddighi, Afsoun**  
GLIOMA (radiotherapy)
- Seddighi, Amir Saied**  
GLIOMA (radiotherapy)
- Seifi Alan, Mahnaz**  
MULTIPLE MYELOMA (therapy)
- Semrin, Abdul Ilah M.**  
NON-ALCOHOLIC FATTY LIVER DISEASE
- Serin, Ozden N.**  
THYROID HORMONES (blood)
- Sethi, Rishi**  
MITRAL VALVE (abnormalities)  
CORONARY VESSEL ANOMALIES (diagnosis)
- Shabani, Mohammad**  
HEAD AND NECK NEOPLASMS
- Shafquat, Azam**  
DEFIBRILLATORS, IMPLANTABLE
- Shahani, Bshesham Kumar**  
MANDIBULAR CONDYLE (pathology)
- Shahbazi Gahrouei, Daryoush**  
BREAST NEOPLASMS (diagnosis)
- Shaheen, Amal Y.**  
DIABETES, GESTATIONAL
- Shahhoseini, Reza**  
LUNG NEOPLASMS
- Shahidi, Fatemeh**  
EDUCATION, MEDICAL

- Shahin, Hala F.**  
DAIRY PRODUCTS (microbiology)
- Shahmoradi, Behzad**  
PARTICULATE MATTER
- Shakeri, Mohammad Taghi**  
PROPOLIS (therapeutic uses)
- Shamsi, Roshanak**  
MULTIPLE MYELOMA (therapy)
- Shamsuddin, Ahmad Fuad**  
ACINETOBACTER BAUMANNII
- Shandiz, Fateme Homae**  
LYMPHOMA, NON-HODGKIN (pathology)
- Shankar, A.**  
LUNG NEOPLASMS
- Shaquizzaman, Mohammad**  
ANTICONSULTANTS
- Sharaf, Hend E.**  
PULMONARY DISEASE, CHRONIC  
OBSTRUCTIVE (genetics)
- Shareef, Mohamed Moustafa**  
STOMACH NEOPLASMS
- Sharifi, Gieve**  
PITUITARY NEOPLASMS (diagnosis)
- Sharshar, Ahmed**  
ANALGESIA, EPIDURAL (veterinary)
- Shehata, Atef**  
CANDIDA ALBICANS (pathogenicity)  
CROSS INFECTION (etiology)
- Sheikh, Shaffi Ahmed**  
ANXIETY
- Shekh Muhammed, Samira Salin**  
KIDNEY (ultrasonography)
- Shete, Abhijeet**  
DULOXETINE HYDROCHLORIDE (adverse  
effects)
- Shi, Rong**  
MYOPIA
- Shimada, Masahiko**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE
- Shirato, Izumi**  
CHOLANGIOPANCREATOGRAPHY,  
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- Shirbaghaee, Zeinab**  
HUMAN PAPILLOMAVIRUS 16
- Shoghy, Khaled**  
ANALGESIA, EPIDURAL (veterinary)
- Shrivastava, Prateek S.**  
CARDIOVASCULAR DISEASES (epidemiology)
- Shrivastava, Saurabh R.**  
CARDIOVASCULAR DISEASES (epidemiology)
- Siddiqui, Adel Zia**  
COMPOSITE RESINS
- Siddiqui, Salma**  
MATERNAL HEALTH
- Singh, R.**  
LUNG NEOPLASMS
- Singh, Satyajit**  
CARDIOMYOPATHY, HYPERTROPHIC
- Skaik, Younis Abdel Wahab**  
DATA INTERPRETATION, STATISTICAL
- Smolen, Agata**  
INTESTINAL DISEASES, PARASITIC  
(epidemiology)
- Soh, Melissa M.**  
STUDENTS, MEDICAL
- Soliman, Mohamed I.**  
ANTIPARASITIC AGENTS
- Somily, Ali M.**  
CULTURE MEDIA
- Sourati, Ainaz**  
RECTAL NEOPLASMS
- Srivastava, V.**  
LUNG NEOPLASMS
- Strebel, Hendrik**  
ESOPHAGEAL PERFORATION
- Sucullu, Ilker**  
COLONIC NEOPLASMS
- Sulong, Anita**  
ENTEROBACTERIACEAE
- Sultan, Doaa M.**  
ZINC (blood)
- Sultan, Hesham A.**  
HEMORRHAGICDISEASEVIRUS, RABBIT  
(genetics)
- Sultan, Intessar I.**  
DIABETES, GESTATIONAL
- Sun, Aining**  
FACTOR VIIA
- Sun, Xiao Yan**  
LUNG NEOPLASMS (genetics)
- Suriya, Muhammad Owais**  
ANXIETY
- Swain, Santosh K.**  
AMYLOIDOSIS (diagnosis)
- Swain, Shasank S.**  
PLANTS, MEDICINAL

- Sweidan, Raed**  
DEFIBRILLATORS, IMPLANTABLE
- Tabei, Seyed Ziaadin**  
ETHICS, INSTITUTIONAL
- Tagata, Tomoko**  
CHOLANGIOPANCREATOGRAPHY,  
ENDOSCOPIC RETROGRADE
- Taghavi, Seyed Alireza**  
COLITIS, ULCERATIVE
- Taha, Inass M.**  
DIABETES, GESTATIONAL
- Taha, Mohammad A. A.**  
ENTEROBIASIS
- Taha, Nabil M.**  
LIVER CIRRHOSIS (veterinary)
- Taherian, Aliakbar**  
BREAST NEOPLASMS
- Tahmtan, Mohammad Reza Barzegar**  
BREAST NEOPLASMS
- Takagi, Kaoru**  
SELF EXPANDABLE METALLIC STENTS
- Talaat, Nizar**  
COLORECTAL NEOPLASMS
- Tale, Ravi**  
PLASMACYTOMA (diagnosis)
- Tamim, Hani A.**  
CLUBFOOT
- Tang, Yaqiong**  
FACTOR VIIIA
- Tantawy, Enas A.**  
DERMATITIS, ATOPIC (microbiology)  
PULMONARY DISEASE, CHRONIC  
OBSTRUCTIVE (genetics)
- Tanvir, Imrana**  
GRANULOMATOSIS WITH POLYANGIITIS
- Tao, Ze Zhang**  
EPISTAXIS (therapy)
- Tarabees, Reda Z.**  
MEAT PRODUCTS (microbiology)
- Tari, Ritam Naik**  
DULOXETINE HYDROCHLORIDE (adverse  
effects)
- Tarif, Nauman**  
GRANULOMATOSIS WITH POLYANGIITIS
- Tariq, Hira**  
HAND DISINFECTION
- Tariq, SM.**  
INTRA-ARTICULAR FRACTURES
- Tavakoli, Mohammad Bagher**  
BREAST NEOPLASMS (diagnosis)
- Tawfeek, Manal A.**  
DIABETES, GESTATIONAL
- Tayyaba, Farhat ul ann**  
TISSUE EXPANSION
- Tekin, Abdullah**  
HEART RATE
- Tekin, Goknur**  
HEART RATE
- Temseh, Ashraf Gabr**  
DIABETES MELLITUS (parasitology)
- Teymouri, Pari**  
PARTICULATE MATTER
- Thabet, Amany G.**  
STREPTOCOCCUSPNEUMONIAE (drug effects)
- Thabet, Suzan**  
HELICOBACTER PYLORI
- Tiwari, V.**  
BREAST NEOPLASMS (pathology)
- Tofighi, Shahram**  
LUNG NEOPLASMS
- Tonkaboni, Arghavan**  
PROPOLIS (therapeutic uses)
- Torbati, Peyman**  
HEAD AND NECK NEOPLASMS (pathology)
- Torchyan, Armen A.**  
CULTURE MEDIA
- Torghabeh, Ali Emadi**  
LYMPHOMA, NON-HODGKIN (pathology)
- Touinsi, Hassen**  
GASTRIC OUTLET OBSTRUCTION
- Touseef, Mohammad**  
MUSCULOSKELETAL ABNORMALITIES
- Turel, Ozden**  
VITAMIN D DEFICIENCY
- Turkmen, Serdar**  
VITAMIN D DEFICIENCY
- Tytgat, Guido N.J.**  
GASTROENTEROLOGY
- Udoh, Usanga Victor**  
IVERMECTIN (therapeutic uses)
- Ugusman, Azizah**  
STUDENTS, MEDICAL
- Upadhyaya, S.**  
LUNG NEOPLASMS

**Usman, Ibrahim S.**  
FOOT-AND-MOUTH DISEASE (prevention and control)

**Usmani, S.**  
THYROID NEOPLASMS (radionuclide imaging)

**Uyar, Mehmet**  
PNEUMONIA, VENTILATOR-ASSOCIATED

**Vaezi, Marjan**  
GLIOMA (radiotherapy)

**Vahedi, Sajad**  
HEALTH

**Vaswani, Aneel Kumar**  
MANDIBULAR CONDYLE (pathology)

**Vehapoglu, Aysel**  
VITAMIN D DEFICIENCY

**Verma, Garima**  
ANTICONVULSANTS

**Verma, K.**  
BREAST NEOPLASMS (pathology)

**Vitry, Agnes I.**  
HEALTH PROMOTION

**Vosough, Fereshteh**  
GASTROINTESTINAL NEOPLASMS

**Wang, Xigong**  
LEIOMYOMA

**Wang, Xudong**  
BURNS

**Wang, Yinzhong**  
STOMACH NEOPLASMS

**Wang, Zhenyu**  
TRANEXAMIC ACID (pharmacology)

**Wasli, Mustafa A.**  
ANEMIA, SICKLE CELL

**Wasty, Wajahat Hussain**  
PARATHYROID NEOPLASMS (therapy)

**WHO Eastern Mediterranean Regional Office**  
RESPIRATORY DISTRESS SYNDROME, ADULT (epidemiology)  
TRAVEL  
INFLUENZA VACCINES  
CORONAVIRUS INFECTIONS (epidemiology)  
CONFLICT [PSYCHOLOGY]  
INFLUENZA, HUMAN (epidemiology)  
HEPATITIS A (epidemiology)  
DENGUE (epidemiology)  
MIDDLE EAST RESPIRATORY SYNDROME  
CORONAVIRUS  
ISLAM  
CHOLERA (prevention and control)  
CHOLERA (epidemiology)  
HEMORRHAGIC FEVERS, VIRAL (epidemiology)  
HEMORRHAGIC FEVER, CRIMEAN (prevention and control)

