Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts

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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 articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database.

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

The main body of the 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 title of the article, author(s), 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.

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.

Availability of photocopies

Photocopies of articles cited in IMEMR may be obtained from EMRO Library, 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/HIS/VHSL/Imemr.htm

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1 Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriy, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen
**Antibodies, Antinuclear**  
**Main Subject Heading**

**immunology**  
**Subheading**

**Evaluation of anti-DS DNA antibodies in anti-nuclear antibody positive Omani patients.**

Alnaqdy, Adel; Al Busaidy, Juma; Hassan, Batool

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Sultan Qaboos University - College of Medicine and Health Sciences - Department of Microbiology and Immunology

**Pakistan Journal of Medical Sciences** 2007; 23 (2): 211-215 (22 ref.)

**Keywords:** Arthritis, Rheumatoid-diagnosis; Lupus Erythematosus, Systemic-diagnosis; Enzyme-Linked Immunosorbent Assay; Crithidia; Fluorescent Antibody Technique

**Abstract:** To study the correlation between enzyme linked immunosorbent assay [ELISA] and immunofluorescent [IF] anti-dsDNA antibody measurement in different diseases. One hundred and forty sera from patients with systemic lupus erythematosus [SLE, n=40], rheumatoid arthritis [RA, n=30], disease control [n=40] and from healthy control subjects [n=30] were included. Using the ELISA, serum anti-dsDNA was detected in 24/40 [60%] SLE, 5/30 [16.6%] RA, 9/40 [22.5%] disease controls and 1/30 [3.3%] of normal healthy controls. When IF assay was employed, anti-ds DNA antibodies were detected in 16/40 [40%] SLE, 3/30 [10%] RA, 5/40 [12.5%] disease controls but none in the normal subjects. These results suggest that both ELISA and IF techniques can be used for the measurement of anti-ds DNA antibodies in clinical laboratories and, these antibodies are not unique to SLE.

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**Figure (1): Sample of IMEMR citation**
Subject Index
**Abdominal Pain**

**diagnosis**

[Use of diagnostic tests in patients with non traumatic acute abdominal pain referred to the emergency department]
Kianmehr, N.; Mofidi, M.; Fathi, M.; Farsi, D.
Iran University of Medical Sciences - Emergency Medicine
Qum University of Medical Sciences Journal 2008; 1 (4): 25-30, 3 (16 ref.)

**Keywords:** Cross-Sectional Studies; Emergency Service, Hospital; Ultrasonography; Urinalysis; Leukocyte Count; Diagnostic Techniques and Procedures; Acute Disease

**Abstract:** Non-traumatic acute abdominal pain is one of the most common complaints in patients referred to emergency department. To make diagnosis decision several diagnostic tests such as WBC count, urine analysis, and abdominal sonography are usually ordered which disturb emergency department, staff and force significant cost to patient and are time consuming. This study was done for determining the tests frequency for diagnosis of patients presenting in ED of Hazrate rasoul hospital with non traumatic acute abdominal pain that had been dismissed from hospital in comparison to previous studies to find whether we can omit some unnecessary tests. Study method was descriptive-cross sectional. By sequential sampling, the data of 400 dismissed patients with non-traumatic acute abdominal pain were gathered and interpreted by statistical descriptive methods. Participants were 29-22 years old, 40.8% male and 59.2% female. WBC had been ordered in 92% of cases. Urine analysis and abdominal sonography had been ordered 91.7% and 95.5% respectively. Frequency of CBC ordering was similar to previous studies while was 2 and 4 fold more for UA and abdominal sonography in comparison to previous studies. These results necessitate revising the diagnostic tests for non-traumatic acute abdominal pain to omit unnecessary tests.

**Adrenal Hyperplasia, Congenital**

**diagnosis**

[Congenital adrenal hyperplasia report of a case]
Toomarian, L; Razavi, SH
Shahid Beheshti University of Medical Sciences - Dental School - Department of Pediatric Dentistry
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 387-392, 7 (12 ref.)

**Keywords:** Tooth, Unerupted; Incisor; Maxilla; Adrenocorticotropic Hormone; Virilism

**Abstract:** Congenital adrenal hyperplasia [CAH] is an autosomal recessive disorder with an incidence of 1/15000, which is sometimes called the adrenogenital syndrome. This disorder which occurs during fetal development is a consequence of inborn errors in cortisol biosynthesis. Compensatory overproduction of ACTH by the fetus to overcome cortisol deficiency produces hyperplastic but inefficient adrenal cortices. More than 90% of cases result from mutations of CYP21 gene, leading to 21- hydroxylase deficiency, which is essential not only for cortisol biosynthesis but also for aldosterone formation. Deficient or excessive mineralocorticoid production is the other major clinical problem associated with CAH syndrome. The distinctive clinical features of the CAH syndrome result from inappropriate production of both sex steroids and mineralocorticoids. In its classical form, CAH is severe and consists of the virilizing [increase of androgens] and salt wasting [lack of aldosteron] phenotype. When a probond exists, early prenatal diagnosis for CAH can be performed by direct molecular analysis in the first trimester. In recently reported case, the patient is a 10 year old young boy whose parent's chief complaint were unerupted maxillary right central incisor. After taking a complete history the patient was diagnosed with CAH. His 18 year old sister was affected too. Up to now, there has been no report regarding the oral and dental status of these patients in the literature. It is probable that delayed eruption and root formation of some teeth can be related to either this congenital disorder or drug consumption.

**Aged**

**Evaluation of haemostatic mechanisms in the elderly.**
El Tayar, Ahmed A.; Gad, Mohamed S.; Mehana, Mohamed A.; El Lakany, Ismaiel A.; El Sawy, Momtaz M.; El Bordiny, Magdy M.
Alexandria University - Faculty of Medicine - Internal Medicine department, Damhoun Teaching Hospital
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 33-38 (36 ref.)

**Keywords:** Hemostatics; Blood Coagulation Factors; Fibrinogen; Fibrin; Blood Platelets; Arteriosclerosis

**Abstract:** Aging is associated with changes in the haemostatic balance including coagulation, fibrinolytic and/or platelet activity. Adverse changes in coagulation and fibrinolytic factors are thought to contribute to the increased risk of cardio-vascular disease and atherothrombosis with age. In this study the aim was to determine how the biological factor
of age affected coagulation, fibrinolytic factors and platelet glycoprotein receptors levels. In so doing the effect of age on the two important systems in the body involved in haemostasis namely, the coagulation and fibrinolytic systems was studied. The population studied consisted of ten young healthy controls aged 20 - 30 years representing [group I], twenty subjects aged 60 - 70 years [group II], twenty subjects aged 70 - 80 years [group III] and ten subjects above 80 years [group IV]. All groups were subjected to thorough history taking, complete clinical examination and routine investigations excluding obeses, hypertensives, diabetics, patients with chronic obstructive pulmonary disease [COPD] or ischemic heart disease and patients with peripheral vascular disease. Investigations of coagulation parameters [procoagulant markers] included prothrombin activity, estimation of fibrinogen level, Factor VII assay. Thrombin antithrombin [TAT] complex, Prothrombin fragment 1+2 [PF1+2]. Investigations of fibrinolytic system [fibrinolytic markers] included Tissue plasminogen activator [TPA] and tissue plasminogen activator- inhibitor [TPA-I]. Flow cytometric investigation of platelet receptors, including platelet membrane glycoprotein GPIIb, IIa, and GPIb. Prothrombin activity and TAT complex were found to increase with age but their differences between the aged groups and group I did not attain a statistical significance. Serum fibrinogen, factor VII and PF 1+2 were rising with the advancement of age and their means were significantly higher in all aged group in comparison with the young group. Serum TPA and TPA-I showed a progressive increase with age and their means were significantly higher in all aged group in comparison to the young group. Platelet glycoprotein receptors IIb, IIa and Ib levels were found statistically significant higher in all aged groups in relation to group I. The maximum increase was found in group IV. The age-dependency of these markers has to be taken into account in respect to their clinical use in order to characterize patients with suspected risk of atherosclerotic events. In future, one should consider routinely screening for these markers in those above the age of 60 years and, if found to be high consider giving fibrinolytic and antithrombotic agents prophylactically.

Albendazole

Preparation and characterization of albendazole microparticles prepared by freeze-drying technique.
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King Saud University - College of Pharmacy - Department of Pharmaceutics
Keywords: Chemistry, Pharmaceutical; Freeze Drying; Microscopy, Electron, Scanning; Microspheres; Solubility
Abstract: The aim of this work is preparation of albendazole [ABZ] micro particles with certain hydrophilic polymers such as hydroxypropyl methylcellulose [HPMC], and polyvinyl pyrrolidone [PVP] using freeze- drying technique. Microparticles of ABZ with these polymers were prepared in different ratios of 1:1, 1:2, and 1:4. Morphology of the prepared ABZ microparticles was studied using a scanning electron microscope. Spherical microparticles with smooth surface of ABZ were detected by this method. Physicochemical properties of drug alone and its freeze-dried microparticles were investigated using differential scanning calorimetry [DSC] and powder X-ray diffractometry [PXRD]. DSC and PXRD analysis showed that ABZ was transformed from the crystalline state to amorphous state by freeze-drying with the chosen polymers as confirmed by disappearance of its melting peak and characteristic crystalline peaks. Dissolution rate of ABZ from the prepared microparticles was determined and compared to its corresponding physical mixtures. Results showed that, the dissolution of freeze-dried microparticles was faster than the corresponding physical mixtures and drug alone. This indicates that, the freeze-drying technique improved ABZ dissolution. Moreover, it was found that the dissolution rate of the drug was affected by the polymer type and the ratio of ABZ to polymer.

Analgesia, Epidural

Fetal responses to epidural analgesia as evidenced by doppler indices.
Manaa, Essam Mohamed; Romeih, Mahmoud Shokry
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Assiut University - Assiut University HospitalKing Khalid University Hospital - Department of Anesthesia
Keywords: Bupivacaine; Amides; Fentanyl; Pain; Laser-Doppler Flowmetry; Fetus-drug effects; Umbilical Arteries; Middle Cerebral Artery; Anesthetics, Local; Double-Blind Method
Abstract: This study was designed to evaluate the maternal effects of epidural analgesia by different local anesthetics and their impact on placenta and fetal blood flow. Depending on the type of local anesthetics used, sixty full-term parturients were randomly allocated into 3 equal groups in a randomized blind study; Group [1] received Bupivacaine [0.1 25%]. Group [2] received Ropivacaine [0.2%] and, Group [3] received LevoBupivacaine [0.125%]. Epidural fentanyl [100 micro g] was added to all groups. Safety was assessed by recording the mothers characters and vital signs as well as the fetal Doppler indices while efficacy was assessed by measuring severity of pain, onset and duration of analgesia, and the motor blockade. Doppler velocimetry studies for fetus included monitoring of Umbilical Artery Pulsatility Indices [UAPI] and Middle Cerebral Artery Pulsatility indices [MCAPI]. Parturient in all groups were comparable. Pulse rate and arterial blood pressure were significantly decreased in all groups after analgesia, but remained within normal ranges. The pain score, had significant reduction in all groups with best results observed in Group 3. The onset of analgesia was relatively rapid in Group 2 followed by Group 3 then Group 1. The duration of analgesia was prolonged in Group 1 followed by Group 3 and then Group 2. There was no incidence of motor block except in 5 parturient [20%] in Group 1 UAPI was
significantly decreased in the three studied groups after epidural analgesia. But, during uterine contraction, there was slight elevation in the UAPI in all groups. The best improvement in placental perfusion was observed in Group 3, then Group 1, and the least was Group 2. On the other hand, MCAPI was significantly increased in all groups after epidural analgesia. But, during uterine contraction, there was slight decrease in the MCAPI in the three groups. The best improvement in MCAPI was observed in Group 3, then Group 1, and the least was Group 2. All local anesthetics produced excellent analgesia during labor. The Doppler indices were improved in the three groups with the best results in levobupivacaine group.

Anemia

epidemiology

Anemia, in adolescent females of preparatory schools in rural areas of sohag district.
Elnahas, Ahmed Fathy Hamed; Aboel Fetoh, Nagah Mohamed; Ahmed, Al Zahraa El Seed; Yousef, Gihan; El Hady, Hala
Public health and Community medicine department
Keywords: Social Class; Adolescent; Schools; Rural Population; Prevalence; Food Habits; Dietary Supplements; Epidemiologic Studies
Abstract: Anemia is generally recognized as the greatest nutritional problem among adolescents, as adolescence is a period of rapid growth, weight gain and blood volume expansion [Beard, et al., 2000][1]. This study aims to measure the prevalence, severity, and risk factors of anemia in adolescent school girls in the rural areas of Sohag district. The present study is a cross sectional study. A cluster sample was used from 6 preparatory rural schools. The total number of the sampled girls was 424 girl, they have undergone, personal interviews and filling of a questionnaire which includes the questions that guide us to the socio-demographic data. General examination which includes observation of the general condition, and pallor, measuring of pulse, weight and height, chest, heart and abdominal examination to detect any gross abnormality. Then every girl was subjected to measuring the blood HB% by Sahle’s method. 34.4% have hemoglobin level less than 70% [cut off point] considered anemic. There were significant relationship between hemoglobin level and some socio-demographic characteristics and dietary practices of the studied girls. There is significant increase in the number of anemic girls among those who had early menarche than those who had late menarche. Anemia is prevalent in adolescent girls. However, this is the group that deserves particular attention, as they are the future mothers.

Anesthesia, Obstetrical

Practice guidelines for obstetrics anesthesia - A summary.
Siddik-Sayyid, Sahar; Zbeidy, Reine
E-mail: ss01@aub.edu.lb
American University of Beirut - Beirut Medical Center - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1291-1303 (12 ref.)
Keywords: Practice Guidelines as Topic; Respiratory Aspiration-prevention and control; Labor, Obstetric; Delivery, Obstetric; Placenta, Retained; Cesarean Section; Ephedrine; Phenylephrine; Analgesics, Opioid; Sterilization, Tubal

Anterior Cruciate Ligament

injuries

Correlation between magnetic resonance imaging and arthroscopic findings in patients with anterior cruciate injuries.
Ragab, Raffat Kamal; Saleh, Alaa El din Ahmed; Zakaria, Yasser Mazloum
Alexandria University - Faculty of Medicine - Department of Orthopedic surgery
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 39-45 (26 ref.)
Keywords: Diagnostic Techniques and Procedures; Arthroscopy; Magnetic Resonance Imaging; Knee Joint; Sensitivity and Specificity
Abstract: The stabilizing anterior cruciate ligament prevents anterior translation and abnormal internal rotation of the tibia during standing and walking. Its disruption lead to loss of stability and potential significant dysfunction. This work was performed to evaluate the role of MRI in diagnosis of ACL injuries. This study was carried out on 50 patients with anterior cruciate ligaments injuries. They were classified into acute and chronic tears according to the time interval between injury and time of examination. All were examined by Magnetic Resonance Imaging [MRI] and by knee arthroscopy. A variety of MR signs were encountered and were classified into primary and secondary signs. Correlation
of MR findings with arthroscopic findings was done revealing sensitivity, specificity, and accuracy of MR to be 88.8%, 50%, 81.8%. Accordingly, MRI is a non-invasive reliable and versatile method of ACL tears assessment with a good sensitivity.