**Wu, Depei**  
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**Wu, Qian**  
FACTOR VIIA

**Wu, Xiaojin**  
FACTOR VIIA

**Wu, Ying**  
MAGNETIC RESONANCE IMAGING

**Xiao, Chang Wu**  
EPISTAXIS (therapy)

**Xu, Xingming**  
TRANEXAMIC ACID (pharmacology)

**Xu, Yu**  
EPISTAXIS (therapy)

**Yamani, Nikoo**  
RESEARCH

**Yang, Bo**  
BURNS

**Yang, Ren Qiang**  
STENTS

**Yap, Xian Hui**  
KIDNEY FAILURE, CHRONIC

**Yarbag, Abdulhekim**  
DIABETES MELLITUS

**Yasar, S. Mehmet**  
ANKLE INJURIES (therapy)

**Yasir, Shazia**  
HEART BLOCK

**Yateem, Mada A.**  
ANEMIA, SICKLE CELL

**Yayha, Norhayati**  
KIDNEY FAILURE, CHRONIC

**Yazar, Hayrullah**  
DIABETES MELLITUS

**Yeler, Mustafa Taner**  
THYROID HORMONES (blood)

**Yigitoglu, Sayime**  
ADAPTATION, PSYCHOLOGICAL

**Yin, Xiangdang**  
ENTERAL NUTRITION

**Yoshida, Shuhei**  
CHOLANGIOPANCREATOGRAPHY, ENDOSCOPIC RETROGRADE

**Younis, Kamilia**  
DIARRHEA (veterinary)

**Younus, Naila**  
KIDNEY (ultrasonography)  
ORAL SUBMUCOUS FIBROSIS

- Younus, Shumaila**  
KIDNEY (ultrasonography)  
ORAL SUBMUCOUS FIBROSIS
- Yousefi, Alireza**  
RESEARCH
- Youssef, Fatma M.**  
PREBIOTICS
- Youssef, Sawsan A.**  
ASTHMA (genetics)
- Yucel, Ergun**  
COLONIC NEOPLASMS
- Yusoff, Muhamad S.B.**  
PSYCHOLOGY, EDUCATIONAL
- Yussif, Mohammed**  
RIBAVIRIN (therapeutic uses)
- Yusuf, Noshin Wasim**  
TUBERCULOSIS, PULMONARY
- Zadeh, Jafar Hasan**  
STUDENTS, MEDICAL
- Zafar, Humaira**  
HEPATITIS B (epidemiology)
- Zaghlool, Dina A.**  
INTESTINAL DISEASES, PARASITIC
- Zaglool, Asmaa W.**  
MILK
- Zaheer, Sara**  
AORTIC DISEASES
- Zahmatkeshan, Mozghan**  
LIVER DISEASES (pathology)
- Zainabadi, Hasan Reza**  
EDUCATION, PROFESSIONAL
- Zakaria, H.M.**  
WILMS TUMOR (surgery)
- Zakaria, Mohammed A.**  
NON-ALCOHOLIC FATTY LIVER DISEASE
- Zakaria, O.M.**  
WILMS TUMOR (surgery)
- Zaky, Hosam A.**  
DEFIBRILLATORS, IMPLANTABLE
- Zaman, Junaid**  
CHOLECYSTECTOMY
- Zamiri, Reza Eghdam**  
GASTROINTESTINAL NEOPLASMS
- Zarrouk, M.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Zayed, Naglaa**  
HEPATITIS C, CHRONIC
- Zazi, Nayel Abd Elhamed**  
KIDNEY FAILURE, CHRONIC (complications)
- Zehra, Amtuz**  
ANEMIA, IRON-DEFICIENCY
- Zehra, Nosheen**  
KIDNEY (ultrasonography)
- Zeinodin, Hamidreza**  
ZINC OXIDE
- Zekri, Abdel Rahman N.**  
HEPATITIS C, CHRONIC
- Zhai, Jian Xia**  
LUNG NEOPLASMS (genetics)
- Zhang, Guobing**  
MAGNETIC RESONANCE IMAGING
- Zhang, Hao**  
MAGNETIC RESONANCE IMAGING
- Zhang, Jing Wei**  
LUNG NEOPLASMS (genetics)
- Zhang, Shu Dong**  
CYSTIC FIBROSIS
- Zhang, Weizhong**  
LEIOMYOMA
- Zhang, Zhengfu**  
LEIOMYOMA
- Zhang, Zhi**  
MAGNETIC RESONANCE IMAGING
- Zheng, Guangli**  
ENTERAL NUTRITION
- Zhu, Ming**  
MAGNETIC RESONANCE IMAGING
- Zohrei, Negar**  
HUMAN PAPILLOMAVIRUS 16
- Zohrevand, Amir Hossein**  
GLIOMA (radiotherapy)
- Zou, You**  
EPISTAXIS (therapy)
- Zriba, S.**  
LEUKEMIA, LYMPHOCYTIC, CHRONIC, B-CELL
- Zuberi, Bader Faiyaz**  
PULMONARY DISEASE, CHRONIC  
OBSTRUCTIVE





Appendix II

List of EMR Journals Indexed in IMEMR

(by country)



Journal	ISSN
<b>Afghanistan (2)</b>	
Afghan Medical Journal	N/A
AFJPH-Afghanistan Journal of Public Health	N/A
<b>Bahrain (3)</b>	
Arab Journal for Food and Nutrition	1608-8352
Bahrain Medical Bulletin	1012-8298
JBMS-Journal of the Bahrain Medical Society	1015-6321
<b>Egypt (140)</b>	
AAMJ-AI-Azhar Assiut Medical Journal	1687-1693
African Journal of Urology	1110-5704
Afro-Arab Liver Journal	1687-224X
Ain-Shams Journal of Forensic Medicine and Clinical Toxicology	1687-1030
Ain-Shams Medical Journal	0002-2144
AJAIC-Alexandria Journal of Anaesthesia and Intensive Care	N/A
AJM-Alexandria Journal of Medicine	2090-5068
Al-Azhar Journal of Dental Science	1110-6751
Al-Azhar Medical Journal	1110-0400
Alexandria Dental Journal	1110-015X
Alexandria Journal of Food Science and Technology	1687-3920
Alexandria Journal of Hepatogastroenterology	2090-1879
Alexandria Journal of Pediatrics	1687-9945
Alexandria Journal of Pharmaceutical Sciences	1110-1792
Alexandria Journal of Veterinary Science	1110-2407
Alexandria Medical Journal [The]	0516-5849
Annals of Pediatric Surgery	1687-4137
Applied Endocrinology in Egypt	1110-1776
Arab Family Health and Population	N/A
Arab Journal of Biotechnology	1110-6875
Arab Journal of Gastroenterology	1687-1979
Arab Journal of Laboratory Medicine [The]	1110-1822
ASJOG-Ain-Shams Journal of Obstetrics and Gynecology	1697-2193
ASNJ-Alexandria Scientific Nursing Journal	1687-3858
Assiut Medical Journal	1110-0494
Assiut University Bulletin for Environmental Researches	1110-6107
Assiut Veterinary Medical Journal	N/A

Journal	ISSN
Benha Medical Journal	1110-208X
Bulletin of Alexandria Thoracic Association	N/A
Bulletin of Faculty of Pharmacy-Cairo University	1110-0931
Bulletin of Faculty of Physical Therapy-Cairo University	1110-6611
Bulletin of High Institute of Public Health [The]	1110-0036
Bulletin of Pharmaceutical Sciences-Assiut University	1110-0052
Bulletin of the Faculty of Science-University of Alexandria	0568-9619
Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
Bulletin of the National Research Centre	1110-0591
Bulletin of the Ophthalmological Society of Egypt	0078-5342
Childhood and Development Quarterly	1110-8681
Clinical Diabetes	0891-8929
EDJ-Egyptian Dental Journal	0070-9484
Egyptian Heart Journal [The]	1110-2608
Egyptian Journal of Anatomy [The]	1110-2144
Egyptian Journal of Biomedical Engineering	1012-5558
Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
Egyptian Journal of Breastfeeding	N/A
Egyptian Journal of Bronchology [The]	1687-8426
Egyptian Journal of Cardiothoracic Anesthesia	1687-9090
Egyptian Journal of Cataract and Refractive Surgery [The]	N/A
Egyptian Journal of Chemistry	0449-2285
Egyptian Journal of Chest Diseases and Tuberculosis [The]	0422-7638
Egyptian Journal of Community Medicine [The]	1110-1865
Egyptian Journal of Dermatology and Andrology	1110-7650
Egyptian Journal of Diabetes [The]	N/A
Egyptian Journal of Food Science	1110-0192
Egyptian Journal of Genetics and Cytology	0046-161X
Egyptian Journal of Histology [The]	1110-0559
Egyptian Journal of Hospital Medicine [The]	1687-2002
Egyptian Journal of Immunology [The]	1110-4902
Egyptian Journal of Medical Human Genetics [The]	1110-8630
Egyptian Journal of Medical Laboratory Sciences	1110-5593

Journal	ISSN
Egyptian Journal of Medical Microbiology	1110-2179
Egyptian Journal of Microbiology	0022-2704
Egyptian Journal of Neonatology [The]	1110-8991
Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
Egyptian Journal of Nutrition	1687-1235
Egyptian Journal of Nutrition and Health	1687-7950
Egyptian Journal of Occupational Medicine	1110-1881
Egyptian Journal of Otolaryngology [The]	1012-5574
Egyptian Journal of Paediatrics [The]	1687-1677
Egyptian Journal of Pediatric Allergy and Immunology	1687-1642
Egyptian Journal of Pharmaceutical Sciences	0301-5068
Egyptian Journal of Physiological Sciences	0301-8660
Egyptian Journal of Psychiatry [The]	1110-1105
Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
Egyptian Journal of Surgery [The]	1110-1121
Egyptian Journal of Urology	1110-5712
Egyptian Journal of Veterinary Science	1110-0222
Egyptian Liver Journal	2090-6218
Egyptian Medical Journal of the National Research Center	1687-1278
Egyptian Orthodontic Journal	1110-435x
Egyptian Orthopaedic Journal [The]	1110-1148
Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
Egyptian Population and Family Planning Review [The]	N/A
Egyptian Rheumatologist [The]	1110-1164
Egyptian Rheumatology and Rehabilitation	1110-161X
Egyptian Science Magazine [The]	1687-3815
EJB-Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
EJENTAS-Egyptian Journal of ENT and Allied Sciences	2090-0740
EMHJ-Eastern Mediterranean Health Journal	1020-3397
Gazette of the Egyptian Paediatric Association [The]	1110-6638
Health Services Journal of the Eastern Mediterranean Region	1014-9899
JESN-Journal of Egyptian Society of Nephrology [The]	N/A
Journal of Advanced Research	2090-1232
Journal of Childhood Studies	2090-0619
Journal of Drug Research of Egypt	0085-2406