**Anti-Bacterial Agents**

**pharmacology**

Use and resistance of antibiotics in Libyan outpatient clinics - an important area for general practice research reflections: from Swedish general practitioners.

Andre, Malin; Arvidsson, Eva
E-mail: malin.andre@ltalarna.se
Centre for Clinical Research

**Libyan Journal of Infectious Diseases [The]** 2008; 2 (2): 1-5 (15 ref.)

**Keywords:** Drug Resistance, Bacterial; Ambulatory Care Facilities; Ambulatory Care; Physicians, Family; Research

**Abstract:** Antibiotic resistance is an increasing global threat and overuse of antibiotics in outpatient clinics is considered to make an important contribution to this. Research and surveillance of antibiotic use and antibiotic resistance are underlined as prerequisites for quality improvement in this area. In the development of the specialty of general practice in Libya, research in this area is suggested.

**Antibodies, Monoclonal**

**therapeutic use**


Emmanouilides, Christos; Philippou, Dimitrios; Sapountzi, Evdokia; Diamandidou, Eleni
E-mail: johntierris@hotmail.com

**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (3): 183-188 (29 ref.)

**Keywords:** Carcinoma, Non-Small-Cell Lung-therapy; Retrospective Studies; Treatment Outcome; Drug Toxicity; Antineoplastic Protocols; Lung Neoplasms; Antineoplastic Agents

**Antineoplastic Agents**

Evaluation of new anti-neoplastic active ingredient in vitro.

El Fiky, B.A.; Halfawy, K.A.; El Naggar, M.I.; Gobba, N.A.
Menouf University - Genetic Engineering and Biotech, Institute

**Bulletin of Pharmaceutical Sciences - Assiut University** 2008; 31 (Part 1): 137-151 (12 ref.)

**Keywords:** Cells, Cultured; Tumor Cells, Cultured; Doxorubicin; Methotrexate

**Abstract:** Drug development programs for identification of new anti-neoplastic agents involve extensive preclinical evaluation of vast numbers of chemicals for detection of anti-neoplastic activity. Cell culture systems have figured largely in the field of cancer chemotherapy, where the potential value of such systems for cytotoxicity and viability testing is now widely accepted. The aim of this study is to evaluate cytotoxicity and viability testing of new anti-neoplastic active ingredient compared to Methotrexate and Adriamycin anti-neoplastic active ingredients which are commonly used for cancer chemotherapy on HEPG[2], HEP[2] and VERO cell lines. Cytotoxicity, LD50, therapeutic dose, drug exposure, recovery period and stability bioassay are determined. Cytotoxicity bioassay of tested active ingredient on HEPG[2] cells showed punching of all monolayer cells with few regenerative cells after 48 hr and no regenerative cells after 72 hr while Methotrexate and Adriamycin showed 75% cytopathic effect on monolayer cells after 24 hr then cells begins to regenerate with few rate after 48-72 hr. Cytotoxicity bioassay of tested active ingredient on HEP[2] cells showed 25% cytopathic effect on monolayer cells then regenerated to reach complete monolayer after 72 hr compared to Methotrexate50% and Adriamycin 75% cytopathic effect on monolayer cells then reached to 75% of monolayer after 72 hr. Cytotoxicity of tested active ingredient on Vero cells showed retraction of monolayer cells then retains its original pattern after 24 hr of exposure while Methotrexate and Adriamycin showed destruction of more 50% of monolayer cell population then reached to 75% of monolayer after 72 hr. In conclusion; cytopathological studies showed that the tested active ingredient has low cytotoxicity, more stable and more tolerated compared to controls.
Aorta, Thoracic

abnormalities

Surgery of double aortic arch: a new modality for diagnosis [multislice CT angiography]
Eltman, Waheed G.; Abu Arab, Walid; Faseh, Nader; Khamis, Hasan
Alexandria University - Faculty of Medicine - Cardiotoracic Surgery Dept.
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 161-165 (25 ref.)

Keywords: Signs and Symptoms; Radiography, Thoracic; Tomogr aphy, X-Ray Computed; Dyspnea; Deglutition Disorders; Aorta, Thoracic-surgery; Mortality

Abstract: The vascular rings are defined as congenital anomalies of the aortic arch in which the trachea and oesophagus are surrounded completely or partially by vascular structures that cause respiratory or feeding problems. Double Aortic Arch [DAA] is the most common clinically recognized form of vascular rings and constitutes about 40% of vascular ring anomalies. Is to detect different methods of diagnosis of double aortic arch [DAA] and mode of treatment. Retrospective analysis of 13 infants with DAA was done where clinical presentation, investigations, surgical approach, and early postoperative outcome was studied and analysed. Thirteen patients presented to us with documented diagnosis of double aortic arch as a sub-entity of vascular ring [9 females and 4 males]. All patients presented with respiratory problems mainly dyspnea while dysphagia was encountered only in 9 patients. Age ranged from 4-7 months. Chest radiography was performed for all infants and denoted tracheal narrowing only in 9 patients, while multi slice CT was the gold standard tool for diagnosis of the DAA. Surgical outcome was favourable with postoperative hospital stay ranged from 4-12 days. We encountered only one post-operative mortality. DAA should be suspected in any infant presented with dyspnea or dysphagia. Early investigation is valuable for prevention of morbidity and mortality. Surgical repair of DAA is of favourable outcome.

Apinae

Antispasmodic effects of Pycnocycla spinosa seed and aerial part extracts on rat ileum and uterus smooth muscle contractions.
Sadraei, H.; Asghari, G.H.; Andishah, M.
Isfahan University of Medical Sciences - School of Pharmacy and Pharmaceutical Sciences - Department of Pharmacology
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 160-163 (5 ref.)

Keywords: Plants, Medicinal; Seeds; Ilenm-drug effects; Muscle, Smooth-drug effects; Myometrium-drug effects; Rats, Wistar; Uterine Contraction-drug effects; Spasm-etiolo; Spasm-prevention and control; Uterus; Plant Extracts; Parasympatholytics; Plant Components, Aerial

Abstract: Hydroalcoholic extract of Pycnocycla spinosa has a relaxant effect on ileum and inhibits castor oil induced diarrhoea in mice. However, effects of P. spinosa seed extracts on ileum and uterus hasn't been investigated. The aim of this study was to investigate effect of P. spinosa seed and extracts of the aerial part on rat ileum and uterus smooth muscle contraction. A 70% ethanol extract of seed and aerial parts of P. spinosa was prepared by a percolation method. Uterine horns or ileum were dissected from non-pregnant female Wistar rats [200-230g] and cut into longitudinal strips and mounted for isotonic recording under Ig tension in Tyrode's solution. Effects of the extracts were examined on tonic contractions induced by KC1 [80mM] on both tissues and on phasic spasm induced by oxytocin [0.002iu/ml] on the uterus. The aerial part extract inhibited rat ileum contractions induced by 80mM KC1 [IC[50] = 42 +/- 3.4 micro g/ml] in a concentration dependent manner and it also inhibited rat uterus contraction induced by 80 mM KC1. However, its inhibitory effects were observed with higher concentration of the extract [IC5o = 420+90 micro g/ml] and at concentration of 1.28mg/ml of the extract in the bath the response was 19+7%. The aerial part extract [40-640 micro g/ml] also reduced the evoked phasic response of uterus to oxytocin [IC[50] = 71 +/- 17.3 micro g/ml]. The seed extract reduced the uterus response to oxytocin in a concentration-dependent manner, and inhibited tissue response completely at 160 micro g/ml [IC[50] = 27 +/- 4 micro g/ml]. From this study it was concluded that the seed extract of P. spinosa have similar inhibitory properties on rat isolated uterus and ileum contractions, while the extract of the aerial part of P. spinosa is more selective inhibitor of ileum contraction, and at higher concentrations it also inhibits uterus spasm.

Apnea

Professor Martin H : son Holmdahl.
Baraka, Anis
American University of Beirut - Beirut Medical Center - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1197-1200 (2 ref.)

Keywords: Oxygen; Anesthesia; Oxyhemoglobins
Asbestos

**adverse effects**

**Environmental exposure to asbestos and the exposure-response relationship with mesothelioma.**
Madkour, M.T.; El Bokhary, M.S.; Awad Allah, H.I.; Awad, A.A.; Mahmoud, H.F.
E-mail: ashraf_madkour@yahoo.com
Ain Shams University - Faculty of Medicine - Department of Chest Diseases

**Keywords:** Environmental Exposure; Mesothelioma-etiolo gy; Biopsy; Risk Assessment; Prevalence; Mesothelioma-epidemiology; Sex Distribution

**Abstract:** An epidemiological and environmental study was carried out in Shubra El-Kheima city, greater Cairo, of the exposure-response relationship between asbestos and malignant pleural mesothelioma. Radiological screening was done for 487 people occupationally exposed to asbestos, 2913 environmentally exposed to asbestos and a control group of 979 with no history of exposure. Pleural biopsy was done for suspicious cases. The airborne asbestos fibre concentrations were determined in all areas. There were 88 cases of mesothelioma diagnosed, 87 in the exposed group. The risk of mesothelioma was higher in the environmentally exposed group than other groups, and higher in females than males. The prevalence of mesothelioma increased with increased cumulative exposure to asbestos.

Asthma

**drug therapy**

**Effects of oral methylprednisolone and inhaled salbutamol in the decrease of wheezing in patients with asthma after tracheal intubation.**
Farrokhnia, F.; Arbabi, S.H.
Tehran University of Medical Sciences - Imam Medical Complex - Department of Anesthesiology
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 164-168 (20 ref.)

**Keywords:** Asthma-prevention and control; Methylprednisolone-therapeutic use; Albuterol-therapeutic use; Administration, Inhalation; Intubation, Intratracheal-adverse effects; Bronchial Hyperreactivity-prevention and control; Bronchial Spasm-etiolo gy; Bronchial Spasm-prevention and control; Drug Therapy, Combination; Airway Obstruction-drug therapy; Prospective Studies

**Abstract:** Airway instrumentation in patients with bronchial hyperreactivity, may evoke life-threatening asthma attack and a good strategy for the prevention of bronchospasm has not been defined. In a randomized, prospective, placebo-controlled study, it was determined whether prophylaxis with either inhaled salbutamol or combined inhaled salbutamol and oral methylprednisolone improves lung functions and prevents wheezing after intubation. Thirty one patients with partially reversible airway obstruction [airway resistance > 180%, forced expiratory volume in 1 second [FEV1] < 70% of predicted value, and FEV1 increase > 12% after two puffs of salbutamol] were randomized to receive daily either 3-2 puffs [0.2 mg] of salbutamol [n = 16] or 3-2 puffs [0.2 mg] of salbutamol and 40 mg of methylprednisolone [n = 15] orally for 5 days. In all patients lung function was evaluated daily and wheezing changes was assessed before and 5 minutes after tracheal intubation. Both salbutamol and combined inhaled salbutamol and oral methylprednisolone treatment significantly improved airway resistance and FEV1 to a steady state, with no difference between groups. When a single-dose of salbutamol pre-induction or prolonged salbutamol treatment was employed, most patients [8 of 10 and 7 of 9] experienced wheezing after intubation. In contrast, only one patient of those who received both salbutamol and methylprednisolone experienced wheezing [P = 0.0056]. Pretreatment with either salbutamol or combined inhaled salbutamol and oral methylprednisolone significantly improves lung function and decreases the incidence of wheezing after tracheal intubation. Methylprednisolone decreases incidence of wheezing more than salbutamol. Therefore, in patients with bronchial hyper reactivity, preoperative treatment with both methylprednisolone and salbutamol minimizes intubation-evoked broncho-constriction.
Attitude to Computers

[The attitude of department heads, faculty members, and physicians of Mashhad University of Medical Sciences toward continuing medical education through internet: Investigating some related factors]
Rashitdorabi, M.; Ahanchian, M.R.; Rezvani, M. Saeedi
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Mashhad University of Medical Sciences - Faculty of Health and Allied Medicine - Department of Optometry
IJME - Iranian Journal of Medical Education 2008; 7 (2): 279-287 (20 ref.)
Keywords: Education, Medical, Continuing-methods; Attitude; Internet; Online Systems; Universities; Schools, Medical
Abstract: Despite recent progresses in education through the web in so many countries, no systematic action has been taken in our country in order to establish online courses. The aim of this study was to determine the attitude of the stake holders of these courses and the factors affecting their attitude. Through a survey study the attitudes of 254 persons including departments' heads, faculty members in Mashhad University of Medical Sciences, and general physicians participating in CME courses, selected through stratified sampling method were investigated. Among the existing factors, availability of hardware facilities, internet and software education, access to internet, and their relationship with the attitude of the participants were studied. The data gathering tools included a questionnaire consisted of 28 items with 5 point Lickert scale for assessing attitude and another questionnaire including demographic data, which were analyzed using frequency distribution indices and chi2. There was no relationship between access to facilities and education with attitudes of the three groups. But, there was a significant relationship between access to internet and their attitude. Although the attitudes toward these courses were positive in total, but with regard to the low mean scores in the three groups, it is highly recommended to improve the attitudes toward online education through education and providing information regarding the advantages of such courses. It is also suggested to provide facilities such as access to internet and study more about other factors affecting human resources attitudes.