Journal	ISSN
Journal of Hepatology, Gastroenterology and Infectious Diseases	1110-0796
Journal of Legal Medicine and Forensic Sciences [The]	1110-6468
Journal of the Arab Society for Medical Research	1687-4293
Journal of the Egyptian Medical Association [The]	0013-2411
Journal of the Egyptian National Cancer Institute	1110-0362
Journal of the Egyptian Public Health Association [The]	0013-2446
Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245
Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216
Journal of the Egyptian Society of Parasitology	1110-0583
Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A
Journal of the Egyptian Society of Toxicology	1110-127X
Journal of the Medical Research Institute-Alexandria University	1110-0133
JPC-Journal of Pediatric Club [The]	N/A
Kasr El Aini Journal of Surgery	0022-9237
Kasr El-Aini Medical Journal	N/A
Kidney Forum	1369-3050
Mansoura Journal of Pharmaceutical Sciences	1110-1318
Mansoura Medical Bulletin	1012-5590
Mansoura Medical Journal	1110-211X
MDV-Molecular Diagnosis and Vaccine	1687-2010
Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A
Medical Journal of Cairo University [The]	0045-3803
Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039
Minoufia Medical Journal	1110-2098
MJFCT-Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437
Neonatology	1687-0492
New Egyptian Journal of Medicine [The]	1110-1946
Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
Population Researches and Studies	N/A
Population Sciences	N/A
Population Studies	1110-1342
PUJ-Parasitologists United Journal	1687-7942
Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381
Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
Scientific Medical Journal	1110-5607

Journal	ISSN
Sohag Medical Journal	1110-7529
South Valley Medical Journal	1110-7529
Suez Canal University Medical Journal	1110-6999
Tanta Medical Journal	1110-1415
Tanta Medical Sciences Journal	1687-5788
Veterinary Medical Journal	1110-1423
Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
Zagazig Journal of Pharmaceutical Sciences	1110-5089
Zagazig Medical Association Journal	1110-2322
Zagazig University Medical Journal	1110-1431
<b>Iraq (30)</b>	
Al-Kindy College Medical Journal	1810-9543
Almustansiriya Journal of Pharmaceutical Sciences	1815-0993
Annals of the College of Medicine-Mosul	0028-1446
Basrah Journal of Surgery	N/A
Bulletin of Endemic Disease-Baghdad	0007-4845
DMJ-Dohuk Medical Journal	2071-7326
IMJ-Iraqi Medical Journal	0304-4564
IOJ-Iraqi Orthodontic Journal	1816-0581
IPMJ-Iraqi Postgraduate Medical Journal	1608-8360
Iraqi Army Medical Journal	N/A
Iraqi Journal of Agriculture	1818-6645
Iraqi Journal of Biotechnology	N/A
Iraqi Journal of Community Medicine	1684-5382
Iraqi Journal of Medical Sciences	1681-6579
Iraqi Journal of Microbiology	N/A
Iraqi Journal of Pharmaceutical Sciences	N/A
Iraqi Journal of Tropical Disease Researches	1814-0823
Journal of Baghdad College of Dentistry	1680-0057
Journal of Basic Medical Sciences	N/A
Journal of Community Medicine	N/A
Journal of Dohuk University	1812-7568
Journal of Karbala University	1813-0410
Journal of the Faculty of Medicine-Baghdad	0041-9419
Kufa Medical Journal	N/A



Journal	ISSN
Medical Journal of Basrah University [The]	0253-0759
Medical Journal of Tikrit University [The]	N/A
New Iraqi Journal of Medicine [The]	1817-5562
Risafa Medical Journal	N/A
Scientific Nursing Journal	1812-2388
Zanco Journal of Medical Sciences	1995-5588
<b>Islamic Republic of Iran (217)</b>	
ABJS-Archives of Bone and Joint Surgery [The]	2345-4644
Acta Medica Iranica	0044-6025
Advances in Cognitive Science	1561-4174
AJMB-Avicenna Journal of Medical Biotechnology	2008-2835
Anatomical Sciences Journal	N/A
Anesthesiology and Pain Medicine	2228-7523
Annals of Military and Health Sciences Research	2383-1960
Archive of Breast Cancer	2383-0425
Archives of Clinical Infectious Diseases	2641-2345
Archives of Iranian Medicine	1029-2977
Archives of Trauma Research	2251-953X
Armaghane-danesh	1728-6506
ARYA Atherosclerosis Journal	1735-3955
Asia Oceania Journal of Nuclear Medicine and Biology	2322-5718
Asian Journal of Sports Medicine	2008-000X
Audiology	1735-1936
Avicenna Journal of Phytomedicine [AJP]	2228-7930
Basic and Clinical Neurosciences	2228-7442
BCCR-Basic and Clinical Cancer Research	2228-6527
BEAT-Bulletin of Emergency and Trauma	2322-2522
Bina Journal of Ophthalmology	1026-6399
Cell Journal [Yakhteh]	2228-5806
DARU-Journal of Pharmaceutical Sciences	1560-8115
DENA-Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450
Dermatology and Cosmetic Quarterly	2008-7470
DRJ-Dental Research Journal	1735-3327
EBNESINA-Medical Journal of Military Medicine [The]	1735-9503
Endovascular Journal	2008-1812

Journal	ISSN
Feyz-Journal of Kashan University of Medical Sciences	1029-7855
Frontiers in Biomedical Technologies	2345-5829
Gastroenterology and Hepatology from Bed to Bench	2010-2258
Genetics in the 3rd Millennium	1728-6182
Govaresh	1560-7186
HAKIM Research Journal	1561-252X
HAYAT-Journal of Faculty of Nursing and Midwifery [The]	1735-2215
Health Information Management	1735-7853
Hepatitis Monthly	1735-143X
Homa-ye-Salamat	2008-2002
Hormozgan Medical Journal	1735-2223
Hospital-Journal of Iranian Scientific Hospital Association	2008-1982
IBJ-Iranian Biomedical Journal	1028-852X
IEJ-Iranian Endodontic Journal	1735-7497
IHJ-Iranian Heart Journal	1735-7306
IJBC-Iranian Journal of Blood and Cancer	2008-4595
IJB-Iranian Journal of Biotechnology	1728-3043
IJCBNM-International Journal of Community Based Nursing and Midwifery	2322-2476
IJCN-Iranian Journal of Child Neurology	1735-4668
IJEM-Iranian Journal of Endocrinology and Metabolism	1683-4844
IJFS-International Journal of Fertility and Sterility	2008-076X
IJHOSCR-International Journal of Hematology-Oncology and Stem Cell Research	2008-2207
IJHPM-International Journal of Health Policy and Management	N/A
IJI-Iranian Journal of Immunology	1735-1383
IJKD-Iranian Journal of Kidney Diseases	1735-8582
IJME-Iranian Journal of Medical Education	1608-9359
IJM-Iranian Journal of Microbiology	2008-3289
IJMCM-International Journal of Molecular and Cellular Medicine	2251-9637
IJMS-Iranian Journal of Medical Sciences	0253-0716
IJN-Iranian Journal of Neonatology	2251-7510
IJOH-International Journal of Occupational Hygiene	2008-5109
IJO-Iranian Journal of Orthodontics	1735-5087
IJP-International Journal of Pediatrics	2345-5047
IJPM-International Journal of Preventive Medicine	2008-7802
IJPR-Iranian Journal of Pharmaceutical Research	1735-0328

Journal	ISSN
IJRM-Iranian Journal of Reproductive Medicine	1680-6433
IJVM-Iranian Journal of Veterinary Medicine	2251-8894
International Cardiovascular Research Journal	2251-9130
International Journal of Endocrinology and Metabolism	1726-913X
International Journal of Environmental Research	1735-6865
International Journal of Environmental Science and Technology	1735-1472
International Journal of High Risk Behaviors and Addiction	2251-8711
International Journal of Mycobacteriology	2212-5531
International Journal of Occupational and Environmental Medicine	2008-6520
International Journal of Organ Transplantation Medicine	2008-6490
International Journal of Radiation Research	2322-3243
International Journal of Women's Health and Reproduction Sciences	N/A
Iran Journal of Nursing	2008-5923
Iran Occupational Health	1735-5133
Iranian Journal of Allergy, Asthma and Immunology	1735-1502
Iranian Journal of Arthropod-Borne Diseases	1735-7179
Iranian Journal of Basic Medical Sciences	2008-3866
Iranian Journal of Cancer Prevention	2008-2398
Iranian Journal of Dermatology	0021-082X
Iranian Journal of Diabetes and Lipid Disorders	1726-7544
Iranian Journal of Diabetes and Obesity	2008-6792
Iranian Journal of Environmental Health Science and Engineering	1735-1979
Iranian Journal of Epidemiology	1735-7489
Iranian Journal of Health and Environment	2008-2029
Iranian Journal of Medical Microbiology	1735-8612
Iranian Journal of Medical Physics	1735-160X
Iranian Journal of Nuclear Medicine	1681-2824
Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
Iranian Journal of Nursing Research	1735-7012
Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993
Iranian Journal of Ophthalmology	1735-4153
Iranian Journal of Otorhinolaryngology	1560-1293
Iranian Journal of Parasitology	1735-7020
Iranian Journal of Pediatrics	2008-2142

Journal	ISSN
Iranian Journal of Psychiatric Nursing	2345-2501
Iranian Journal of Psychiatry	1735-4587
Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
Iranian Journal of Psychiatry and Clinical Psychology [IJPCP]	1735-4315
Iranian Journal of Public Health	0304-4556
Iranian Journal of Radiology	1735-1065
Iranian Journal of Veterinary Research	1728-1997
Iranian Rehabilitation Journal	1735-3602
JBUMS-Journal of Babol University of Medical Sciences	1561-4107
JCR-Journal of Craniomaxillofacial Research	5489-2345
JCVTR-Journal of Cardiovascular and Thoracic Research	2008-5117
JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
JMB-Journal of Medical Bacteriology	2251-8649
JMR-Journal of Medical Research	1728-1962
JNE-Journal of Nursing Education	3812-2322
JNP-Journal of Nephropathology	2251-8363
Journal of Anesthesiology and Pain	2228-6659
Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
Journal of Cardio-Thoracic Medicine	2345-2447
Journal of Dental Materials and Techniques	2322-4150
Journal of Dental Medicine-Tehran University of Medical Sciences	1024-641X
Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X
Journal of Dental School-Shahid Beheshti University of Medical Sciences	1735-7683
Journal of Dentistry-Shiraz University of Medical Sciences	1728-3426
Journal of Environmental Studies	1025-8620
Journal of Family and Reproductive Health	1735-8949
Journal of Fundamentals of Mental Health [The]	1028-6918
Journal of Gorgan University of Medical Sciences	1562-4765
Journal of Guilan University of Medical Sciences	2008-4048
Journal of Health Administration	2008-1200
Journal of Health and Safety at Work	2251-807X
Journal of Health Promotion Management [JHPM]	2251-8614
Journal of Health Scope	2251-8959
Journal of Hygiene and Health	1735-2363
Journal of Injury and Violence Research	2008-2053

Journal	ISSN
Journal of Isfahan Dental School	1735-255X
Journal of Isfahan Medical School	1027-7595
Journal of Islamic Dental Association of Iran [The]-JIDA	1024-6428
Journal of Jahrom University of Medical Sciences	2008-7993
Journal of Kerman University of Medical Sciences	1023-9510
Journal of Kermanshah University of Medical Sciences [KUMS]	2251-9068
Journal of Lasers in Medical Sciences	2008-9783
Journal of Mashhad Dental School	1560-9286
Journal of Mazandaran University of Medical Sciences	1735-9260
Journal of Medical Council of Islamic Republic of Iran	1562-1073
Journal of Medical Education	1735-3998
Journal of Medicinal Plants	1684-0240
Journal of Minimally Invasive Surgical Sciences	2251-7022
Journal of Modern Rehabilitation	2008-2576
Journal of Nursing and Midwifery Quarterly-Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
Journal of Ophthalmic and Vision Research	2008-2010
Journal of Patient Safety and Quality Improvement	2345-4482
Journal of Periodontology and Implant Dentistry	2008-7748
Journal of Qazvin University of Medical Sciences [The]	1561-3666
Journal of Rafsanjan University of Medical Sciences	1735-3165
Journal of Rehabilitation	1607-2960
Journal of Reproduction and Infertility	2228-5482
Journal of Research in Behavioural Sciences	1735-2029
Journal of Research in Dental Sciences	2008-4676
Journal of Research in Health Sciences [JRHS]	1682-2765
Journal of Research in Medical Sciences	1735-5311
Journal of Safety Promotion and Injury Prevention	N/A
Journal of School of Public Health and Institute of Public Health Research	1735-7586
Journal of Screening and Geographical Medicine	1735-7594
Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
Journal of Shahrekord University of Medical Sciences	1735-1448
Journal of Tehran University Heart Center [The]	1735-8620
Journal of Veterinary Research	2008-2525
Journal of Zahedan University of Medical Sciences and Health Services	1735-076X
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366

Journal	ISSN
JPC-Journal of Pharmaceutical Care	2322-4630
JRH-Journal of Research and Health	2251-6395
JRMS-Journal of Research in Medical Sciences	1735-1995
JRRS-Journal of Research in Rehabilitation Sciences	1735-7519
Jundishapur Journal of Microbiology [JJM]	2008-3645
Jundishapur Journal of Natural Pharmaceutical Products	1735-7780
Jundishapur Scientific Medical Journal	2252-052x
KOOMESH-Journal of the Semnan University of Medical Sciences	1608-7046
Medical Journal of Mashad University of Medical Sciences	1735-4013
Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
Medical Journal of the Islamic Republic of Iran	1016-1430
Medical Laboratory Journal	1735-9007
Medical Sciences Journal of Islamic Azad University	1023-5922
Medical-Surgical Nursing Journal	2322-178X
MEJC-Middle East Journal of Cancer	2008-6709
Middle East Journal of Digestive Diseases	2008-5230
Modares Journal of Medical Sciences, Pathobiology	1562-9554
Nephro-Urology Monthly	2251-7006
Novelty in Biomedicine	2345-3346
Nursing and Midwifery Research	1753-5001
Ofogh-E-Danesh	1735-1855
Payavard-Salamat	1735-8132
Payesh-Health Monitor	1680-7626
Pejouhandeh: Bimonthly Research Journal	1735-1022
Qom University of Medical Sciences Journal	1735-7799
Quarterly Journal of Medical Ethics	2008-4374
Quarterly Journal of Medical Law	N/A
Quarterly Journal of Sabzevar University of Medical Sciences	1606-7487
Quarterly Scientific Journal of Relief and Rescue	2008-4544
Razi Journal of Medical Sciences	2228-7043
Research in Cardiovascular Medicine	2251-9572
RMM-Research in Molecular Medicine	2322-1348
Salmand-Iranian Journal of Aging	1735-806X
Scientific and Research Journal of Army University of Medical Sciences-JAUMS	1727-1789
Scientific Journal of Forensic Medicine	1027-1457

Journal	ISSN
Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520
Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
Social Welfare Quarterly	1735-8191
Strides in Development of Medical Education	1735-4242
Tanaffos	1735-0344
Teb Va Tazkie	1608-2397
Tehran University Medical Journal [TUMJ]	1683-1764
Thrita Student Journal of Medical Sciences	2251-8312
Toloo-e-Behdasht	1728-5127
Trauma Monthly	2251-7464
Urology Journal	1735-1308
WJPS-World Journal of Plastic Surgery	2228-7914
Yafteh Journal	1563-0773
Zahedan Journal of Research in Medical Sciences	N/A
<b>Jordan (9)</b>	
Arab Journal of Psychiatry [The]	1016-8923
Dirasat	1026-3764
Jordan Journal of Pharmaceutical Sciences	1995-7157
Jordan Medical Journal	0446-9283
Journal of the Royal Medical Services	2078-8703
Medical Journal of Islamic World Academy of Sciences	1016-3360
Pan Arab Medical Journal	N/A
Population Bulletin of ESCWA	0258-1914
Smile Dental Journal	2072-473X
<b>Kuwait (6)</b>	
Bulletin of Nutrition and Food	N/A
Bulletin of the Kuwait Institute for Medical Specialization	N/A
GJO-Gulf Journal of Oncology [The]	2078-2101
KMJ-Kuwait Medical Journal	0023-5776
Medical Arabization	N/A
Medical Principles and Practice	1011-7571
<b>Lebanon (10)</b>	
ACES-Actualites Cliniques et Scientifiques	1683-8068
AJU-Arab Journal of Urology	N/A
Arab Dental Journal	N/A

Journal	ISSN
IAJD-International Arab Journal of Dentistry	2218-0885
JLDA-Journal of the Lebanese Dental Association	1810-9632
Journal of the Arab Neonatology Forum	1812-1756
Lebanese Science Journal	1561-3410
LMJ-Lebanese Medical Journal	0023-9852
Middle East Journal of Anesthesiology	0544-0440
Middle East Journal of Family Medicine	N/A
<b>Libya (6)</b>	
DMJ-Derna Medical Journal	N/A
Garyounis Medical Journal	0254-7198
JMJ-Jamahiriya Medical Journal	N/A
Libyan Journal of Infectious Diseases [The]	N/A
LJM-Libyan Journal of Medicine	1993-2820
Tabib Attifil Alarabi	N/A
<b>Morocco (7)</b>	
Bulletin Epidemiologique	0851-8238
ISESCO Journal of Science and Technology	2028-8077
Journal du Practicien	1113-5667
Maroc Medical	0253-4053
Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
Revue Marocaine de Medecine et Sante	0251-0758
Revue Marocaine des Maladies de L'Enfant	N/A
<b>Oman (3)</b>	
Oman Journal of Ophthalmology	0974-620X
Oman Medical Journal	1999-768X
SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
<b>Pakistan (83)</b>	
Al-Shifa Journal of Ophthalmology	1990-3863
Anaesthesia, Pain and Intensive Care	1607-8322
Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
Annals of Jinnah Postgraduate Medical Centre - Karachi	N/A
Annals of King Edward Medical College	1684-6680
APMC-Annals of Punjab Medical College	1024-8919
Bahria Journal of Professional Psychology	1816-0840
Biomedica	1992-4852



Journal	ISSN
Challenge-Quarterly [The]	0528-7944
Community Medicine	0301-7265
Diabetes Digest	1369-7501
Esculapio	2309-3080
FWU Journal of Social Sciences	1995-1272
GJMS-Gomal Journal of Medical Sciences	1819-7973
Hamdard Medicus	0250-7188
Health [The]	2218-3299
IJEHSR-International Journal of Endorsing Health Science Research	2307-3748
Infectious Diseases Journal of Pakistan	1027-0299
International Journal of Pathology	1810-0155
Isra Medical Journal	2073-8285
JAMC-Journal of Ayub Medical College-Abbotabad-Pakistan	1025-9589
JCPSP-Journal of the College of Physicians and Surgeons Pakistan	1022-386X
JDUHS-Journal of the Dow University of Health Sciences	1995-2198
JIMDC-Journal of Islamabad Medical and Dental College	2227-3875
JKCD-Journal of Khyber College of Dentistry	2220-2633
JLUMHS-Journal of the Liaquat University of Medical Health Sciences	1729-0341
JOPDAK-Journal of the Pakistan Dental Association Karachi	1680-2292
Journal of Basic and Applied Sciences	1814-8085
Journal of Medical Sciences	1682-4474
Journal of Medical Sciences	1997-3438
Journal of Nephrology Urology and Transplantation	N/A
Journal of Surgery [The]	1681-4517
JPAD-Journal of Pakistan Association of Dermatologists	1560-9014
JPDA-Journal of the Pakistan Dental Association	1680-2292
JPIMS-Journal of Pakistan Institute of Medical Sciences	1683-6928
JPMA-Journal of Pakistan Medical Association	0030-9982
JPMI-Journal of Postgraduate Medical Institute	1013-5472
JPPS-Journal of Pakistan Psychiatric Society	1726-8710
JSOGP-Journal of the Society of Obstetricians and Gynaecologists of Paksitan	N/A
JSP-Journal of Surgery Pakistan International	1817-0242
KMUJ-Khyber Medical University Journal	2072-7763
Lahore Journal of Public Health	N/A
Medical Channel	1681-5491