Attitude to Health

Attitude of community and village leaders towards the community-based programme in the faculty of medicine - University of Gezira, Sudan.
Abdalla, M.E.; Mirghani, O.A.; Hakim, Y.
E-mail: hason75@yahoo.com
University of Gezira - Faculty of Medicine
Keywords: Residence Characteristics; Community Health Services; Faculty, Medical; Program Evaluation; Leadership; Health Education; Health Knowledge, Attitudes
Abstract: The objective is to describe the attitude of the community and village leaders towards the community based programme implemented in the Faculty of Medicine - University of Gezira [FMUG]. The curriculum is unique, with 30% of it is community-Based. So the attitude of the community is highly considered in the evaluation of the programme. Twenty-four community leaders from the 48 members of the State Assembly were interviewed. Forty-eight of the village leaders from nine villages in El managil area where the three phases of the Interdisciplinary Field Training, Research and Rural Development Programme IFTRRDP have been completed recently were also interviewed through a pre structured interview by independent, trained personnel and their responses were collected and analyzed. All the community and village leaders knew most of the objectives of the school. The expectations of the community from the school are the health education and treatment of patient. Community benefits from the presence of the students were rated as good and excellent by 56% of the community leaders and 87.8% of the village leaders. More visits for strengthening the relation between the school and the community was suggested by 72.9% [n = 35]. 18.8% [n = 9] of the village leaders participated in the evaluation of students. Objectives of the community based programme at FMUG are very well known and accepted by the community. This support the FMUG community partnership and services beside training students. The expectations of the community are fitting fully with the objectives of the school. The attitude of the community towards the community based programmes in FMUG is positive, this can be sustained by ensuring more involvement of them in all steps of the programme. More studies to describe and measure the attitudes of the community in other CBE medical schools is recommended for comparison.

Awareness

Intraoperative awareness : major factor or non-existant?
Lekprasert, Varinee; Frost, Elizabeth, A.M.; Pausawasdi, Somsri
Mahidol University - Ramathibodi Hospital - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1201-1218 (69 ref.)
Keywords: Intraoperative Period; Anesthesia; Risk Factors
**Bacillus anthracis**

*isolation and purification*

Characterization of Bacillus anthracis spores isolates from soil by biochemical and multiplex PCR analysis.

Vahedi, F.; Jula, Gh. Moazeni; Kianizadeh, M.; Mahmoudi, M.

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Mashhad University of Medical Sciences - Immunology Research Centre


**Keywords:** Polymerase Chain Reaction; Soil Microbiology; Sensitivity and Specificity; Mice; Guinea Pigs; Spores, Bacterial-isolation and purification

**Abstract:** Outbreaks of Bacillus anthracis in animals are repeatedly reported in the Islamic Republic of Iran. In this study soil samples were analysed from endemic regions of the country, and B. anthracis isolates were identified by classical bacteriological and biochemical methods. A multiplex polymerase chain reaction [PCR] assay was also developed as an alternative for identification of isolates, and was shown to be a rapid, sensitive and specific diagnostic assay. The results confirmed that 25 samples contained B. anthracis, of which 9 were virulent for mice and guinea pigs. This study suggests that multiplex PCR can be used as a reliable alternative for the detection of B. anthracis spores.

**beta-Lactam Resistance**

**New resistance mechanism of escherichia coli to beta-lactamins.**

Bouabdellah, M.; Tagajdid, M.R.; Zerrou, A.; Benouda, A.

**Maroc Medical** 2008; 30 (1): 22-26 (8 ref.)

**Keywords:** Escherichia coli-drug effects; Drug Resistance, Bacterial; Microbial Sensitivity Tests; Cephalosporinase

**Abstract:** Escherichia coli is the germ most frequently isolated in especially urinary infections. The perpetual change of its sensitivity profile to beta-lactamins is due to several evolution factors. Some strains have acquiered resistance by gene mutation or by acquisition of movable genetic material. Also phenomenon as impermeability, excretion by efflux system or modifying penicillin liaison proteins could be seen but the production of beta-lactamases remains the most frequent mechanism of resistance that has been describe until now. The authors report, through this observation, a case of a particular strain of Escherichia coli that has been isolated from urine of an hospitalized patiente. This strain presented an hyperproduction of cefalosporinases, which is a recently discovered mechanism of resistance. In one hand, specific bacteriologic tests as synergy test, antagonism test and the use of cloxacillin added antibiogramme on Mueller-Hinton medium were carried out and have allowed to display the phenotypic aspect of this mechanism. In the other hand, its genetic aspec t was mentionned through a new literature data. The authors have also underlined the importance of the antibiogramme prior to any prescription of antibiotics which could put pressure on the germ leading to a selection of individual resistant, to this kind of difficul not controlled resistance and many potential complications ensue from it.

**Bezoars**

**diagnosis**

**Mystique of Bezoars.**

Venkatramana, Manda; Rajagopal, Ambil S.

Gulf Medical College Hospital and Research Centre - Department of Surgery

**Emirates Medical Journal** 2008; 26 (2): 117-119 (10 ref.)

**Keywords:** Intestinal Obstruction-etiology; Gastrectomy-adverse effects; Laparotomy; Bezoars-surgery

**Abstract:** We present a case report documenting an unusual case of small bowel obstruction due to phytobezoar which required exploratory laparotomy in a middle aged man with history of peptic ulcer surgery done two decades before. Bezoars are large conglomerates of vegetable fiber, hair or concretions of various substances in the gastrointestinal tract and patients with gastric surgery are at increased risk of development. The advent of acid reducing drugs and H. pylori eradication therapy has led to dramatic reduction in the need for surgical treatment of uncomplicated peptic ulcer. Thus, gastrointestinal bezoars are encountered less frequently than in the past but still may be a complication following gastrectomy for malignant disease, a procedure still undertaken frequently in regions where the disease is endemic. Whilst uncommon it is of interest to gastroenterologist and general surgeons as well as general practitioners who see patients with a previous history of gastric surgery.
Breast Neoplasms

Molecular analysis of Bcl-2 and cyclin D1 expression in differentially expressing estrogen receptor breast cancer MCF7, T47D and MDA-MB-468 cell lines treated with adriamycin.
Kaabinejadian, S.; Fouladdel, S.H.; Ramezani, M.; Azizi, E.
Tehran University of Medical Sciences [TUMS] - Faculty of Pharmacy - Molecular Research Lab
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 182-188 (29 ref.)
Keywords: Breast Neoplasms-immunology; Breast Neoplasms-drug therapy; Cytogenetic Analysis; Genes, bcl-2-drug effects; Genes, bcl-2-genetics; Receptors, Estrogen-therapeutic use; Doxorubicin-therapeutic use; Cell Line, Tumor-classification; Cyclin D1-genetics; Reverse Transcriptase Polymerase Chain Reaction; Immunohistochemistry
Abstract: Bcl-2 and Cyclin D1 [CCND1] are key elements in cancer development and progression. Bcl-2 acts as a cell death suppressor and is involved in apoptosis regulation. Cyclin D1 is an important regulator of G1/S phase of the cell cycle progression. In addition, estrogen receptor (ER) is an important prognostic factor in breast cancer cells. Therefore it is important to determine the Bcl-2 and CCND1 expression in MCF7, T47D and MDA-MB-468 breast cancer cell lines with different ER status following Adriamycin [ADR] treatment. Cytotoxicity of ADR [250 and 500nM] after 1-5 days exposure of the cell lines was evaluated by MTT assay. The mRNA and protein levels of Bcl-2 and cyclin D1 in tested cell lines were also analyzed by RT-PCR and immunocytochemistry [ICC] methods ADR cytotoxicity was highest in MDA-MB-468 and lowest in MCF7 cells in a time-dependent manner. Bcl-2 mRNA increased in MCF7 and decreased in MDA-MB-468 after exposure to ADR but it was less detectable in T47D cells. The expression of CCND1 in MCF7 with high level of ER expression was higher than the other two cell lines in untreated conditions. However, CCND1 mRNA did not show significant changes after ADR treatment. Immunocytochemical analysis did not show significant differences between Bcl-2-protein expression in the presence or absence of ADR in MDA-MB-468 cell line while in T47D and MCF7 cells its expression decreased after exposure to ADR. In addition to nuclear expression of cyclin D1 in all cell lines, strong cytoplasmic expression of cyclin D1 protein was observed only in MCF7 and T47D cells. The tested cell lines with different levels of ER expression showed differential molecular responses to ADR that is important in tumor-targeted cancer therapy.

radionuclide imaging

Tc-99m tetrofosmin scintimammography for the detection of recurrent breast cancer in a patient with equivocal mammography study.
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Sultan Qaboos University - Sultan Qaboos University Hospital - Department of Radiology and Molecular Imaging
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 79-81 (15 ref.)
Keywords: Neoplasm Recurrence, Local-radionuclide imaging; Mammography; Sensitivity and Specificity; Predictive Value of Tests
Abstract: This is a case report describing a patient at Sultan Qaboos University Hospital, Oman, with recurrent local breast cancer and axillary lymph node metastasis. The cancer was detected with 99Tc-m tetrofosmin scintimammography after an equivocal mammography study.

Bronchi

injuries

Traumatic rupture of the right main bronchus: a rare clinical entity?
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Freeman Hospital - Hamad Medical Corporation - Department of Cardiothoracic Surgery
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 47-49 (13 ref.)
Keywords: Wounds and Injuries; Wounds, Nonpenetrating; Thoracic Injuries; Bronchi-surgery
Abstract: Tracheo-bronchial disruption is an uncommon injury usually associated with severe, blunt thoracic trauma and rarely occurs in isolation. Due to the natural anatomic protection of the thoracic bronchial tree, severe trauma is required to disrupt it and is usually associated with multiple injuries. We report on a patient who suffered antero-posterior compression trauma to the chest and developed severe right bronchial injury.
**Brucellosis**

**diagnosis**

**Neurobrucellosis: report of a rare disease in 20 Iranian patients referred to a tertiary hospital.**
Ranjbar, M.; Rezaiee, A.A.; Hashemi, S.H.; Mehdipour, S.  
E-mail:ahmaliver@yahoo.com  
Iran University of Medical Sciences - Department of Infectious Diseases  
**Keywords:** Neurologic Manifestations-diagnosis; Rare Diseases-diagnosis; Brucellosis-complications; Brucellosis-mortality; Hospitals  
**Abstract:** We reviewed the clinical manifestations and outcome of 20 cases of neurobrucellosis out of 1375 patients with brucellosis admitted to the infectious diseases ward of a tertiary hospital in Hamedan, Islamic Republic of Iran. Of the 20 cases, 12 had meningitis [acute and subacute], 4 had meningoencephalitis, 2 had myelopathy, 1 had polyradiculopathy and 1 had meningovascular complications manifested by stroke. The most prevalent symptoms were headache [75%), vomiting and fever (50%) and unconsciousness (35%). Among 20 neurobrucellosis patients, 1 died and the other 19 recovered; 14 fully recovered and 5 patients had residual neurological deficits. In endemic areas, the disease should be ruled out in all patients who develop unexplained neurological symptoms.

**Busulfan**

**therapeutic use**

**Efficacy and early complications of intravenous busulfan in children with thalassemia undergoing hematopoietic stem cell transplantation.**
Pakakasama, Samart; Chuansumrit, Ampaiwan; Damkong, Butsakorn; Sirachainan, Nongnuch; Sirireung, Somtawin; Hongeng, Suradej  
E-mail:rasam@mahidol.ac.th  
Faculty of Medicine/Pediatrics  
**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (3): 189-192 (17 ref.)  
**Keywords:** Busulfan-adverse effects; Busulfan-administration and dosage; Thalassemia-therapy; Transplantation Conditioning; Hematopoietic Stem Cell Transplantation; Treatment Outcome; Transplantation Chimera; Child

**Candidiasis, Vulvovaginal**

**diagnosis**

**Vulvovaginal candidiasis in pregnancy.**  
Aslam, Maleeha; Hafeez, Rubeena; Ijaz, Sadia; Tahir, M.  
Allama Iqbal Medical College - Department of Pathology  
**Biomedica** 2008; 24 (Jan.-Jun.): 54-56 (22 ref.)  
**Keywords:** Pregnancy Complications, Infectious; Culture Media-therapeutic use; Recurrence; Incidence; Pregnancy
Abstract: Vulvovaginal candidiasis [VVC] is a common cause of vaginitis during pregnancy. Although the disease is rarely life threatening, it is a source of great physical and psychological discomfort and suffering. High Vaginal swabs [HVS] were collected from 50 pregnant women and subjected to Gram's smear, 10% KOH wet mount and culture. Candida was isolated from 48% of all cultures. However, Gram's smear and KOH mount revealed only 38% positivity with 10% showing both Candida spores and pseudohyphae. Multigravidae [60%] were more commonly affected than primigravidae [40%]. The common presenting signs and symptoms of VVC in present study were excessive vaginal discharge [100%], vaginal pruritis [91.6%] and vaginal burning [75%]. Although Gram's stain/ KOH mount is a valuable method in rapid diagnosis of symptomatic VVC as the invasive forms of yeast can also be demonstrated, yet its low sensitivity as compared to cultures could restrict the use in routine practice. Thus the best approach for the diagnosis of VVC is a combination of culture and Gram's smear/ or KOH mount.

Carboxylic Acids

chemical synthesis

Synthesis of 2-trifluoromethyl-4, 7-dihydro-7-oxo -[1,2,4]triazolo[1,5-a] pyrimidine-6-carboxylic acid derivatives as potential antimonyo-bacterial and antimicrobial Agents.

El Koussi, Nawal A.
Assiut University - Faculty of Pharmacy - Department of Medicinal Chemistry
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31 (Part 1): 109-121 (17 ref.)
Keywords: Pyrimidines-therapeutic use; Anti-Bacterial Agents; Antifungal Agents
Abstract: Syntheses of the target compounds were achieved by reaction of 3-amino-5-trifluoromethyl-l, 2, 4-triazole 1 and diethylethoxymethylene malonate [DEEA] in glacial acetic acid to afford ethyl 2-[trifluoromethyl]-4, 7-dihydro-7-oxo[1, 2, 4]-triazolo [1, 5-a] pyrimidine-6-carboxylate 2. Reaction of compound 2 with hydroxylamine hydrochloride gave hydroxamic acid 3, while reaction with hydrazine hydrate in methanol gave the corresponding carbamylhydrazone 4. Schiff bases of compound 4 with appropriate aldehyde yielded series 5a-g. Refluxing of hydrazide 4 with appropriate isothiocyanate gave thioureas 6a-f. The antimycobacterial evaluation was determined against Mycobacterium tuberculosis H[37]Rv [ATCC 27294]. Compound 5e and 5b showed activity with IC90 [6.672, 7.362 micro g/ml respectively] and IC50 [4.627, 6.382 micro g/ml respectively]. In vitro antibacterial screening for the prepared compounds were determined against certain strains of gram positive and gram negative bacteria. The results showed that compounds 3, 5a, 6b possessed higher activity than ampicillin against all strains, also the activity range from half to sixth activity of nalidixic acid against E. coli. Compounds 3, 5a, 5b, 5c, 5f, 6b exhibited activity against P. aeruginosa, while nalidixic acid possessed no activity. Compounds 3, 5a, 5b and 6b possessed antifungal activity.

Carcinoid Tumor

complications

Middle-ear carcinoid tumor with distant metastasis and fatal outcome.
Gaafar, Ayman; Ereno, Cosme; Lopez, Jose I.; Fernandez de Larrinoa, Aitor; Grande, Javier; Salazar, Julio; Yarnoz, Jerusalem; Bilbao, Francisco Jose
Basque Country University - Basurto Hospital - Department of Pathology
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 53-56 (18 ref.)
Keywords: Carcinoid Tumor-diagnosis; Ear, Middle; Neoplasms Metastasis; Fatal Outcome

Carcinoma in Situ

pathology

Occurrence of carcinoma in situ in association with invasive cancer of breast.
Ihtesham ud Din; Shaharyar; Hamid, Tahira; Zaman, Samina; Naveed, I.A.
King Edward Medical University - Mayo Hospital - Department of Pathology and Clinical Oncology
Biomedica 2008; 24 (Jan.-Jun.): 42-45 (14 ref.)
Keywords: Breast Neoplasms-pathology; Carcinoma in Situ-diagnosis; Carcinoma in Situ-epidemiology; Early Detection of Cancer
Abstract: The objectives of this study were to find out the frequency and the pattern of carcinoma in situ occurring in association with different types of breast cancers. This study was conducted in the Department of Clinical Oncology and
the Department of Pathology, King Edward Medical University/ Mayo Hospital, Lahore on breast cancer patients
grade, and presence or absence of carcinoma in situ were recorded. Histopathological features were recorded according
to WHO system. Grade was recorded only when it was assigned according to the Elston-Ellis modification of
Scarff-Bloom-Richardson grading system. A total of 1230 histopathologically documented invasive and non-invasive
breast cancers patients were included in the study. DCIS alone was seen in seven patients [0.57%] and LCIS alone in
two patients [0.16%]. Invasive ductal carcinoma was seen in 998 patients [81.14%] and invasive lobular carcinoma in 96
patients [07.80%]. Majority of breast cancers were grade II whereas grade I seen in 23.90% patients only. Areas of
carcinoma in situ in different types of invasive cancers were seen in 328 [26.86%] patients. Majority of these patients
were below 50 years of age. DCIS was present in 246 of 998 patients [24.65%] of invasive ductal carcinoma [NOS].
Comedo pattern was seen in 154 of 290 [53.10%] of DCIS. LCIS was present in 38 of 96 patients [39.58%] of invasive
lobular carcinoma. Carcinoma in situ of breast is a purely diagnosed disease entity in our setting. It is seen mostly in
association with invasive carcinoma of breast cancer. Ductal carcinoma in situ with comedo pattern is most frequent.

**Carcinoma, Hepatocellular**

**therapy**

*A new chemoimmunotherapy regimen [OXAFI] for advanced hepatocellular carcinoma.*

Ang, Mei Kim; Poon, Donald; Foo, Kian Fong; Chung, Yaw Fui; Chow, Pierce; Wan, Wei Keat; Thng, Choon Hua; Ooi,
London

National Cancer Centre - Department of Medical Oncology

**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (3): 159-165 (36 ref.)

**Keywords:** Immunotherapy; Antineoplastic Protocols; Survival Rate; Treatment Outcome; Neutropenia; Drug Toxicity;
Tomography, X-Ray Computed; Liver Neoplasms; Organoplatinum Compounds; Antineoplastic Agents; Doxorubicin;
Fluorouracil; Interferon Alfa-2b

**Abstract:** Chemotherapeutic treatment options for advanced unresectable and/or metastatic hepatocellular carcinoma
[HCC] are limited. Currently available treatments are associated with low response rates and little evidence of improved
survival, so we evaluated a new chemoimmunotherapy regimen. Seven patients with unresectable and/or metastatic
HCC were treated with intravenous oxaliplatin [30mg/m[2]] and doxorubicin [20mg/m[2]] given on days 1, 8 and 15 in a
28-day cycle, a daily continuous infusion of fluorouracil [200mg/m[2]] and subcutaneous interferon alfa-2b 5 MU
administered thrice weekly [OXAFI]. Treatment was administered to a maximum of six cycles. Data on the response to
treatment, toxicity, surgical procedures and survival outcome was reviewed. The best response was three partial
responses, three stable disease responses and one progressive disease response. Two patients underwent interval
hepatic resection, and histological analysis in one patient showed a complete pathological response. Another patient
underwent a liver transplant after four cycles of treatment. These three patients were alive with no evidence of disease at
23, 21 and 18 months follow-up, respectively. At a median follow-up of 14 months [range 2-23 months], one patient died
2 months after diagnosis due to progressive disease, while all six other patients were alive. Neutropenia was the
predominant toxicity, but there were no episodes of febrile neutropenia, hospital admissions or deaths. There were no
cases of hepatitis B virus re-activation. OXAFI shows activity in HCC and has manageable toxicity. Complete
pathological remission is possible with this regimen.

**Carcinoma, Mucoepidermoid**

**pathology**

*Sclerosing mucoepidermoid carcinoma of the thyroid gland: cytohistological findings of a case.*

Lopez, Jose I.; Gaafar, Ayman; Garmendia, Maddi; Velasco, Veronica; Ortega, Francisco J.; Del Cura, Jose L.

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**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (1): 62-65 (26 ref.)

**Keywords:** Thyroid Neoplasms; Histocytological Preparation Technique
Carcinoma, Non-Small-Cell Lung

secondary

Second line chemotherapy in locally advanced or metastatic non-small-cell lung cancer.
Bouchentouf, R.; Benjelloune, A.; Benaser, M.A. Alt
Maroc Medical 2008; 30 (1): 56-62 (23 ref.)
Keywords: Carcinoma, Non-Small-Cell Lung-drug therapy; Lung Neoplasms; Neoplasm Metastasis; Antineoplastic Agents-therapeutic use; Taxoids; Thymidylate Synthase-antagonists and inhibitors
Abstract: Most of the patients affected with locally advanced non-small-cell lung cancer have a recurrence or an evolutionary resumption of their disease justifying a second line treatment. The docetaxel gives a significant survival benefit, compared with palliative care. Several trials were reported with gemcitabine, vinorelbine, and paclitaxel. Pemetrexed shows a survival benefit similar to that docetaxel but with less side effects. Many other treatments have been evaluated lately, especially those with targeted molecules.

Cardiopulmonary Resuscitation

[The effect of cardiopulmonary resuscitation workshop on nurses' sustained learning]
Borimnejad, L.; Rasouli, M.; Nasrabadi, A. Nikbakht; Mohammadi, H. Mohammadi; Ahmadzadeh, M.
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Iran University of Medical Sciences - School of Nursing and Midwifery - Pediatrics Department
IJME - Iranian Journal of Medical Education 2008; 7 (2): 209-215 (19 ref.)
Keywords: Education, Nursing-methods; Learning; Nurses
Abstract: The effect of the presence of trained personnel in the team on the outcome of resuscitation has been proved in previous studies. An informative need assessment, in the environment of present study, reveals the role of the nurses' knowledge in Cardiopulmonary Resuscitation [CPR]. Therefore, this study was designed to determine the effect of education through workshop on nurses' sustained learning regarding resuscitation. An interventional study, using pre-test and post-test was carried out. The data gathering tool was a questionnaire consisted of two parts including individual characteristics and 21 multiple choice questions about necessary actions in cardiopulmonary resuscitation. This questionnaire was answered by the participants before, immediately after, and 6 months after the workshop. The results were analyzed using Repeated Measure ANOVA by SPSS software. The highest score, the lowest score and the mean score in pre-test were 17, 6 and 10.12, respectively. These scores for the post-test were 21, 13 and 17.96, respectively. For the test held after 6 month, the highest score was 17, the lowest was 10 and the mean score was 15.02. Comparing the means of these tests showed a significant difference between the pre-test, post-test, and the test after 6 months. Although CPR workshops met the needs felt by nurses to some extent, the repetition of these workshops in regular bases [six months at maximum], seems to be necessary.

Cardiovascular System

drug effects

Attenuation of cardiovascular responses to laryngoscopy and tracheal intubation - Intravenous sufentanil vs pethidine.
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Isfahan University of Medical Sciences - Department of Anesthesia and Intensive Care
Middle East Journal of Anesthesiology 2008; 19 (6): 1349-1359 (26 ref.)
Keywords: Sufentanil-pharmacology; Meperidine-pharmacology; Anesthesia, Intravenous; Double-Blind Method; Laryngoscopy; Intubation, Intratracheal; Anesthesia, General; Heart Rate; Blood Pressure; Analgesics, Opioid
Abstract: The study was undertaken to compare the effects of small doses of sufentanil or pethidine on cardiovascular responses induced by tracheal intubation. Sixty ASA physical status I-II patients, scheduled for elective abdominal surgery under general anesthesia, were randomly allocated in a double blind fashion to receive an intravenous bolus of either sufentanil 0.1 micro g/kg [Group S, n = 30] or pethidine 1.5 mg/kg [Group P, n = 30] for induction of anesthesia. The heart rate [HR], systolic arterial pressure [SAP], diastolic arterial pressure [DAP], and mean arterial pressure [MAP] were measured before induction of anesthesia [baseline], at 1 -min intervals for 3 min after the induction of anesthesia, and at 1, 3, 5, and 7 mm after start of laryngoscopy. No significant differences in SAP, DAP, and MAP were observed between the two groups. Heart rate was significantly increased 2 and 3 minutes after induction of anesthesia and 1 minute after intubation in group P as compared to group S [P < 0.01]. However, the numbers of patients who developed a heart rate increase more than 20% of basal value were not different between two groups. At the end of the study period, systolic,
diastolic, and mean arterial pressure slightly decreased from preinduction values was transient and did not require
treatment. If adequate timing in opioid administration is warranted according to the time to peak effect of each opioid
drug, small doses of sufentanil or pethidine could provide effective control of the inotropic response induced by
laryngoseopy and tracheal intubation.

**Castor Bean**

poisoning

A case of castor bean poisoning.
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Nizwa Hospital - Department of Medicine
**SQUJM - Sultan Qaboos University Medical Journal** 2008; 8 (1): 83-87 (27 ref.)
**Keywords:** Ricin-toxicity; Awareness

Abstract: Castor beans, sometimes used in traditional therapies, contain ricin one of the most toxic substances known.
It may cause an acute and potentially fatal gastroenteritis in addition to neurological and ophthalmological lesions.
Poisoning may also lead to delayed visceral damages; however, the latter is quite rare. The toxicity is dose related and
depends on the amount of castor beans ingested. There is no specific treatment and symptomatic management to
reduce the load of the toxin needs to be initiated quickly and early when a case of poisoning is suspected so that serious
complications will be avoided. Increasing the awareness of the population to the dangers of ricin would be a way to avoid
the utilisation of castor seeds in traditional therapies. Here we are reporting a case of mild poisoning after ingestion of a
single castor bean. The patient, who presented at Nizwa Hospital, Oman, fortunately recovered completely as the
ingested dose was quite small.

**Catheterization, Central Venous**

adverse effects

Catheter malposition following supraclavicular approach for subclavian vein catheterization -
case reports.
Singh, Prem K.; Ali, Zulfiquar; Rath, Girja P.; Prabhakar, Hemanshu
India Institute of Medical Sciences - Department of Neuroanaesthesiology
**Middle East Journal of Anesthesiology** 2008; 19 (6): 1405-1410 (7 ref.)
**Keywords:** Subclavian Vein; Clavicle; Medical Errors; Catheterization-adverse effects; Radiography, Thoracic

Abstract: The supraclavicular approach of subclavian vein catheterization is associated with the lowest incidence of
malposition. We report two cases of unusual malpositions seen during central venous catheterization of subclavian vein
via supraclavicular approach. Literature search did not reveal such malpositions. The possible cause for the malposition
and method to prevent it is discussed.

Retrospective analysis of catheter-related bacteraemia in haemodialysis patients in Benghazi,
Libya.
Al Ghaweel, Ibrahim; Ezwaie, Mohammed O.; Zahid, Intlyaz H.; Hussain, Saad M.; Elferjani, Nuria I.
E-mail: Igh3weel@yahoo.com
Al Arab Medical University - Faculty of Medicine - Department of Community Medicine
**Libyan Journal of Infectious Diseases [The]** 2008; 2 (2): 25-30 (19 ref.)
**Keywords:** Bacteremia-etiology; Renal Dialysis; Kidney Failure, Chronic; Retrospective Studies;
Bacteremia-microbiology

Abstract: Continuous haemodialysis is commonly used in patients with end stage renal disease. Catheter-
related bacteraemia [CRB] is a major cause of morbidity in haemodialysis patients. This retrospective study was carried out to
determine the incidence, clinical profile and morbidity and mortality of CRB in Benghazi Nephrology Centre. All hospital
records of hemodialysis patients with catheters placed in hemodialysis Unit at Benghazi Nephrology Centre in the period
of 1[st] January 2003 through 31[st] December 2006 were retrospectively analysed for CRB. In all cases, pyrexia in
patients with central venous catheters was considered to be due to CRB until proved otherwise. Catheter was taken out,
even in case of permanent [tunneled] one, and the tip was sent for culture and sensitivity. The mean age +/- SD of
hemodialysis patients was 56 +/- 10.4 years [range = 26-70 years] and the male to female ratio was 1:3:1. The overall
incidence of CRB was 5.7 episodes per 1000 catheters - days. Staphylococcus species were the most predominant
pathogens isolated. Two patients died due to sepsicaemia and one patient had meningitis due to Gram-negative bacteria.
Antimicrobial therapy with vancomycin, ceftriaxone and gentamicin was effective in 91% of CRB cases. The present
study has shown that CRB is not uncommon complication in patients using dialysis catheters at Benghazi Nephrology
Centre. However, it occurs less commonly with tunnelled than non-tunnelled central venous catheters Staphylococcus spp. Being the most commonly isolated pathogens, antimicrobial therapy should cover Staphylococcus species unless culture result indicates otherwise.