Journal	ISSN
Medical Forum Monthly	1029-385X
Medical Spectrum [The]	0254-8534
Medicine Today	1813-9876
Mother and Child	0379-2617
PAFMJ-Pakistan Armed Forces Medical Journal	0030-9648
Pakistan Heart Journal	0048-2706
Pakistan Journal of Biochemistry	0300-8185
Pakistan Journal of Chest Medicine	N/A
Pakistan Journal of Clinical Psychology	1019-438X
Pakistan Journal of Community Medicine [The]	N/A
Pakistan Journal of Health	N/A
Pakistan Journal of Medical and Health Sciences	1996-7195
Pakistan Journal of Medical Ethics	N/A
Pakistan Journal of Medical Sciences	1682-024X
Pakistan Journal of Neurological Sciences	1990-6269
Pakistan Journal of Neurology	N/A
Pakistan Journal of Obstetrics and Gynaecology	N/A
Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X
Pakistan Journal of Otolaryngology-Head and Neck Surgery	0257-4985
Pakistan Journal of Pathology	1024-6193
Pakistan Journal of Pharmaceutical Sciences	1011-601X
Pakistan Journal of Pharmacology	0255-7088
Pakistan Journal of Physiology	1819-270X
Pakistan Journal of Psychology	0030-9869
Pakistan Journal of Scientific and Industrial Research	0030-9885
Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413
Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421
Pakistan Medical Journal	0031-000X
Pakistan Ophthalmology	0259-3661
Pakistan Oral and Dental Journal	1012-8700
Pakistan Pediatric Journal	0304-4904
PJC-Pakistan Journal of Cardiology	1016-1244
PJMR-Pakistan Journal of Medical Research	0030-9842
PJO-Pakistan Journal of Ophthalmology	0886-3067
PJPH-Pakistan Journal of Public Health	2225-0891

Journal	ISSN
PJS-Pakistan Journal of Surgery	0258-8552
POJ-Pakistan Orthodontic Journal	2074-0069
Proceedings-Shaikh Zayed Postgraduate Medical Institute	N/A
Professional Medical Journal-Quarterly [The]	1024-8919
RMJ-Rawal Medical Journal	0303-5212
<b>Palestine (3)</b>	
Al-Quds Medical Journal	N/A
Annals of Alquds Medicine	1815-2635
PMJ-Palestinian Medical Journal	N/A
<b>Qatar (4)</b>	
Gulf Journal of Dermatology and Venereology [The]	N/A
Heart Views	1995-705X
JEMTAC-Journal of Emergency Medicine, Trauma and Acute Care	1999-7086
Qatar Medical Journal	0253-8253
<b>Saudi Arabia (29)</b>	
Annals of Saudi Medicine	0256-4947
Annals of Thoracic Medicine	1817-1737
Hematology, Oncology and Stem Cell Therapy	1658-3876
International Journal of Diabetes Mellitus	1877-5934
International Journal of Health Sciences	1658-3639
Journal of Epidemiology and Global Health	2210-6006
Journal of Family and Community Medicine	1319-1683
Journal of Infection and Public Health	1876-0341
Journal of King Abdulaziz University-Medical Sciences	1319-1004
Journal of Taibah University Medical Sciences	1658-3612
Journal of the Saudi Heart Association	1016-7315
MEAJO-Middle East African Journal of Ophthalmology	0974-9233
Neurosciences	1319-6138
Pan Arab Journal of Neurosurgery	1319-6995
Rehabilitation International	N/A
Research Centre Bulletin	1019-5335
Saudi Epidemiology Bulletin	1319-3965
Saudi Heart Journal	1018-077X
Saudi Journal of Disability and Rehabilitation	1319-6499
Saudi Journal of Gastroenterology [The]	1319-3767

Journal	ISSN
Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491
Saudi Journal of Sports Medicine [The]	1319-6308
Saudi Medical Journal	0379-5284
SDJ-Saudi Dental Journal [The]	1013-9052
SGH Medical Journal	1658-2489
SJA-Saudi Journal of Anaesthesia	1658-354X
SJO-Saudi Journal of Ophthalmology	1319-4534
SPJ-Saudi Pharmaceutical Journal	1319-0164
Urology Annals	0974-7796
<b>Sudan (10)</b>	
AJNT-Arab Journal of Nephrology and Transplantation	1858-554X
Gezira Journal of Health Sciences	1810-5386
JMJ-Juba Medical Journal	N/A
Khartoum Pharmacy Journal	N/A
Omdurman Journal of Pharmaceutical Sciences	N/A
SJPH-Sudanese Journal of Public Health	1990-7567
Sudan Journal of Medical Sciences	1858-5051
Sudan Medical Journal	0491-4481
Sudan Medical Monitor	1858-5000
Sudanese Journal of Dermatology	1815-3941
<b>Syrian Arab Republic (10)</b>	
Arab Journal of Pharmaceutical Sciences	1683-0369
Arabic Journal of Forensic Medicine and Criminal Science	N/A
Arabic Medical Journal	N/A
Damascus University Journal for Health Sciences	2072-2265
JABHS-Journal of the Arab Board of Health Specializations	1561-0217
JISHIM-Journal of the International Society for the History of Islamic Medicine	1303-667X
Journal of Clinical Laboratory [The]	1814-411X
Journal of the Arab Board of Medical Specializations	1561-0217
Journal of the Arab Dentist	N/A
Research Journal of Aleppo University-Medical Sciences Series	N/A
<b>Tunisia (9)</b>	
Archives de l'Institut Pasteur de Tunis	0020-2509
Cahiers Medicaux de Tunisie	0300-5291
IDEES-Revue de Perfectionnement Medical et Paramedical	N/A

Journal	ISSN
Maghreb Medical	0330-258X
Revue Maghrebine de Pediatrie [La]	0330-7611
Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La]	N/A
Revue Tunisienne d'Infectiologie	1737-8958
SST-Sante et Securite au Travail	N/A
Tunisie Medicale [La]	0041-4131
<b>United Arab Emirates (5)</b>	
EMJ-Emirates Medical Journal	0250-6882
Gulf Medical University: Proceedings	2306-6865
HMJ-Hamdan Medical Journal	2227-2437
International Journal of Diabetes and Metabolism	1606-7754
IRCMJ-Iranian Red Crescent Medical Journal	1561-4395
<b>Yemen (8)</b>	
HJMS-Hadramout Journal of Medical Sciences	2224-1806
Journal of Tropical Nephro-Urology	N/A
Sana'a University Journal of Medical Sciences	N/A
University of Aden Journal of Natural and Applied Sciences	1606-8947
Yemeni Journal for Medical Sciences [The]	N/A
YHMRJ-Yemeni Health and Medical Research Journal	N/A
YJMRH-Yemeni Journal of Medical and Health Research	N/A
YMJ-Yemen Medical Journal	N/A

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Appendix III

List of EMR Journals Indexed in  
IMEMR

(by title)



S/N	Journal	ISSN
1	AAMJ-Al-Azhar Assiut Medical Journal	1687-1693
2	ABJS-Archives of Bone and Joint Surgery [The]	2345-4644
3	ACES-Actualites Cliniques et Scientifiques	1683-8068
4	Acta Medica Iranica	0044-6025
5	Advances in Cognitive Science	1561-4174
6	Afghan Medical Journal	N/A
7	AFJPH-Afghanistan Journal of Public Health	2308-2895
8	African Journal of Urology	1110-5704
9	Afro-Arab Liver Journal	1687-224X
10	Ain-Shams Journal of Forensic Medicine and Clinical Toxicology	1687-1030
11	Ain-Shams Medical Journal	0002-2144
12	AJAIC-Alexandria Journal of Anaesthesia and Intensive Care	N/A
13	AJM-Alexandria Journal of Medicine	2090-5068
14	AJMB-Avicenna Journal of Medical Biotechnology	2008-2835
15	AJNT-Arab Journal of Nephrology and Transplantation	1858-554X
16	AJU-Arab Journal of Urology	2090-598X
17	Al-Azhar Journal of Dental Science	1110-6751
18	Al-Azhar Medical Journal	1110-0400
19	Alexandria Dental Journal	1110-015X
20	Alexandria Journal of Food Science and Technology	1687-3920
21	Alexandria Journal of Hepatogastroenterology	2090-1879
22	Alexandria Journal of Pediatrics	1687-9945
23	Alexandria Journal of Pharmaceutical Sciences	1110-1792
24	Alexandria Journal of Veterinary Science [AJVS]	1110-2407
25	Alexandria Medical Journal [The]	0516-5849
26	Al-Kindy College Medical Journal	1810-9543
27	Al-Majallah Al-Tibbiya Al-Arabiayh	N/A
28	Almustansiriya Journal of Pharmaceutical Sciences	1815-0993
29	Al-Quds Medical Journal	N/A
30	Al-Shifa Journal of Ophthalmology	1990-3863
31	Anaesthesia, Pain and Intensive Care	1607-8322
32	Anatomical Sciences Journal	N/A
33	Anesthesiology and Pain Medicine	2228-7523
34	Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
35	Annals of Alquds Medicine	1815-2635



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36	Annals of Jinnah Postgraduate Medical Centre - Karachi	N/A
37	Annals of King Edward Medical College	1684-6680
38	Annals of Military and Health Sciences Research	2383-1960
39	Annals of Pediatric Surgery	1687-4137
40	Annals of Saudi Medicine	0256-4947
41	Annals of the College of Medicine-Mosul	0028-1446
42	Annals of Thoracic Medicine	1817-1737
43	APMC-Annals of Punjab Medical College	2077-9143
44	Applied Endocrinology in Egypt	1110-1776
45	Arab Dental Journal	N/A
46	Arab Family Health and Population	N/A
47	Arab Journal for Food and Nutrition	1608-8352
48	Arab Journal of Biotechnology	1110-6875
49	Arab Journal of Gastroenterology	1687-1979
50	Arab Journal of Laboratory Medicine [The]	1110-1822
51	Arab Journal of Pharmaceutical Sciences	1683-0369
52	Arab Journal of Psychiatry [The]	1016-8923
53	Arabic Journal of Forensic Medicine and Criminal Science	N/A
54	Arabic Medical Journal	N/A
55	Archive of Breast Cancer	2383-0425
56	Archives de l'Institut Pasteur de Tunis	0020-2509
57	Archives of Clinical Infectious Diseases	2641-2345
58	Archives of Iranian Medicine	1029-2977
59	Archives of Trauma Research	2251-953X
60	Armaghane-danesh	1728-6506
61	ARYA Atherosclerosis Journal	1735-3955
62	Asia Oceania Journal of Nuclear Medicine and Biology	2322-5718
63	Asian Journal of Sports Medicine	2008-000X
64	ASJOG-Ain-Shams Journal of Obstetrics and Gynecology	1697-2193
65	ASNJ-Alexandria Scientific Nursing Journal	1687-3858
66	Assiut Medical Journal	1110-0494
67	Assiut University Bulletin for Environmental Researches	1110-6107
68	Assiut Veterinary Medical Journal	N/A
69	Audiology	1735-1936
70	Avicenna Journal of Phytomedicine [AJP]	2228-7930