**Cerebellar Neoplasms**

secondary

Isolate cerebellar metastasis from colonic adenocarcinoma.
Andaloussi Saghir, K.; El Marjany; El Omari, H.; Mansouri, H.; El Gueddari, B.K.
Maroc Medical 2008; 30 (1): 63-67 (18 ref.)
**Keywords:** Colonic Neoplasms-complications; Adenocarcinoma; Neoplasm Metastasis; Cerebellar Neoplasms-diagnosis
**Abstract:** The hepatic and pulmonary are the preferential metastasis sites of colorectal cancer. Cerebral metastases are rare to see even exceptional when they are insulated. We report the case of a 47 years old patient having introduced a colic adenocarcinoma treated by surgery and chemotherapy. 18 months later he showed a cerebelleux syndrome with an intracranial hypertension. Cerebral tomodensitometry and magnetic imagery by raisonnance highlighted a double cystic and tissue component lesion of the left cerebellum hemisphere. Pulmonary radiography and abdominal ultrasound were without anomaly. The patient underwent total surgical remove of the lesion. The histology cal study of the operational part had revealed that it acted of a cerebellum metastasis of colic adenocarcinoma. As an adjuvant treatment, a whole brain radiation was given with a boost to the posterior cerebral pit. The patient died 20 months after the diagnosis of the metastasis.

**Cesarean Section**

Cesarean myomectomy of huge myoma: a case report.
Jarjees, Yosra Tahir; Hassan, Ghusoon S.
E-mail:yjarjees@yahoo.co.uk
University of Mosul - Mosul College of Medicine - Department of Obstetrics and Gynecology
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 61-62 (11 ref.)
**Keywords:** Myoma-surgery; Pregnancy; Leiomyoma-surgery; Uterine Neoplasms
**Abstract:** We present this case report of abdominal myomectomy for huge myoma done during cesarean section in a patient who presented with a transverse lie at term. Apart from moderate intra-operative blood loss, there was no fetal or maternal morbidity or mortality.

**Choriocarcinoma**

drug therapy

Abuidris, Dafalla Omer; Mohammed, Rehab Sid Ahmed; Elgaili, Elgaili Mohamed; Elsanousi, Mohamed Elsanousi Mohamed
E-mail:abuidris@yahoo.com
University of Gezira - Molecular Biology and Oncology - Institute of Nuclear Medicine
**Keywords:** Pregnancy; Uterine Neoplasms; Gestational Trophoblastic Neoplasms
**Abstract:** This is the first case report from its kind to be reported from the Institute of nuclear medicine, Molecular Biology University of Gezira. It is a case report of a 30-years old lady diagnosed as having choriocarcinoma, gestational trophoblastic tumor, and treated with multiple agent chemotherapy for three months. She was advised not to get pregnant during the first two years following chemotherapy. She was on regular follow up for one year after which she disappeared and discontinued the contraceptive pills. Seven months later she presented with a viable pregnancy and was followed till she delivered a normal viable alive boy. Both the lady and her baby are in a good health after six months from delivery.
Circumcision, Male

adverse effects

The circumcision: is it an insignificant act?
El Azzouzi, D.; Bouhafs, A.; Kaddouri, N.; Abdelhak, M.; Benhmamouch, N.

**Maroc Medical** 2008; 30 (1): 32-37 (7 ref.)

**Keywords:** Circumcision, Male-ethics; Circumcision, Male-methods

**Abstract:** The circumcision is one of the most frequent interventions practised to a male child; it is defined as surgical removal of the prepuse for a religious or traditional reasons. The surgical removal of the prepuse, is carried out either in emergency in case of paraphimosis, or normally case of phimosis. The complications of the circumcision are frequent and varied; haemorrhage and infection are described as early complications while generally the urological complications are known as late complications. Those are even more frequent when the circumcision is performed in a traditional way or by non professional [paramedical agents, hajjamas...] without a rigorous asepsis and in unfavourable material conditions. If the ritual circumcision is uncertain, the circumcision performed in surgical conditions remains a benign intervention.

Clinical Competence

-[Facilitating and preventing factors in learning clinical skills from the viewpoints of the third year students of Fatemeh School of Nursing and Midwifery]-
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Shiraz University of Medical Scienes - Fatemeh Zahara School of Nursing and Midwifery - Department of Health Education

**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 343-352 (25 ref.)

**Keywords:** Students, Nursing; Education, Nursing-methods; Cross-Sectional Studies; Faculty, Nursing; Midwifery

**Abstract:** Investigating the problems and barriers in learning clinical skills has been regarded in so many studies but the factors facilitating this process have not been taken into consideration. This study was performed with the aim to determine the facilitating and preventing factors in learning clinical skills from the viewpoints of third year students of Fatemeh School of Nursing and Midwifery in Shiraz. In this descriptive cross-sectional study, 54 nursing students in their sixth semester were selected through convenience sampling method. A researcher made questionnaire including 67 questions about facilitating and preventing factors in learning clinical skills was distributed among the samples. The questions included the areas of the relationships between the student, staff, instructor and the patient; student's satisfaction with the teaching methods of instructors and staff; teaching methods of theoretical and practical lessons; the facilities provided by the hospital and university; and instructors' characteristics. The data was analyzed by SPSS software through descriptive statistics. The most facilitating factors in learning clinical skills belonged to Instructors' educational and scientific experiences in developing educational affairs [77.8%], the educational environment provided by the instructors for experiencing clinical skills by students [77.8%], paying attention to the patient's rights and needs [76%], and instructors' responsibility toward education [76%]. The most preventing factors in learning clinical skills were the stress felt in the ward [83.3%], lack of students' support by staff [66.6%], and staff's bad temperedness [64.8%]. Students were satisfied with the items in different areas but they were unsatisfied with the relationship between staff and students, and also the way that instructors presented the practical and theoretical lessons. They mentioned these factors as the ones prevented their clinical learning. It is recommended to revise clinical education and take some appropriate action in order to provide a proper clinical education environment.

-[Medication calculation skills in nursing students of Arak University of Medical Sciences in 2007]-
Kouhestani, H.; Baghcheghi, N.
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Arak University of Medical Sciences - School of Nursing and Midwifery - Medical Surgical Department

**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 353-360 (16 ref.)

**Keywords:** Students, Nursing; Education, Nursing-standards; Cross-Sectional Studies; Needs Assessment; Drug Dosage Calculations; Universities; Schools, Medical

**Abstract:** Accurate medication calculation is a critical skill that nurses must demonstrate in order to administer medications safely. However, the ability of nursing students to calculate the correct dosage of medications has been mentioned as a concern in numerous studies. The aim of this study was to investigate the ability of nursing students in medication calculation. In this cross-sectional descriptive study, 76 nursing students were selected. The data gathering tool was a questionnaire consisted of three parts including demographic information, students' views toward their interest and ability in medication calculation, and 20 questions about medication calculation. After gathering the questionnaires, they were analyzed by SPSS software using statistical t-test, ANOVA, and correlation coefficient. According to most students, calculating medication dosage was simple [65.78 percents], they were interested in it [55.26 percents], and they had enough proficiency in performing this activity [63.15 percents]. Six students [7.89 percents] had provided correct
answers to all of 20 questions and 33 ones [43.42] had responded to 75 percents of the questions correctly. The mean and standard deviation of students’ scores were 14.9 +/- 6.2. There was a significant relationship between the semester and interest in medication calculation, and the test results. Although medication calculation is one of the essential skills for nurses; few participants had provided correct answers to all of the questions. This reveals the importance of this skill and a need to emphasize on medication calculation in nursing students’ education.

**Clonidine**

**therapeutic use**

Intrathecal clonidine for labor pain : international perspective.
Kuczkowski, Krzysztof M.; Chandra, Susilo  
E-mail: kkuczkowski@ucsd.edu  
University of California San Diego - USCD Medical Center - Department of Anesthesiology  
Middle East Journal of Anesthesiology 2008; 19 (6): 1417-1420 (8 ref.)  
Keywords: Labor Pain-drug therapy; Labor, Obstetric; Injections, Spinal; Anesthesia, Spinal; Bupivacaine; Analgesia, Obstetrical; Anesthesia, Obstetrical; Internationality

**Coagulation Protein Disorders**

**congenital**

Constitutional deficits in coagulation factors.
Chakour, M.; Messaoudi, N.; Tagajdid, R.; Belfeqih, B.; Belmekkei, A.; Naji, M.  
Maroc Medical 2008; 30 (1): 17-21 (10 ref.)  
Keywords: Blood Coagulation Disorders; Retrospective Studies; Genetic Diseases, Inborn; Coagulation Protein Disorders-diagnosis; Perioperative Care  
Abstract: Hereditary deficit of coagulation factors is rare affection. This is a retrospective study which analyse the coagulation parameters of 25 patients with an hereditary deficit. Deficiency on factor V, VII and VIII were the most frequent. Generally without symptoms, hereditary deficiency of coagulation factors must to be diagnosing with a great prudence for prevention of hemorragie riskin surgery.

**Colorectal Neoplasms**

**complications**

The occlusive colo-rectal cancer.
Bounaim, A.; Hasbi, S.; Alahyane, A.; Achour, A.; Sair, K.; Zentar, A.  
Maroc Medical 2008; 30 (1): 12-16 (21 ref.)  
Keywords: Retrospective Studies; Colorectal Neoplasms-pathology; Colorectal Neoplasms-surgery; Intestinal Obstruction-surgery  
Abstract: It is the most common progressive and revealing complication of colon cancer. This urgent situation becomes grave by combination of both cancer and occlusion. The surgeon must deal with the blockage as well as the cancer. This action takes into account several parameters, not only the patient’s clinical state but also the site and stage of the tumor. It is concerning 18 patients who had a colonic occlusive cancer, throught a period of 5 years. The parameters include the clinical state of the patient, and site and stage of the tumor. Of 123 colo-rectal cancer patients operated during this period, 18 cases were suffering from occlusion, represnting 15%. Average age was 54 years, ranging from 31 to 78 years, divioed to 10 men and 8 women with sex ratio of 1, 2. The location was predominately in the left colon with 13 cases, 4 cases in the right colon and 1 case in medium rectum. The right colon 1 cases in medium rectum. The right localisations were operated in a one stage operation while the left and rectal cases were carried out in 2 stage : 1 with primary colostomy and 13 with surgical colostomy the morbidity rate was at 19%. Early diagnosis, an adapted resuscitation procedure and a rapide surgical interferance with colostomy, can reduce the morbidity and mortality rate. Tumoral resection with continous restauration is the most pratical urgent surgical interferance. An appropriate care, mainly the patient's rehydratation and rapide surgical interferance will reduce mortality and morbidity rates. While the treatment or right colon cancer can be done by an one stage surgery, the left occlusive colon cancer as it is more urgent is managed case by case and we recomend a colostomy with or without the first resection.
Communicable Diseases

epidemiology

Epidemiological transition of some diseases in Oman: a situational analysis.
Ganguly, S.S.; Al Shafeee, M.A.; Al Lawati, Jawad A.; Dutta, P.K.; Duttagupta, K.K.
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Sultan Qaboos University - College of Medicine and Health Sciences - Department of Family Medicine and Public Health
Keywords: Communicable Diseases-mortality; Cardiovascular Diseases-epidemiology; Diabetes Mellitus-epidemiology; Obesity-epidemiology; Life Style; Incidence; Immunization Programs-utilization; Malaria-epidemiology; Tuberculosis-epidemiology; Neoplasms-epidemiology
Abstract: During the past 35 years Oman has undergone a rapid socioeconomic and epidemiological transition leading to a steep reduction in child and adult mortality and morbidity due to the decline of various communicable diseases, including vaccine-preventable diseases. Good governance and planning, together with leadership and commitment by the government, has been a critical factor in this reduction. However, with increasing prosperity, lifestyle-related noncommunicable diseases have emerged as new health challenges to the country, with cardiovascular diseases, diabetes and obesity in the lead among other chronic conditions. Appropriate prevention strategies for reducing the burden of noncommunicable diseases are discussed.

Composite Resins

[Effect of plasma ARC and halogen lights on composite microhardness]
Aboei, Mehrizi M.A.; Mohammad, Ebrahim H.; Aboei, Mehrizi E.; Ghassemi, A.
Shahid Beheshti University of Medical Sciences - Dental School - Department of Operative Dentistry
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 341-347, 1 (26 ref.)
Keywords: Halogens; Hardness; Ligth; Plasma
Abstract: Together with the controversy which exists in the efficacy of new PAC light curing units, this study evaluated the irradiation effect of plasma ARC and halogen light curing units on the microhardness of three resin composites. In this experimental study, two light - curing units including Remecure CL 15 [PAC] [with the output of 1600 mW/cm[2]] and Arialux [QTH] [with the output of 710 mW/cm[2]] were used. Six specimens of three type of resin composite were prepared in a steel mold with 2mm thickness. The three composites were CeramX [Dentsply], Heliomolar [Vivadent] and Z100 [3M]. Curing time with Remecure was 5 seconds and with Arialux was as the composite manufacturer recommended. After 24 hours, vickers hardness measurements on top and bottom surfaces of each specimen were made and the bottom/top vickers hardness [B/T VHN] was determined. Microhardness of two surfaces in each group was compared by t, 2-way ANOVA and Tukey tests. For CeramX composite two light curing units showed the same microhardness on the top and bottom surfaces. Heliomolar showed significantly lower values of microhardness on both surfaces and B/T VHN with Remecure. In Z100 specimens microhardness [on both surfaces] was lower with Remecure but B/T VHN was the same [P<0.05]. Except Heliomolar specimens which were cured by Remecure, B/T VHN was acceptable in all groups [more than 80%].The efficiency of Remecure unit in manufacturers' instruction time was equivalent or lower than conventional halogen light depending on the type of resin composite.

Constipation

surgery

Role of anorectal myectomy in management of functional outlet obstruction.
Mahmoud, Mohamed Mazlom Zakaria; El Shazly, Walid Galal; Gaweesh, Yossry
University of Alexandria - Faculty of Medicine - Surgical Department, Colorectal Unit
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 127-134 (34 ref.)
Keywords: Colonic Diseases, Functional; Colonoscopy; Sigmoidoscopy; Histology; Hirschsprung Disease
Abstract: this work aim to study the value of anorectal myectomy in diagnosis and treatment of functional outlet obstruction, twenty five patients with functional outlet obstruction were subjected to anorectal myectomy and biopsies were taken and examined for ganglionic state. All patients were subjected preoperatively to colonoscopy or barium, flexible sigmoidoscopy, colon transit time, standard proctography, anorectal manometry, pre-operative scoring of their constipation. Postoperatively patients were followed up for at least one year, where colon transit time and anorectal manometry were redone, and rescoring of their constipation. There was clinical improvement in 15 patients [60%] of these 10 were males, and histopathological examination of the specimen proved to be aganglionic in 9 patients [60%]. There was no clinical improvement in the other 10 patients of these 7 were males, and biopsy was aganglionic in only 3
patients [30%]. Anorectal myectomy is a promising diagnostic and therapeutic option in cases of functional outlet obstruction, provided careful patient selection and adequate physiological tests were done to the selected patients.

**Coronary Artery Bypass**

**Early results of combined coronary artery by-pass grafting and valve replacement.**

Alexandria University - Faculty of Medicine - Cardio-Thoracic Surgery

*Bulletin of Alexandria Faculty of Medicine* 2007; 43 (1): 105-110 (28 ref.)

**Keywords:** Heart Valve Prosthesis Implantation; Coronary Disease; Postoperative Complications; Follow-Up Studies

**Abstract:** In the era of continuously evolving cardiac interventions, the profile of patients referred for coronary artery bypass grafting [CABG] is changing to include older patients with concomitant diseases and co-morbidities. Studies on the results of a specific type of valve pathology operation in combination with CABG are few. This study conducted on 29 consecutive patients who underwent combined CABG and valve operations between January 2002 and December 2006. Follow-up for survival and events continued six months after discharge. All patients underwent cardiac catheterization within 3 months before operation. Patients age ranged from 30-72 years, with a mean of 56.3 +/- 9.64 years, of these patients, 21 patients [72.4%] were males, whereas 8 patients [27.6%] were females. They underwent a combination of CABG with either isolated aortic valve replacement [n - 16], isolated mitral valve replacement [n = 9], or double valve replacement [n = 4]. LAD was grafted in 23 patients, RCA was grafted in twelve patients, OM was grafted in ten patients and saphenous vein was used to graft the diagonal branch of the LAD in two patients. It was found that sex, age, the duration of aortic cross clamping, and arrhythmias specially atrial fibrillation and heart block are important determinants of early post-operative events suggesting restriction of the number of distal anastomosis to shorten the aortic cross-clamp.

**adverse effects**

**Early use of clopidogrel after coronary artery by-pass grafting.**

Elman, Waheed G.; Azab, Sahar H.
Alexandria University - Faculty of Medicine - Cardio-Thoracic Surgery Department

*Bulletin of Alexandria Faculty of Medicine* 2007; 43 (1): 121-125 (22 ref.)

**Keywords:** Thromboembolism-prevention and control; Platelet Aggregation Inhibitors; Blood Transfusion; Follow-Up Studies

**Abstract:** A better preserved hemostasis increases the risk of thrombosis, which is of particular importance for the patency of coronary anastomosis. Thromboembolic complications seem to be more frequent following off-pump coronary artery by-pass [OP CAB] than after conventional coronary Artery by-pass grafting [CABG], it is not known whether the conventional antiplatelet treatment, as established for on-pump procedures, is optimal for OPCAB-patients. Clopidogrel is a potent platelet aggregation inhibitor, that has gained widespread acceptance for the treatment of acute coronary syndromes and as an adjunct to percutaneous coronary intervention. Is to detect safety and efficacy of administration of clopidogrel early post-operative. Seventy five patients who underwent primary isolated CABG in Alexandria Forty two patients received dopidogrel after OPCAB or conventional on pump coronary artery bypass grafting according to surgeon's decision. The rest of patients didn't receive dopidogrel. Patients were divided into two groups, dopidogrel group [42 patients 56%] had received dopidogrel post-operatively, the no-clopidogrel group [33patients 44%] didn't receive dopidogrel. Post-operative bleeding, chest tube drainage, blood transfusion was detected. In the dopidogrel group, 38 patients [90.5%] received blood transfusions, and the mean number of packed red blood cells transfused during hospitalization was 3.8 +/- 2.2 units. In the second group, 29 patients [87.8%] received blood transfusions, and the mean number of packed red blood cells transfused was 3.5 +/- 2.6 units. No significant differences were noted in the development of early postoperative [within 30 days] pleural effusions requiring thoracentesis. This study documents the safety of early dopidogrel administration after coronary revascularization when administered according to a defined postoperative protocol. Major gastrointestinal bleeding is considered of most frequent risk and needs to be considered.

**Coronary Disease**

**epidemiology**

**Prevalence of coronary heart disease among Tehran adults: Tehran lipid and glucose study.**

Hadaegh, F.; Harati, H.; Ghanbarian, A.; Azizi, F.
Shaheed Beheshti University of Medical Sciences - Research Institute of Endocrine Sciences


**Keywords:** Prevalence; Risk Factors; Electrocardiography-utilization; Sex Factors; Age Factors; Blood Pressure-complications; Body Mass Index; Waist-Hip Ratio-adverse effects; Cholesterol-blood; Blood Glucose
Abstract: This study is the first report on the prevalence of coronary heart disease [CHD] and its associated risk factors in adult residents of Tehran. Standard supine ECG data were collected for 5984 men and women aged ≥ 30 years and coded by Minnesota criteria. All major cardiovascular risk factors were also measured. Based on Rose angina, self-reported history of CHD or ECG-defined CHD, the aged-adjusted prevalence of CHD was 21.8% [22.3% in women and 18.8% in men]. Variables independently associated with CHD were female sex, age, systolic blood pressure, 2-hour postprandial glucose, body mass index, waist-to-hip ratio and LDL/HDL cholesterol ratio.

etiology

Some risk factors for coronary heart disease among Omani males: a matched case-control study.
Ganguly, Shyam S.; Al Shafaee, M.A.; Al Maniri, Abdullah A.
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Sultan Qaboos University - College of Medicine and Health Sciences - Department of Family Medicine and Public Health
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 45-51 (23 ref.)
Keywords: Risk Factors; Case-Control Studies; Life Style; Diabetes Mellitus; Hypertension; Health Education; Prevalence; Smoking
Abstract: Evaluation of some of the leading risk factors for coronary heart disease [CHD] among males in Oman. We conducted a hospital-based pair-wise matched case-control study among Omani CHD patients admitted in the Sultan Qaboos University Hospital and the Royal Hospital located in Muscat, Oman. The cases were matched with an equal number of controls in respect of age and hospital. The information was collected from the cases and controls based on an interview and review of the medical records of the admitted CHD patients. The odds ratios [ORs] were estimated under univariate as well as multivariate situations using conditional multiple binary logistic regression model. The analysis revealed that 74 percent of the cases were of angina pectoris. The majority of the cases [96%] were above 40 years of age. The prevalence of sedentary life style was predominant [88.0%]. Hypertension, diabetes, family history of CHD and a sedentary occupation were the most significant risk factors for the development of the disease. The estimated values of the adjusted ORs were found to be 9.98, 2.74, 28.19 and 3.00 respectively [p<0.05]. Individuals with hypertension, diabetes mellitus, a family history of CHD and with sedentary occupations are to be considered at high risk of developing CHD. Such individuals should be provided with appropriate health education along with close monitoring for symptoms and signs of CHD.

Cross Infection

epidemiology

Prevalence of the nosocomial infection and risk factors.
El Rhazi, K.; Nejjari, C.; Kanjaa, N.; Tachfouti, N.; Qarrniche, N.; Berraho, M.; Serhier, Z.; El Fakir, S.
Maroc Medical 2008; 30 (1): 4-11 (11 ref.)
Keywords: Risk Factors; Prevalence
Abstract: The prevalence of the nosocomial infection was 6.7%, in the first study done at the University hospital center. The results were considered as underestimated. This study was done to determine the prevalence and risk factors associated with to create a new strategy against NI in this UHC. A cross sectional study was conducted. All the patients hospitalized the day of the study in this establishment were included and were examined to look for NI. The following risk factors were also looked for: the presence of a catheter, a urinary sound and surgical intervention. The statistical analysis was carried out using the software Epi info version 6. Chi-square test was used for comparing categorical data, and the Student's t-test for comparing the means. Significance was taken as P < 0.05. 276 patients were hospitalized the day of the study. Sex Ratio [Men/Women] was 0.92. The average age was 35.25 +/- 21 years with [0 - 84]. More than a third of the investigated patients [40.9%] had surgery and 36.2% of them had a vascular catheter, 13.8% had a urinary sound and 4.3% benefited from artificial ventilation. The prevalence of NI was 11.2% in all departments. 79.3% of patients got NI on the same day of study and in the same hospitalised department The two main factors associated with the occurrence of NI were surgical operations [p = 0.04] and duration of hospitalisation [15 days or more] [p = 0, 002]. The results between the present and previous study [2004 and 2006 respectively] shows a significant increase of the NI prevalence [p = 0, 036]. The results of this study 2006 allowed estimating the NI prevalence evolution with a more relevant collection of data, consequently, a rational and adequate decision-taking.
Cryptosporidium parvum

epidemiology

The epidemiology of cryptosporidium parvum infections in the united states.
Amin, Omar M.
Parasitology Center

Keywords: Feces-analysis; Prevalence; Signs and Symptoms; Mass Screening

Abstract: Six percent of 9,856 fecal specimens from 4,928 patients from all states and the District of Columbia tested positive for Cryptosporidium parvum infections in 2003-2005. Annual prevalence rate was similar in all three years. Overall prevalence was lowest in winter months but peaked in May, especially in males that were relatively more frequently infected than females. Additional peaks were observed in September, 2003 and February, 2004. Frequency of infection increased with age in both sexes up to age 80-89. Twenty two percent of infected patients were asymptomatic. Intestinal symptoms were relatively more common than extra-intestinal symptoms. Singly infected males [82%] and females [77%] experienced one or more of 17 intestinal symptoms [most frequently diarrhea, bloating, and gas] and one or more of 19 extra-intestinal symptoms [most frequently fatigue, brain fog and neurological problems].

Cyclopentanes

chemistry

Study of the structure of the polypentenamere.
Ismail, F.; Bendebane, F.; Boukhari, A.
E-mail:ismail.fadhel@univ-annaba.org
Lebanese Science Journal 2008; 9 (1): 113-122 (12 ref.)

Keywords: Polymers; Temperature; Thermodynamics

Abstract: Polypentenamer is obtained by ring opening metathesis polymerization [ROMP] of cyclopentene. This linear product does not present cross-links or detectable secondary ramifications. However, its structural units are geometric isomers with different cis and trans configurations. The objective of this study is to compare the effect of temperature on the fractions of the cis and trans structural units in the polymer, with theoretical thermodynamic predictions, and to determine the distribution type of these different units within chains that constitute the polymer. The polypentenamer studied in this work, is obtained from bulk polymerization in the gaseous phase of pure cyclopentene in presence of only tungsten hexachloride as catalyst without any other reagent. Fractions of the cis and trans structural units in polymer chains, are calculated from [13C] NMR spectra as a function of the polymerization temperature. The experimental results do not agree with thermodynamic predictions. The kinetics of the processes leading to cis or trans units probably follow more than one mechanistic scenario.

Cyclosporine

adverse effects

Simvastatin reverses cyclosporin A-induced endothelial damage in rats:lipid-lowering-dependent and -independent effects.
Abdel Galil, Abdel Galil A.; El Sawy, Mohamed M.A.; Saad, Evan I.; Omar, Amal G.; Helmy, Mai M.
University of Alexandria - Faculty of Pharmacy - Department of Pharmacology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 237-246 (52 ref.)

Keywords: Endothelium; Protective Agents; Simvastatin; Oxidative Stress; Superoxide Dismutase; Malondialdehyde; Lipoproteins, LDL; Lipoproteins, HDL; Rats

Abstract: Cyclosporin A [CyA] is the immunosuppressant most frequently used in transplant surgery and in the management of autoimmune diseases. CyA-induced oxidative stress together with dyslipidemia have been implicated in the pathogenesis of vascular dysfunction associating CyA therapy. The present study investigated the possible protective effect of simvastatin, a lipid-lowering drug with potent antioxidant properties, against CyA-induced endothelial damage in male rats. Eighteen male Wistar rats were used. They were divided into 3 groups: control, CyA and CyA + simvastatin. In the control group, rats were administered the vehicle, olive oil; in the CyA group, rats were administered CyA [20 mg/kg/day, s.c. for 14 days] and in the CyA+simvastatin group, rats were co-administered simvastatin [2.5 mg/kg/day, s.c. for 14 days] and CyA. Administration of CyA [20 mg/kg/day, s.c. for 14 days] in male rats resulted in a significant increase in the lipid peroxidation product, malondialdehyde [MDA], and a significant decrease in superoxide
dismutase [SOD] activity in plasma. CyA treatment was also associated with a significant increase in plasma nitrite level as well as an elevation in plasma cholesterol, triglycerides [TGs], low density lipoproteins [LDL] and a reduction in high density lipoproteins [HDL] levels. CyA-induced vascular dysfunction was further confirmed by the attenuation of endothelium-dependent relaxations produced by carbachol in rat isolated aortic rings. Co-administration of simvastatin [2.5 mg/kg/day, s.c. for 14 days] with CyA significantly reversed the deleterious biochemical and functional vascular effects that accompanied CyA treatment. The present study provides good evidence that both oxidative stress and dyslipidemia underlie the CyA-induced vascular damage, an effect that could be reversed by simvastatin co-administration.

Dental Caries

diagnosis

Significant caries index values and related factors in 5-6-year-old children in Istanbul, Turkey.
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University of Istanbul - Cerrahpasa Medical Faculty - Department of Public Health
Keywords: Dental Caries-etiology; Dental Caries-statistics and numerical data; Cross-Sectional Studies; Schools, Nursery; Mothers; Educational Status; Oral Hygiene; Risk Factors; World Health Organization
Abstract: To evaluate significant caries [SiC] index values and related factors in Turkish children aged 5-6 years old, children from 5 nursery schools in Istanbul were included in a cross-sectional study. Sociodemographic information and data about oral care habits were obtained from the records and from parents. Of 542 students examined, the mean decayed/missing/filled primary teeth [dmft] index was 3.74 [SD 3.49] and the SiC index was 7.75 [SD 2.56]. About 76.8% of the children had experienced dental caries. Logistic regression analysis of the SiC index for dmft showed that risk factors for poor dental status were low mother's education [OR 2.04] and irregular toothbrushing versus once-a-day brushing [OR 4.09] or twice-a-day brushing [OR 4.20].