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71	Bahrain Medical Bulletin	1012-8298
72	Bahria Journal of Professional Psychology	1816-0840
73	Basic and Clinical Neuroscience	2008-126X
74	Basrah Journal of Surgery	1683-3589
75	BCCR-Basic and Clinical Cancer Research	2228-6527
76	BEAT-Bulletin of Emergency and Trauma	2322-2522
77	Benha Medical Journal	1110-208X
78	Bina Journal of Ophthalmology	1026-6399
79	Biomedica	1992-4852
80	Bulletin Epidemiologique	0851-8238
81	Bulletin of Alexandria Thoracic Association	1687-997X
82	Bulletin of Endemic Disease-Baghdad	0007-4845
83	Bulletin of Faculty of Pharmacy-Cairo University	1110-0931
84	Bulletin of Faculty of Physical Therapy-Cairo University	1110-6611
85	Bulletin of High Institute of Public Health [The]	1110-0036
86	Bulletin of Nutrition and Food	N/A
87	Bulletin of Pharmaceutical Sciences-Assiut University	1110-0052
88	Bulletin of the Faculty of Science-University of Alexandria	0568-9619
89	Bulletin of the Kuwait Institute for Medical Specialization	N/A
90	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
91	Bulletin of the National Research Centre	1110-0591
92	Bulletin of the Ophthalmological Society of Egypt	0078-5342
93	Cahiers Medicaux de Tunisie	0300-5291
94	Cell Journal [Yakhteh]	2228-5806
95	Challenge-Quarterly [The]	0528-7944
96	Childhood and Development Quarterly	1110-8681
97	Clinical Diabetes	0891-8929
98	Community Medicine	0301-7265
99	Damascus University Journal for Health Sciences	2072-2265
100	DARU-Journal of Pharmaceutical Sciences	1560-8115
101	DENA-Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450
102	Dermatology and Cosmetic Quarterly	2008-7470
103	Diabetes Digest	1369-7501
104	Dirasat	1026-3764
105	DMJ-Derna Medical Journal	N/A

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106	DMJ-Dohuk Medical Journal	2071-7326
107	DRJ-Dental Research Journal	1735-3327
108	Eastern Mediterranean Region Drugs Digest	1040-2312
109	Eastern Mediterranean Region Epidemiological Bulletin	1014-2347
110	EBNESINA-Medical Journal of Military Medicine [The]	1735-9503
111	EDJ-Egyptian Dental Journal	0070-9484
112	Egyptian Heart Journal [The]	1110-2608
113	Egyptian Journal of Anatomy [The]	1110-2144
114	Egyptian Journal of Biomedical Engineering	1012-5558
115	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
116	Egyptian Journal of Breastfeeding	N/A
117	Egyptian Journal of Bronchology [The]	1687-8426
118	Egyptian Journal of Cardiothoracic Anesthesia	1687-9090
119	Egyptian Journal of Cataract and Refractive Surgery [The]	N/A
120	Egyptian Journal of Chemistry	0449-2285
121	Egyptian Journal of Chest Diseases and Tuberculosis [The]	0422-7638
122	Egyptian Journal of Community Medicine [The]	1110-1865
123	Egyptian Journal of Dermatology and Andrology	1110-7650
124	Egyptian Journal of Diabetes [The]	N/A
125	Egyptian Journal of Food Science	1110-0192
126	Egyptian Journal of Genetics and Cytology	0046-161X
127	Egyptian Journal of Histology [The]	1110-0559
128	Egyptian Journal of Hospital Medicine [The]	1687-2002
129	Egyptian Journal of Immunology [The]	1110-4902
130	Egyptian Journal of Medical Human Genetics [The]	1110-8630
131	Egyptian Journal of Medical Laboratory Sciences	1110-5593
132	Egyptian Journal of Microbiology	0022-2704
133	Egyptian Journal of Neonatology [The]	1110-8991
134	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
135	Egyptian Journal of Nutrition	1687-1235
136	Egyptian Journal of Nutrition and Health	1687-7950
137	Egyptian Journal of Occupational Medicine	1110-1881
138	Egyptian Journal of Otolaryngology [The]	1012-5574
139	Egyptian Journal of Paediatrics [The]	1687-1677
140	Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642

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141	Egyptian Journal of Pharmaceutical Sciences	0301-5068
142	Egyptian Journal of Physiological Sciences	0301-8660
143	Egyptian Journal of Psychiatry [The]	1110-1105
144	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
145	Egyptian Journal of Surgery [The]	1110-1121
146	Egyptian Journal of Urology	1110-5712
147	Egyptian Journal of Veterinary Science	1110-0222
148	Egyptian Liver Journal	2090-6218
149	Egyptian Medical Journal of the National Research Center	1687-1278
150	Egyptian Orthodontic Journal	1110-435x
151	Egyptian Orthopaedic Journal [The]	1110-1148
152	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
153	Egyptian Population and Family Planning Review [The]	1110-1156
154	Egyptian Rheumatologist [The]	1110-1164
155	Egyptian Rheumatology and Rehabilitation	1110-161X
156	Egyptian Science Magazine [The]	1687-3815
157	EJB-Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
158	EJENTAS-Egyptian Journal of ENT and Allied Sciences	2090-0740
159	EJMM-Egyptian Journal of Medical Microbiology [The]	1110-2170
160	EMHJ-Eastern Mediterranean Health Journal	1020-3397
161	EMJ-Egyptian Medical Journal [The]	1110-0095
162	EMJ-Emirates Medical Journal	0250-6882
163	Endovascular Journal	2008-1812
164	Esculapio	2309-3080
165	Feyz-Journal of Kashan University of Medical Sciences	1029-7855
166	Frontiers in Biomedical Technologies	2345-5829
167	FWU Journal of Social Sciences	1995-1272
168	Garyounis Medical Journal	0254-7198
169	Gastroenterology and Hepatology from Bed to Bench	2010-2258
170	Gazette of the Egyptian Paediatric Association [The]	1110-6638
171	Genetics in the 3rd Millennium	1728-6182
172	Gezira Journal of Health Sciences	1810-5386
173	GJMS-Gomal Journal of Medical Sciences	1819-7973
174	GJO-Gulf Journal of Oncology [The]	2078-2101
175	Govaresh	1560-7186

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176	Gulf Journal of Dermatology and Venereology [The]	N/A
177	Gulf Medical University: Proceedings	2306-6865
178	HAKIM Research Journal	1561-252X
179	Hamdard Medicus	0250-7188
180	HAYAT-Journal of Faculty of Nursing and Midwifery [The]	1735-2215
181	Health [The]	2218-3299
182	Health Information Management	1735-7853
183	Health Services Journal of the Eastern Mediterranean Region	1014-9899
184	Heart Views	1995-705X
185	Hematology, Oncology and Stem Cell Therapy	1658-3876
186	Hepatitis Monthly	1735-143X
187	HJMS-Hadramout Journal of Medical Sciences	2224-1806
188	HMJ-Hamdan Medical Journal	2227-2437
189	Homa-ye-Salamat	2008-2002
190	Hormozgan Medical Journal	1735-2223
191	Hospital-Journal of Iranian Scientific Hospital Association	2008-1928
192	IAJD-International Arab Journal of Dentistry	2218-0885
193	IBJ-Iranian Biomedical Journal	1028-852X
194	IDEES-Revue de Perfectionnement Medical et Paramedical	N/A
195	IEJ-Iranian Endodontic Journal	1735-7497
196	IHJ-Iranian Heart Journal	1735-7306
197	IJBC-Iranian Journal of Blood and Cancer	2008-4595
198	IJB-Iranian Journal of Biotechnology	1728-3043
199	IJCBNM-International Journal of Community Based Nursing and Midwifery	2322-2476
200	IJCN-Iranian Journal of Child Neurology	1735-4668
201	IJDO-Iranian Journal of Diabetes and Obesity	2008-6792
202	IJEHSR-International Journal of Endorsing Health Science Research	2307-3748
203	IJEM-Iranian Journal of Endocrinology and Metabolism	1683-4844
204	IJFS-International Journal of Fertility and Sterility	2008-076X
205	IJHOSCR-International Journal of Hematology-Oncology and Stem Cell Research	2008-2207
206	IJHPM-International Journal of Health Policy and Management	N/A
207	IJI-Iranian Journal of Immunology	1735-1383
208	IJKD-Iranian Journal of Kidney Diseases	1735-8582
209	IJMCM-International Journal of Molecular and Cellular Medicine	2251-9637
210	IJME-Iranian Journal of Medical Education	1608-9359

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211	IJM-Iranian Journal of Microbiology	2008-3289
212	IJMS-Iranian Journal of Medical Sciences	0253-0716
213	IJN-Iranian Journal of Neonatology	2251-7510
214	IJOH-International Journal of Occupational Hygiene	2008-5109
215	IJO-Iranian Journal of Orthodontics	1735-5087
216	IJP-International Journal of Pediatrics	2345-5047
217	IJPM-International Journal of Preventive Medicine	2008-7802
218	IJPR-Iranian Journal of Pharmaceutical Research	1735-0328
219	IJRM-Iranian Journal of Reproductive Medicine	1680-6433
220	IJVM-Iranian Journal of Veterinary Medicine	2251-8894
221	IMJ-Iraqi Medical Journal	0304-4564
222	Infectious Diseases Journal of Pakistan	1027-0299
223	International Cardiovascular Research Journal	2251-9130
224	International Journal of Diabetes and Metabolism	1606-7754
225	International Journal of Diabetes Mellitus	1877-5934
226	International Journal of Endocrinology and Metabolism	1726-913X
227	International Journal of Environmental Research	1735-6865
228	International Journal of Environmental Science and Technology	1735-1472
229	International Journal of Health Sciences	1658-3639
230	International Journal of High Risk Behaviors and Addiction	2251-8711
231	International Journal of Mycobacteriology	2212-5531
232	International Journal of Occupational and Environmental Medicine	2008-6520
233	International Journal of Organ Transplantation Medicine	2008-6490
234	International Journal of Pathology	1810-0155
235	International Journal of Radiation Research	2322-3243
236	International Journal of Women's Health and Reproduction Sciences	N/A
237	IOJ-Iraqi Orthodontic Journal	1816-0581
238	IPMJ-Iraqi Postgraduate Medical Journal	1608-8360
239	Iran Journal of Nursing	2008-5923
240	Iran Occupational Health	1735-5133
241	Iranian Journal of Allergy, Asthma and Immunology	1735-1502
242	Iranian Journal of Arthropod-Borne Diseases	1735-7179
243	Iranian Journal of Basic Medical Sciences	2008-3866
244	Iranian Journal of Cancer Prevention	2008-2398
245	Iranian Journal of Dermatology	0021-082X

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246	Iranian Journal of Diabetes and Lipid Disorders	1726-7544
247	Iranian Journal of Environmental Health Science and Engineering	1735-1979
248	Iranian Journal of Epidemiology	1735-7489
249	Iranian Journal of Health and Environment	2008-2029
250	Iranian Journal of Medical Microbiology	1735-8612
251	Iranian Journal of Medical Physics	1735-160X
252	Iranian Journal of Nuclear Medicine	1681-2824
253	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
254	Iranian Journal of Nursing Research	1735-7012
255	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
256	Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993
257	Iranian Journal of Ophthalmology	1735-4153
258	Iranian Journal of Otorhinolaryngology	1560-1293
259	Iranian Journal of Parasitology	1735-7020
260	Iranian Journal of Pediatrics	2008-2142
261	Iranian Journal of Psychiatric Nursing	2345-2501
262	Iranian Journal of Psychiatry	1735-4587
263	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
264	Iranian Journal of Psychiatry and Clinical Psychology [IJPCP]	1735-4315
265	Iranian Journal of Public Health	0304-4556
266	Iranian Journal of Radiology	1735-1065
267	Iranian Journal of Veterinary Research	1728-1997
268	Iranian Rehabilitation Journal	1735-3602
269	Iraqi Army Medical Journal	N/A
270	Iraqi Journal of Agriculture	1818-6645
271	Iraqi Journal of Biotechnology	N/A
272	Iraqi Journal of Community Medicine	1684-5382
273	Iraqi Journal of Medical Sciences	1681-6579
274	Iraqi Journal of Microbiology	N/A
275	Iraqi Journal of Pharmaceutical Sciences	1683-3597
276	Iraqi Journal of Tropical Disease Researches	1814-0823
277	IRCMJ-Iranian Red Crescent Medical Journal	1561-4395
278	ISESCO Journal of Science and Technology	2028-8077
279	Isra Medical Journal	2073-8285
280	JABHS-Journal of the Arab Board of Health Specializations	1561-0217

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281	JAMC-Journal of Ayub Medical College-Abbottabad-Pakistan	1025-9589
282	JBMS-Journal of the Bahrain Medical Society	1015-6321
283	JBUMS-Journal of Babol University of Medical Sciences	1561-4107
284	JCPSP-Journal of the College of Physicians and Surgeons Pakistan	1022-386X
285	JCR-Journal of Craniomaxillofacial Research	5489-2345
286	JCVTR-Journal of Cardiovascular and Thoracic Research	2008-5117
287	JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
288	JDUHS-Journal of the Dow University of Health Sciences	1995-2198
289	JEMTAC-Journal of Emergency Medicine, Trauma and Acute Care	1999-7086
290	JESN-Journal of Egyptian Society of Nephrology [The]	N/A
291	JIMDC-Journal of Islamabad Medical and Dental College	2227-3875
292	JISHIM-Journal of the International Society for the History of Islamic Medicine	1303-667X
293	JKCD-Journal of Khyber College of Dentistry	2220-2633
294	JLDA-Journal of the Lebanese Dental Association	1810-9632
295	JLUMHS-Journal of the Liaquat University of Medical Health Sciences	1729-0341
296	JMB-Journal of Medical Bacteriology	2251-8649
297	JMJ-Jamahiriya Medical Journal	2079-1216
298	JMJ-Juba Medical Journal	N/A
299	JMR-Journal of Medical Research	1728-1962
300	JNE-Journal of Nursing Education	3812-2322
301	JNP-Journal of Nephropathology	2251-8363
302	JOPDAK-Journal of the Pakistan Dental Association Karachi	1680-2292
303	Jordan Journal of Pharmaceutical Sciences	1995-7157
304	Jordan Medical Journal	0446-9283
305	Journal du Practicien	1113-5667
306	Journal of Advanced Research	2090-1232
307	Journal of Anesthesiology and Pain	2228-6659
308	Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
309	Journal of Baghdad College of Dentistry	1680-0057
310	Journal of Basic and Applied Sciences	1814-8085
311	Journal of Basic Medical Sciences	N/A
312	Journal of Cardio-Thoracic Medicine	2345-2447
313	Journal of Childhood Studies	2090-0619
314	Journal of Clinical Laboratory [The]	1814-411X
315	Journal of Community Medicine	N/A



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316	Journal of Dental Materials and Techniques	2322-4150
317	Journal of Dental Medicine-Tehran University of Medical Sciences	1024-641X
318	Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X
319	Journal of Dental School-Shahid Beheshti University of Medical Sciences	1735-7683
320	Journal of Dentistry-Shiraz University of Medical Sciences	1728-3426
321	Journal of Dohuk University	1812-7568
322	Journal of Drug Research of Egypt	0085-2406
323	Journal of Environmental Studies	1025-8620
324	Journal of Epidemiology and Global Health	2210-6006
325	Journal of Family and Community Medicine	2230-8229
326	Journal of Family and Reproductive Health	1735-8949
327	Journal of Fundamentals of Mental Health [The]	1028-6918
328	Journal of Gorgan University of Medical Sciences	1562-4765
329	Journal of Guilan University of Medical Sciences	2008-4048
330	Journal of Health Administration	2008-1200
331	Journal of Health and Safety at Work	2251-807X
332	Journal of Health Promotion Management [JHPM]	2251-8614
333	Journal of Health Scope	2251-8959
334	Journal of Hepatology, Gastroenterology and Infectious Diseases	1110-0796
335	Journal of Hygiene and Health	1735-2363
336	Journal of Infection and Public Health	1876-0341
337	Journal of Injury and Violence Research	2008-2053
338	Journal of Isfahan Dental School	1735-255X
339	Journal of Isfahan Medical School	1027-7595
340	Journal of Islamic Dental Association of Iran [The]-JIDA	1024-6428
341	Journal of Jahrom University of Medical Sciences	2008-7993
342	Journal of Karbala University	1813-0410
343	Journal of Kerman University of Medical Sciences	1023-9510
344	Journal of Kermanshah University of Medical Sciences [KUMS]	2251-9068
345	Journal of King Abdulaziz University-Medical Sciences	1319-1004
346	Journal of Lasers in Medical Sciences	2008-9783
347	Journal of Legal Medicine and Forensic Sciences [The]	1110-6468
348	Journal of Mashhad Dental School	1560-9286
349	Journal of Mazandaran University of Medical Sciences	1735-9260
350	Journal of Medical Council of Islamic Republic of Iran	1562-1073

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351	Journal of Medical Education	1735-3998
352	Journal of Medical Sciences	1997-3438
353	Journal of Medical Sciences	1682-4474
354	Journal of Medicinal Plants	1684-0240
355	Journal of Minimally Invasive Surgical Sciences	2251-7022
356	Journal of Modern Rehabilitation	2008-2576
357	Journal of Nephrology Urology and Transplantation	1606-9331
358	Journal of Nursing and Midwifery Quarterly-Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
359	Journal of Ophthalmic and Vision Research	2008-2010
360	Journal of Patient Safety and Quality Improvement	2345-4482
361	Journal of Periodontology and Implant Dentistry	2008-7748
362	Journal of Qazvin University of Medical Sciences [The]	1561-3666
363	Journal of Rafsanjan University of Medical Sciences	1735-3165
364	Journal of Rehabilitation	1607-2960
365	Journal of Reproduction and Infertility	2228-5482
366	Journal of Research in Behavioural Sciences	1735-2029
367	Journal of Research in Dental Sciences	2008-4676
368	Journal of Research in Health Sciences [JRHS]	2228-7795
369	Journal of Research in Medical Sciences	1735-5311
370	Journal of Safety Promotion and Injury Prevention	N/A
371	Journal of School of Public Health and Institute of Public Health Research	1735-7586
372	Journal of Screening and Geographical Medicine	1735-7594
373	Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
374	Journal of Shahrekord University of Medical Sciences	1735-1448
375	Journal of Surgery [The]	1681-4517
376	Journal of Taibah University Medical Sciences	1658-3612
377	Journal of Tehran University Heart Center [The]	1735-8620
378	Journal of the Arab Board of Medical Specializations	1561-0217
379	Journal of the Arab Dentist	N/A
380	Journal of the Arab Neonatology Forum	1812-1756
381	Journal of the Arab Society for Medical Research	1687-4293
382	Journal of the Egyptian Medical Association [The]	0013-2411
383	Journal of the Egyptian National Cancer Institute	1110-0362
384	Journal of the Egyptian Public Health Association [The]	0013-2446
385	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245

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386	Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216
387	Journal of the Egyptian Society of Parasitology	1110-0583
388	Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A
389	Journal of the Egyptian Society of Toxicology	1110-127X
390	Journal of the Faculty of Medicine-Baghdad	0041-9419
391	Journal of the Medical Research Institute-Alexandria University	1110-0133
392	Journal of the Royal Medical Services	2078-8703
393	Journal of the Saudi Heart Association	1016-7315
394	Journal of Tropical Nephro-Urology	N/A
395	Journal of Veterinary Research	2008-2525
396	Journal of Zahedan University of Medical Sciences and Health Services	1735-076X
397	Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
398	JPAD-Journal of Pakistan Association of Dermatologists	1560-9014
399	JPC-Journal of Pediatric Club [The]	N/A
400	JPC-Journal of Pharmaceutical Care	2322-4630
401	JPDA-Journal of the Pakistan Dental Association	1680-2292
402	JPIMS-Journal of Pakistan Institute of Medical Sciences	1683-6928
403	JPMA-Journal of Pakistan Medical Association	0030-9982
404	JPMI-Journal of Postgraduate Medical Institute	1013-5472
405	JPPS-Journal of Pakistan Psychiatric Society	1726-8710
406	JRH-Journal of Research and Health	2251-6395
407	JRMS-Journal of Research in Medical Sciences	1735-1995
408	JRRS-Journal of Research in Rehabilitation Sciences	1735-7519
409	JSOGP-Journal of the Society of Obstetricians and Gynaecologists of Paksitan	N/A
410	JSP-Journal of Surgery Pakistan International	1817-0242
411	Jundishapur Journal of Microbiology [JJM]	2008-3645
412	Jundishapur Journal of Natural Pharmaceutical Products	1735-7780
413	Jundishapur Scientific Medical Journal	2252-052x
414	Kasr El Aini Journal of Surgery	0022-9237
415	Kasr El-Aini Medical Journal	N/A
416	Khartoum Pharmacy Journal	1816-5168
417	Kidney Forum	1369-3050
418	KMJ-Kuwait Medical Journal	0023-5776
419	KMUJ-Khyber Medical University Journal	2072-7763
420	KOOMESH-Journal of Semnan University of Medical Sciences	1608-7046