Dental Cements

[Frequency of dental cements application by general practitioners and prosthodontists in Tehran, 2004]
Sahabi, M.; Al Avi, K.; Morsali, N.
Shahid Beheshti University of Medical Sciences - Dental School - Department of Prosthodontics
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 357-364, 3 (19 ref.)
Keywords: Physicians, Family; Prosthodontics; Dentists; Denture, Partial, Fixed; Cross-Sectional Studies; Zinc Phosphate Cement; Polycarboxylate Cement; Zinc Oxide-Eugenol Cement
Abstract: Nowadays various types of dental cements are used in fixed prosthetic treatments with different indications. On the other hand, these indications may be changed over a lot every day and new materials are being produced. The aim of this study was to determine the practice of dentists [included general practitioners and prosthodontists] about applications and manipulations of dental cements in fixed prosthetic treatments. The study was designed as a cross-sectional, descriptive method. Samples were 362 general practitioners [GP] and 32 [academic and non-academic staff] specialists worked in Great Tehran in 2004. Sampling was done in a simple random method. The questionnaire consisted of 11 questions. After determining the validity of questionnaire, it's reliability was confirmed by means of a test-retest exam. Zinc phosphate was the most frequent cement in fixed partial denture restorations [FPDs] in non-vital teeth [54.4% of GPs and 51.3% of specialists]. In vital teeth, both in preparations near and distant to the pulp, polycarboxylate were used frequently by GPs [50.8% and 56.4%, respectively] and specialists [531% and 34.4%, respectively]. The most of dentists in both groups were using zinc oxide with eugenol in temporary restorations near the pulp [55.5% and 62.5%, respectively]. Zinc phosphate was frequently used for post and core cases [54.5% and 71.9%, respectively]. The choices of general practitioners were relatively similar to specialists.

Dental Devices, Home Care

[A comparison of chlorhexidine impregnated floss vs. conventional dental floss on gingivitis]
Vahabi, S.; Nazemi, B.
Shahid Beheshti University of Medical Sciences - Dental School - Department of Periodontics
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 418-425, 11 (32 ref.)
Keywords: Gingivitis; Chlorhexidine-theroapeutic use; Dental Plaque Index; Periodontal Index
Abstract: Plaque induced gingivitis is the most prevalent form of periodontal diseases and there are several reports demonstrating low efficiency of mechanical methods to control the dental plaque completely. Chemical method has been found as an adjunct to mechanical plaque control. The purpose of this clinical trial was to evaluate the clinical outcomes
of chlorhexidine when used subgingivally with dental floss versus normal flossing alone. Thirty-seven female dental students with gingivitis and at least 2 sites with probing depth of 2mm and bleeding on probing in each quadrant participated in this split mouth clinical trial study. Following the initial evaluation of Plaque Index [PI], Bleeding Index [BI] and Gingival Index [GI], all patient received oral hygiene instruction, polishing and SRP [Scaling and Root Planning] if needed and their quadrants were affected by chlorhexidine impregnated floss in one side and dental floss in another side randomly. The measurements were repeated at 3 and 6 weeks. Then data were analyzed statistically within each group [Paired T Test] and between the groups [T Test] with an alpha-error level less than 0.05. Both methods presented significant improvement in PI and GI after 3 and 6 weeks and chlorhexidine impregnated floss showed a significantly greater reduction in PI after 3 weeks [1.5 +/- 0.7] and GI after 6 weeks [1.2 +/- 0.4] as compared to dental floss alone [respectively 1.7 +/- 0.65, 1.5 +/- 0.35, P<0.05]. The results indicated that chlorhexidine impregnated floss provided a more significant improvement of clinical outcomes than dental floss alone and recommends long term studies on various samples to validate these results.

Dental Implants

Success rate of long implants inserted in fresh frozen bone.
Rigo, Leone; Franco, Maurizio; Viscioni, Alessandro; Guidi, Riccardo; Avantaggiato, Anna; Carinci, Francesco
Civil Hospital - Department of Maxillofacial Surgery
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 86-91 (33 ref.)
Keywords: Bone and Bones; Treatment Outcome; Retrospective Studies; Kaplan-Meiers Estimate; Transplants-utilization
Abstract: To evaluate the clinical outcome on a series of long implants inserted into homologue Fresh Frozen Bone [FFB]. This retrospective study was conducted in the period between December 2003 and December 2006, 33 patients were operated on at the Civil Hospital, Castelfranco Veneto, Italy and 85 LIs inserted. The mean follow-up period was 28 months. Implant diameter and length ranged from 3.3 to 5.0 mm and from 14 to 16 mm, respectively. No implants were lost [i.e. SRV = 100%] and no differences were detected among the studied variables, On the contrary, Cox regression showed that implant diameter [i.e. narrow - implants, diameter 3, 75 mm] and prosthetic restoration [i.e. removable dentures] correlated with a statistically significant lower delta IA [i.e. reduced crestal bone loss] and thus a better clinical outcome. FFB is a good material to be used in pre-prosthetic surgery. LIs inserted into FFB can be considered reliable, although a higher marginal bone loss has to be expected when wider implants and fixed prosthetic restorations are used.

Dental Prosthesis, Implant-Supported utilization

Implant-supported overdenture: a standard of care for edentulous patients.
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King Sand University - College of Dentistry
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 100-104 (55 ref.)
Keywords: Denture, Overlay-utilization; Quality of Life; Patient Satisfaction
Abstract: Implants have had a significant impact on current prosthodontic treatment of edentulous patients.as a result of the development of osseointegrated dental implants, new treatment options have become available and new prosthetic designs have emerged. Overdentures supported by few implants dramatically improve patient comfort and acceptance as well as oral function compared to conventional denture. Different type of attachment was introduced for implant-supported overdenture that improves quality of life of geriatric populations in both function and esthetic.

Dental Waste

Management of dental waste in a dental hospital of lahore.
Mushtaq, A.; Alam, M.; Iqbal, Shahid; Mushtaq, Sohaila
Montmorency College of Dentistry and Institute of Public Health
Biomedica 2008; 24 (Jan.-Jun.): 61-63 (12 ref.)
Keywords: Medical Waste Disposal; Incineration; Sewage; Cross-Sectional Studies; Data Collection; Mercury-toxicity
Abstract: It is a descriptive study based on personal observations at Punjab Dental Hospital, Lahore carried out over a period of two weeks. A structured checklist was made to collect the data regarding the management of Dental hospital waste and filled in by observation. Final analysis was made with the help of Epi info 2002 statistical package. There was no categorization and segregation of infectious waste at the point of origin. Bags and containers for infectious waste were not marked with Biohazard symbol. White bags were not available for the general waste. There is no incinerator, storage site and landfill sights in the dental hospital. Transportation of waste within the hospital is through open baskets. Dental
Hospital sends its infectious waste to the Children Hospital Lahore for incineration twice a week. Amalgam/mercury, X-ray developer and fixer waste were drained through the main sewage system. Sanitary workers are not provided with protective clothing, gloves, masks and shoes. Waste management at Punjab Dental Hospital is not satisfactory. Interest and motivation in hospital waste management is lacking. The administration is required to play its role.

**Denture Bases**

*[Effect of disinfectant solutions on surface roughness of heat cure denture base acrylic resins]*

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Isfahan University of Medical Sciences - Dental School - Department of Prosthodontics

**Dental Journal - Shaheed Beheshti University of Medical Sciences** 2008; 25 (4): 393-400, 8 (23 ref.)

**Keywords:** Dental Disinfectants; Acrylic Resins; Surface Properties; Heat; Sodium Hypochlorite; Glutaral; Methylmethacrylates

**Abstract:** During infection control process, disinfection of prosthesis is important. But disinfecting method can cause some changes on dentures surface. The aim of this study was to evaluate the effect of disinfectant agents on surface roughness of denture base materials. In this study two chemical disinfectants [sodium hypochlorite 0.5%, glutaraldehyde 2%] and two dentures resin materials [Acropars, Meliodent] were used. 40 acrylic resin samples were made. Changes from baseline for surface roughness at four different times [10 minutes, 30 minutes, 24 hours and 7 days] were recorded. ANOVA and Duncan and T-test analysis compared the mean surface roughness of the groups. Mean variation of surface roughness for Acropars resin in sodium hypochlorite and glutaraldehyde at 24 hours and 7 days was significant \[P<0.001\]. This variation for Meliodent resin 7 days after immersion in hypochlorite 0.5% was significant \[P<0.001\]. Mean variation of surface roughness for Meliodent resin in glutaraldehyde was not significant for the time of the study. Mean surface roughness difference among Meliodent and Acropars resin in glutaraldehyde and sodium hypochlorite after 10 minutes and 24 hours was significant \[P<0.001\]. The difference between these two acrylic resin after 7 days in gluteraldehyde was also significant \[P<0.001\]. Result of this study indicated sodium hypochlorite 0.5% and gluteraldehyde 2% can be used on Acropars only up to a period of 30 minutes. Sodium hypochlorite 0.5% can be used on Meliodent for 24 h. However gluteraldehyde 2% can be used for a longer period.

**Denture, Partial, Removable**

Dentists experiences, practices and understanding of some design statements regarding mandibular kennedy class I removable partial dentures.

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**JPDA - Journal of the Pakistan Dental Association** 2008; 17 (2): 70-78 (36 ref.)

**Keywords:** Denture Design; Health Knowledge, Attitudes, Practice; Dentists; Questionnaires

**Abstract:** Mandibular Kennedy class I situation being substantial and its restoration need with removable partial dentures [RPDs], necessitates practitioners to be knowledgeable and skillful in the clinical, biological and technical aspects. It is aimed to report clinical experiences and practices with RPDs of some dentists and their understanding of some statements pertaining to the design of these RPDs. Comparative, PMDC Registered dentists in NWFP. A self-administered structured Performa documenting personal and RPD practice related information and responses to some conceptual statements pertaining to a standardized mandibular Kennedy Class I RPD was used to collect data. Data were collected, by either direct personal contact or through mail, from 120 dentists divided into 4 groups on the basis of their professional educational and practice experience level. There were wide variations in responses of dentists regarding the extent of their provision of RPDs and specifically of mandibular Kennedy Class I RPD to patients, A substantial number of dentists [77 97%] had never reappraised their RPD making skills. Not doing jaw cast surveying and delegating the RPD design to dental technician was noted in cases of some 67 - 93% and 20 - 43% respectively. Selection of inappropriate design statements pertaining to the test situation regarding the various aspects of RPD designing was also made by many dentists in the various groups. Participants having relatively fresh entry into clinical dental practice proved more knowledgeable by responding appropriately in larger numbers. Mostly within group and between-group variations were statistically insignificant. Knowledge of the participating dentists in all the 4 groups was poor regarding the understanding of the concepts related to RPD design. However, relatively younger dentists proved better than the others.
Depression

epidemiology

Prevalence, predictors and determinants of depression in women of the reproductive age group.
Daud, Seema; Kashif, Rootaba; Anjum, Aftab
Lahore Medical and Dental College - Departments of Community Medicine
Biomedica 2008; 24 (Jan.-Jun.): 18-22 (25 ref.)

Keywords: Depression-etioloqy; Prevalence; Women; Reproduction; Risk Factors; Age Distribution; Demography; Family Characteristics

Abstract: The purpose of this study was to find out prevalence, predictors and determinants of depression in women of reproductive age. The study was conducted in a peri-urban locality of Lahore. Among 186 respondents, 114 were less than 30 years of-age [61%], 117 were Christians [62%] and 124 were educated [67%], 65 lived in nuclear family system [35%], with 148 women having 5 to 10 family members [79%], 174 were housewives [94%], 154 husbands were in regular employment [83%] and 107 women had family income of less than Rs. 5000 [58%]. Among the study group, 123 women were married [66%], 19 were pregnant [15%] and 61 women had 3-4 children [50%]. The present study prevalence of depression was 25%. Emotional and physical complaints like sadness, crying, irritability, loss of interest in life, sleeplessness, inability to work, tiredness, health worries, disappointment, self blaming, poor appetite and weight loss, were more in depressed respondents than non-depressed women [p = < 0.001]. Among age group > 30 years, 33% women were depressed compared to 19% in age group < 30 years [p = 0.03]. Among uneducated respondents 35% were depressed in contrast to 19% of educated women [p = 0.02]. In nuclear family type, 35% respondents were depressed compared to 20% living in mixed family system [p = 0.03]. Among women with 3-4 children, 38% had depression in contrast with 19% with 1-2 children [p = 0.02]. The study concluded that depression in reproductive age women is not uncommon. Its emotional and physical predictors and socio-demographic determinants must be kept in mind while identifying its risk factors and planning its management.

Dermatitis, Contact

enzymology

[Evaluation of matrix metaloproteinase 2 [MMP2] activity in contact nickel dermatitis using zymoanalysis in comparison to normal individuals]
Falak, R.; Khoramizadeh, M.R.; Pezeshki, M.; Mansoori, P.
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Iran University of Medical Sciences - Science of Immunology
Qom University of Medical Sciences Journal 2008; 1 (4): 45-52, 6 (27 ref.)

Keywords: Matrix Metalloproteinase 2; Nickel; Fibroblasts

Abstract: Matrix Metalloproteinases [MMPs], produced mainly by fibroblasts, play a major role in wound healing processes. This study aimed to investigate the MMP2 activity in dermal fibroblasts found in chronic contact nickel dermatitis lesions. In order to study the role of MMP2 in contact nickel dermatitis, fibroblast from patients and healthy individuals were cultured based on ex-plantation of skin. MMP2 activity was measured in fibroblast culture media using zymoanalysis. Zymograms were then analyzed by quantitative densitometry. MTT assay was also used to evaluate and compare proliferation capacity of fibroblasts in both cell cultures. The mean MMP2 activity 6-8 days after ex-plantation was significantly higher in patients fibroblasts than in normal individuals [170 +/- 9.2 and 134.3 +/- 5.9 in patients and normals, respectively [p < 0.05]. The proliferation capacity of patients' fibroblasts was significantly higher than that of normal cases [385938 +/- 2816 and 270261 +/- 6527 respectively, p < 0.05] in the same days. Our study shows a significant increase in degenerative activity of fibroblasts in nickel dermatitis lesions. It was also seen that the MMP2 activity per cell was significantly higher in patients' fibroblasts compared to healthy individuals and that gelatinolytic activity of MMP2 is independent of cell number. Therefore, intra-and inter-cellular signals may be altered in fibroblasts of nickel dermatitis lesions which lead to promotion of fibroblast response to mitogenic and fibrogenic stimulations.