S/N	Journal	ISSN
421	Kufa Medical Journal	N/A
422	Lahore Journal of Public Health	N/A
423	Lebanese Science Journal	1561-3410
424	Libyan Journal of Infectious Diseases [The]	N/A
425	LJM-Libyan Journal of Medicine	1993-2820
426	LMJ-Lebanese Medical Journal	0023-9852
427	Maghreb Medical	0330-258X
428	Mansoura Journal of Pharmaceutical Sciences	1110-1318
429	Mansoura Medical Bulletin	1012-5590
430	Mansoura Medical Journal	1110-211X
431	Maroc Medical	0253-4053
432	MDV-Molecular Diagnosis and Vaccine	1687-2010
433	MEAJO-Middle East African Journal of Ophthalmology	0974-9233
434	Medical Arabization	N/A
435	Medical Channel	1681-5491
436	Medical Forum Monthly	1029-385X
437	Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A
438	Medical Journal of Basrah University [The]	0253-0759
439	Medical Journal of Cairo University [The]	0045-3803
440	Medical Journal of Islamic World Academy of Sciences	1016-3360
441	Medical Journal of Mashad University of Medical Sciences	1735-4013
442	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
443	Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039
444	Medical Journal of the Islamic Republic of Iran	1016-1430
445	Medical Journal of Tikrit University [The]	N/A
446	Medical Laboratory Journal	1735-9007
447	Medical Principles and Practice	1011-7571
448	Medical Sciences Journal of Islamic Azad University	1023-5922
449	Medical Spectrum [The]	0254-8534
450	Medical-Surgical Nursing Journal	2322-178X
451	Medicine Today	1813-9876
452	MEJC-Middle East Journal of Cancer	2008-6709
453	Middle East Journal of Anesthesiology	0544-0440
454	Middle East Journal of Digestive Diseases	2008-5230
455	Middle East Journal of Family Medicine	N/A

S/N	Journal	ISSN
456	Minoufia Medical Journal	1110-2098
457	MJFCT-Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437
458	Modares Journal of Medical Sciences, Pathobiology	1562-9554
459	Mother and Child	0379-2617
460	Neonatology	1687-0492
461	Nephro-Urology Monthly	2251-7006
462	Neurosciences	1319-6138
463	New Egyptian Journal of Medicine [The]	1110-1946
464	New Iraqi Journal of Medicine [The]	1817-5562
465	Novelty in Biomedicine	2345-3346
466	Nursing and Midwifery Research	1753-5001
467	Ofogh-E-Danesh	1735-1855
468	Oman Journal of Ophthalmology	0974-620X
469	Oman Medical Journal	1999-768X
470	Omdurman Journal of Pharmaceutical Sciences	N/A
471	PAFMJ-Pakistan Armed Forces Medical Journal	0030-9648
472	Pakistan Heart Journal	0048-2706
473	Pakistan Journal of Biochemistry	0300-8185
474	Pakistan Journal of Chest Medicine	N/A
475	Pakistan Journal of Clinical Psychology	1019-438X
476	Pakistan Journal of Community Medicine [The]	N/A
477	Pakistan Journal of Health	0030-9834
478	Pakistan Journal of Medical and Health Sciences	1996-7195
479	Pakistan Journal of Medical Ethics	N/A
480	Pakistan Journal of Medical Sciences	1682-024X
481	Pakistan Journal of Neurological Sciences	1990-6269
482	Pakistan Journal of Neurology	1990-6269
483	Pakistan Journal of Obstetrics and Gynaecology	N/A
484	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X
485	Pakistan Journal of Otolaryngology-Head and Neck Surgery	0257-4985
486	Pakistan Journal of Pathology	1024-6193
487	Pakistan Journal of Pharmaceutical Sciences	1011-601X
488	Pakistan Journal of Pharmacology	0255-7088
489	Pakistan Journal of Physiology	1819-270X
490	Pakistan Journal of Psychology	0030-9869

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491	Pakistan Journal of Scientific and Industrial Research	0030-9885
492	Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413
493	Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421
494	Pakistan Medical Journal	0031-000X
495	Pakistan Ophthalmology	0259-3661
496	Pakistan Oral and Dental Journal	1012-8700
497	Pakistan Pediatric Journal	0304-4904
498	Pan Arab Journal of Neurosurgery	1319-6995
499	Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
500	Pan Arab Medical Journal	N/A
501	Payavard-Salamat	1735-8132
502	Payesh-Health Monitor	1680-7626
503	Pejouhandeh: Bimonthly Research Journal	1735-1022
504	PJC-Pakistan Journal of Cardiology	1016-1244
505	PJMR-Pakistan Journal of Medical Research	0030-9842
506	PJO-Pakistan Journal of Ophthalmology	0886-3067
507	PJPH-Pakistan Journal of Public Health	2225-0891
508	PJS-Pakistan Journal of Surgery	0258-8552
509	PMJ-Palestinian Medical Journal	N/A
510	POJ-Pakistan Orthodontic Journal	2074-0069
511	Population Bulletin of ESCWA	0258-1914
512	Population Researches and Studies	0255-898X
513	Population Sciences	N/A
514	Population Studies	1110-1342
515	Proceedings-Shaikh Zayed Postgraduate Medical Institute	N/A
516	Professional Medical Journal-Quarterly [The]	1024-8919
517	PUJ-Parasitologists United Journal	1687-7942
518	Qatar Medical Journal	0253-8253
519	Qom University of Medical Sciences Journal	1735-7799
520	Quarterly Journal of Medical Ethics	2008-4374
521	Quarterly Journal of Medical Law	N/A
522	Quarterly Journal of Sabzevar University of Medical Sciences	1606-7487
523	Quarterly Scientific Journal of Relief and Rescue	2008-4544
524	Razi Journal of Medical Sciences	2228-7043
525	Rehabilitation International	N/A

S/N	Journal	ISSN
526	Research Centre Bulletin	1019-5335
527	Research in Cardiovascular Medicine	2251-9572
528	Research Journal of Aleppo University-Medical Sciences Series	N/A
529	Revue Maghebaine de Pediatrie [La]	0330-7611
530	Revue Maghebaine d'Endocrinologie-Diabete et de Reproduction [La]	N/A
531	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
532	Revue Marocaine de Medecine et Sante	0251-0758
533	Revue Marocaine des Maladies de L'Enfant	N/A
534	Revue Tunisienne d'Infectiologie	1737-8958
535	Risafa Medical Journal	N/A
536	RMJ-Rawal Medical Journal	0303-5212
537	RMM-Research in Molecular Medicine	2322-1348
538	Salmand-Iranian Journal of Aging	1735-806X
539	Sana'a University Journal of Medical Sciences	1993-3584
540	Saudi Epidemiology Bulletin	1319-3965
541	Saudi Heart Journal	1018-077X
542	Saudi Journal of Disability and Rehabilitation	1319-6499
543	Saudi Journal of Gastroenterology [The]	1319-3767
544	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491
545	Saudi Journal of Sports Medicine [The]	1319-6308
546	Saudi Medical Journal	0379-5284
547	Scientific and Research Journal of Army University of Medical Sciences-JAUMS	1727-1789
548	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381
549	Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
550	Scientific Journal of Forensic Medicine	1027-1457
551	Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520
552	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
553	Scientific Medical Journal	1110-5607
554	Scientific Nursing Journal	1812-2388
555	SDJ-Saudi Dental Journal [The]	1013-9052
556	SGH Medical Journal	1658-2489
557	SJA-Saudi Journal of Anaesthesia	1658-354X
558	SJO-Saudi Journal of Ophthalmology	1319-4534
559	SJPH-Sudanese Journal of Public Health	1990-7567
560	Smile Dental Journal	2072-473X

S/N	Journal	ISSN
561	Social Welfare Quarterly	1735-8191
562	Sohag Medical Journal	1110-7529
563	South Valley Medical Journal	1110-7529
564	SPJ-Saudi Pharmaceutical Journal	1319-0164
565	SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
566	SST-Sante et Securite au Travail	N/A
567	Strides in Development of Medical Education	1735-4242
568	Sudan Journal of Medical Sciences	1858-5051
569	Sudan Medical Journal	0491-4481
570	Sudan Medical Monitor	1858-5000
571	Sudanese Journal of Dermatology	1815-3941
572	Suez Canal University Medical Journal	1110-6999
573	Tabib Attifil Alarabi	N/A
574	Tanaffos	1735-0344
575	Tanta Medical Journal	1110-1415
576	Tanta Medical Sciences Journal	1687-5788
577	Teb Va Tazkie	1608-2397
578	Tehran University Medical Journal [TUMJ]	1683-1764
579	Thrita Student Journal of Medical Sciences	2251-8312
580	Toloo-e-Behdasht	1728-5127
581	Trauma Monthly	2251-7464
582	Tunisie Medicale [La]	0041-4131
583	University of Aden Journal of Natural and Applied Sciences	1606-8947
584	Urology Annals	0974-7796
585	Urology Journal	1735-1308
586	Veterinary Medical Journal	1110-1423
587	WJPS-World Journal of Plastic Surgery	2228-7914
588	Yafteh Journal	1563-0773
589	Yemeni Journal for Medical Sciences [The]	N/A
590	YHMRJ-Yemeni Health and Medical Research Journal	N/A
591	YJMRH-Yemeni Journal of Medical and Health Research	N/A
592	YMJ-Yemen Medical Journal	N/A
593	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
594	Zagazig Journal of Pharmaceutical Sciences	1110-5089
595	Zagazig Medical Association Journal	1110-2322



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596	Zagazig University Medical Journal	1110-1431
597	Zahedan Journal of Research in Medical Sciences	N/A
598	Zanco Journal of Medical Sciences	1995-5588

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