Diabetes Mellitus

Shokair, Nagwa F.
University of Alexandria - Faculty of Medicine - Community Medicine Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 225-236 (33 ref.)
Keywords: Patient Compliance; Exercise; Patient Acceptance of Health Care; Body Mass Index; Questionnaires; Health Education; Patient Satisfaction; Cross-Sectional Studies; Delivery of Health Care

Abstract: The problem of poor compliance to prescribed treatment is very complex. The success of long-term maintenance therapy for diabetes mellitus (DM) depends largely upon the patient's compliance with a therapeutic plan. Determine the pattern of compliance of diabetic patients with treatment regimen and its determinants and explore the barriers to poor compliance. A community-based cross-sectional study was adopted where a cluster random sampling technique was used. Data was collected using an interview questionnaire. Patients' medical records were reviewed. Body mass index (BMI) was estimated. The total mean percent score of compliance of diabetic patients with treatment regimen was 58.44 +/- 20.37%. Compliance with appointments [except for eye and renal screening], medication and personal self-care was much better than compliance with diet and exercise. The mean fasting blood sugar level was 169.64 +/- 50.01 mg/dl. Less than half of the patients [42.2%] received health education. Age, education, marital status, duration of diabetes, glycemic control, complications, co-morbidities, family support, patients' satisfaction and perceptions were significantly associated with compliance. The most commonly cited barriers for achieving good compliance were: lack of knowledge, poverty and difficulty in changing habits. Efforts should be made to enhance diabetic education. Physicians need to be trained in the area of education and communication. Skills in assessing readiness for change and exploring patient's perceptions must be developed. There should be routine monitoring for eye, renal and psychological wellbeing.

Diabetes Mellitus, Type 1

Prevalence of celiac disease in patients with type 1 diabetes mellitus.
Afifi, Mohamed Tamer; Kasem, Ali Nassrat; Thabet, Tarek Mostafa; El Halwany, Zakaria M. Fahmy
Alexandria University - Faculty of Medicine - Gastroenterology Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 135-144 (43 ref.)

Keywords: Celiac Disease-diagnosis; Prevalence; Antibodies; Signs and Symptoms

Abstract: Celiac disease is an autoimmune disorder in genetically susceptible individuals after ingestion of gluten. Early diagnosis and treatment of celiac disease could potentially prevent the development of serious complications like osteoporosis, small bowel lymphoma, and infertility. Nowadays, the availability of non-invasive serological tests for celiac disease altered the classical diagnostic pathway, and allows screening of populations at particular risk of developing celiac disease. Celiac disease is associated with many other autoimmune disorders, type 1 diabetic patients may have the risk of developing celiac disease or one of its complications. To determine the prevalence of celiac disease in adult patients with type 1 diabetes mellitus attending the outpatient diabetic clinic of Alexandria University Main Hospital. 200 adult patients with type 1 diabetes mellitus screened for celiac disease by anti-endomysial (EMA) IgA antibodies, and anti-tissue transglutaminase [tTG] IgA antibodies, in addition, Anti-endomysial [EMA] IgG antibodies used to detect patients with IgA deficiency. Distal duodenal biopsy and histopathological examination was performed for any serologically positive patient. Eight [4%] patients showed positive results for all performed serological tests. They all confirmed to be celiac diseased by histopathological examination of distal duodenal biopsy. Anther three patients showed only weak positive liter for tTG-IgA and all of them revealed normal mucosal histopathological finding. Anti-endomysial [EMA] IgA assay showed optimal concordance with histopathological finding. In three patients of the celiac group; the disease was asymptomatic. Symptoms [anemia, fatigue, short stature, diarrhea abdominal distension, recurrent aphthus ulcer, and recurrent hypoglycaemic attacks] in a mild form were significantly higher in the diabetic-celiac group than that in diabetic non-celiac group. There were no significant differences between the diabetic-celiac group and diabetic non-celiac group as regard age, diabetic onset, duration, or glycemic control. Patients with type 1 diabetes mellitus have an increased prevalence of celiac disease. Because most cases are clinically unrecognized, consideration should be given to screening all patients with type 1 diabetes. EMA serological screening and confirmatory histopathological examination of distal duodenal biopsy remain the best screening strategy to detect celiac disease in patients with type 1 diabetes.

Diabetic Retinopathy

Care of diabetic retinopathy patients in Oman.
Khandekar, Rajiv; Mohammed, Ali Jaffer; Al Lawati, Jawad A.
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Ministry of Health - Non-Communicable Diseases Control Department
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 5-9 (25 ref.)

Keywords: Delivery of Health Care; World Health Organization; Health Education; Referral and Consultation; Blindness
**Diagnosis**

**Caution with the hasty surgical decisions.**
El Assad, K.; Saadi, N.; El Harroudii, T.; Jallil, A.; El Alami, M.H.; Chraibi, C.; Bezad, R.
*Maroc Medical* 2008; 30 (1): 68-69 (4 ref.)
**Keywords:** Diagnosis, Differential; Hysterectomy; Uterine Neoplasms-surgery; Uterine Neoplasms-diagnosis; Surgical Procedures, Operative

**Diagnostic Imaging**

**Molecular imaging: Bridging imaging and biology.**
Al Lamki, Lamk
E-mail:mjournal@squ.edu.om
*Sultan Qaboos University Medical Journal* 2008; 8 (1): 1-2 (5 ref.)
**Keywords:** Magnetic Resonance Imaging; Tomography, Emission-Computed, Single-Photon; Positron-Emission Tomography; Molecular Biology

**Diarrhea**

**etiology**

**Detection of cyclospora cayetanensis infections among diarrheal children attending Suez Canal University Hospital.**
Abdel Wahab, Amina M.; El Sharkawy, Sonia G.; Rayan, Hanan Z.E.; Hussein, Eman M.
Suez Canal University - Faculty of Medicine - Departments of Pediatrics
*PUJ - Parasitologists United Journal* 2008; 1 (1): 37-46 (38 ref.)
**Keywords:** Child; Cyclospora-isolation and purification; Feces-parasitology; Oocytes; Cyclosporiasis; Hospitals, University

**Abstract:** The objective of the present study is to detect the occurrence of Cyclospora cayetanensis among diarrheal children with or without immunosuppressant conditions. Stool samples were collected and examined for identification of the parasite using different concentration methods [Formaline ethely acetate, Potassium hydroxide and Sheather's floatation] and different stains [acid fast, modified Ziehl Neelsen, modified Kinyoun and modified safranin]. Confirmation of the results was performed using autofluorescence technique. Cyclospora oocysts were detected in 19.6% of 230 diarrheal children without immunosuppressant conditions and 34.6% of 230 diarrheal children with immunosuppressant conditions with significant difference between the two groups. Sheather's floatation method was significantly more sensitive than direct smear, FEA and KOH sedimentation methods [with sensitivities of 93.6%, 63.7%, 75.8% and 79.8%, respectively]. Additionally, the modified safranin was the best staining method as it was significantly more sensitive than the acid fast and the modified Ziehl Neelsen staining. On the other hand, no significant differences were found between the acid fast, the modified Ziehl Neelsen or the modified Kinyoun staining. Cyclosporiasis predominated in the age group 1-4 years compared to other age groups. There was a significant association between infection with Cyclospora and low socioeconomic level, living in rural areas and using tap water. Cyclospora was found as a sole parasite in 55 out of 124 [44.4%] infected children. Co-infection with other pathogenic parasites occurred in 69 cases; most commonly Cryptosporidium [30/124]. It was concluded that cyclosporiasis is common among diarrheal children especially if it is associated with immunosuppressant conditions. Feces examination for oocysts using Sheather's floatation and the modified safranin staining are recommended for diagnosis.

**Diet**

**Nutrition, oral and periodontal health, advances in knowledge.**
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University of Connecticut - School of Dental Medicine - Division of Periodontology
*JPDA - Journal of the Pakistan Dental Association* 2008; 17 (2): 67-69 (22 ref.)
**Keywords:** Diet Therapy; Nutritional Status; Oral Health; Periodontal Diseases-classification; Periodontal Diseases-immunology; Periodontal Diseases-diet therapy; Prevalence; Probiotics-therapeutic use; Lactobacillus; Knowledge
Diphtheria-Tetanus Vaccine

**Antitoxin response to tetanus toxoid [TT] versus combined tetanus -reduced diphtheria [TD] vaccination in pregnant women: clinical trial.**

Abdel Aziz, A.M.; Farghaly, N.F.; Tayel, S.E.; El Abady, M.S.; El Alkamy, S.A.

University of Alexandria - Faculty of Medicine - Community Medicine Department

**Bulletin of Alexandria Faculty of Medicine** 2007; 43 (1): 247-252 (21 ref.)

**Keywords:** Pregnancy-blood; Tetanus Antitoxin-blood; Immunization-adverse effects

**Abstract:** Outbreaks of diphtheria in 1990s primarily involved adults. This reflects the decline of immunity with age. It is recommended to use the combined tetanus-diphtheria toxoid [Td] instead of the monovalent tetanus toxoid [TT] whenever tetanus toxoid is indicated. The protective efficacy following the new vaccinations schedule needs to be tested. The present study aimed to compare serum levels of diphtheria and tetanus antitoxin in pregnant women receiving [Td] vaccine and those receiving [TT] tetanus toxoid vaccine. As well as, to compare the frequency of adverse events following immunization between both groups. randomized, double blind controlled trial strategy was adopted. The reference population was pregnant women attending four rural health units in Abu Homos District, Egypt. A simple randomized procedure was used to allocate enrolled subjects [n = 130] to a study group [receiving Td vaccine] and a control group [receiving TT group] in a ratio of 1:1. The study revealed that before the vaccine administration, the mean values of tetanus antitoxin level in the experimental group [who received two doses of Td vaccine] and the control group [who received two doses of TT vaccine] did not differ significantly. After the first dose of vaccination, the mean tetanus antibody level was significantly lower in the Td group than in the TT group [t = 5.51, p < 0.001]. However, after the second dose, the mean tetanus antibody litter for Td group rise to 5.83 +/- 3.99 IU/ml and was still lower than that for the TT group [6.9 +/- 3.27 IU/ml] but this difference was not statistically significant, [t = 1.68, P = 0.096]. There were no significant differences between the two groups as regards the occurrence of systemic adverse events following either the first dose or second dose of Td or TT vaccine. On the other hand, the frequency of local adverse events following the first dose and second dose of Td vaccine were higher than that following TT vaccine. However, the difference was not statistically significant except for occurrence of local pain. The study concluded that tetanus-diptheria toxoid [Td] can be used instead of single tetanus toxoid [TT] to protect against both tetanus and diphtheria. The local reactions associated with Td are usually self limited and require no therapy.

Disaster Planning

**Effectiveness of training new standard operating procedures of the hospital disaster plan.**

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Rashid Hospital Dubai - Department of Emergency and Trauma Center

**Emirates Medical Journal** 2008; 26 (2): 85-100 (9 ref.)

**Keywords:** Hospital Planning; Reference Standards; Quality Indicators, Health Care; Evaluation Studies as Topic; Staff Development

**Abstract:** [1] To assess the effectiveness of training of three SOPs of the hospital disaster plan and three key disaster management figures by using appropriate assessment tools [the performance indicators]. [2] To strengthen the concept that the planning, drills, and training improve a hospital’s ability to respond to a disaster. Using a standardized tool derived from Emergo Train System, the performance of three SOPs and three disaster management roles were assessed and applied to a specific disaster plan. Using a control as an exercise drill without antecedent training, subsequent measurements of the SOPs and specific disaster management roles were obtained and analyzed during three real life disasters. The success rate of the overall result of all 6 performance indicators used was only 45.5% in a disaster drill without any prior training but after training, there was a significant increase in the success rates to 79.5%, 87.9%, and 94.7% respectively in three successive disaster over three months period. All the results were subjected to statistical analysis. The odds ratio before and after the training were calculated and the difference was found to be highly significant Effectiveness of training can be measured quantitatively by using appropriate tools [i.e., the performance indicators]. It is also possible to evaluate standard operating procedures [SOPs] of a hospital disaster plan in real time disaster scenarios.
Doxorubicin toxicity

Adriamycin cardiotoxicity, Bezold-Jarisch reflex or both?
Hobaika, Adriano Bechara De Souza
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Anesthesiology Teaching and Training Center
Middle East Journal of Anesthesiology 2008; 19 (6): 1421-1422 (6 ref.)
Keywords: Cardiotoxins; Heart-drug effects; Nitroglycerin; Bradycardia; Hypotension; Pressoreceptors-drug effects; Reflex

Adriamycin cardiotoxicity, Bezold-jarisch reflex or both?
Prabhakar, Hemanshu
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Middle East Journal of Anesthesiology 2008; 19 (6): 142 (3 ref.)
Keywords: Cardiotoxins; Heart-drug effects; Arrhythmias, Cardiac; Reflex

Ear Protective Devices

[Study of the effective parameters on the making use of protective devices in Qom province workers community in 2006]
Tabaraie, Y.; Ahmadizad, S.; Heidari, H.R.; Koohpaie, A.R.
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Qom University of Medical Sciences
Qom University of Medical Sciences Journal 2008; 1 (4): 53-60, 7 (10 ref.)
Keywords: Hearing Loss, Noise-Induced-prevention and control; Questionnaires; Noise, Occupational-adverse effects; Noise, Occupational-prevention and control
Abstract: Noise threats health of many groups of industrial workers and causes hearing loss. Use of personal protective device is the best control method to protect against hazardous conditions. Hence, this investigation was carried out to determine situation of using of protective devices and effective parameters on it, in Qom province workers community in 2006. This research is descriptive-sectional study. Sample volume was designed 378 persons working in factories in Qom. First of all, list of Qom factories with noise pollution problems, were collected and 30 important factories among them were selected randomly. In the second stage, 378 persons were selected randomly from workers. The interest information was obtained by questionnaire and collected data were analyzed by SPSS software. The obtained results showed that, 83.6% of workers have been using ear protective devices. 296 of them, which were using ear protective devices, had an occupational hygienist in their workplaces. This research also showed that, 109 workers that used ear protective devices, had moderate knowledge level. Moreover, 82.5% of trained workers have used ear protective devices. The statistical analysis of the results showed that there were no significant relationship between use of ear protective devices and existence of occupational hygienist in workplace, knowledge and age of workers, worker's antecedent, physical health of workers and kind of ear protective devices [p > 0.05]. These results showed that among all considered parameters; only four parameters were effective in using ear protective devices; education of workers before employment, head workman and employer's knowledge level, factories facilitation and kind of ear protective devices.

Echinococcosis, Hepatic diagnosis

Cystobiliary fistula in hepatic hydatid disease: diagnostic and therapeutic challenge.
Shawki, A.; El Abd, O.; Salama, M.; Sidkey, F.; Taher, M.Y.
Menoufiya University - National Liver Institute
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 189-195 (20 ref.)
Keywords: Biliary Fistula-surgery; Ultrasonography; Tomography, X-Ray Computed; Cholangiopancreatography, Endoscopic Retrograde; Sphincterotomy, Endoscopic; Postoperative Complications; Wound Infection
Abstract: In Hydatid disease of the liver cystobiliary fisula [CBF] constitutes an anatomic and a clinicopathologic entity characterized by the occurrence of a life-threatening cholangitis with increased morbidity and the prolongation of hospital stay. An accurate preoperative diagnosis of this complication is essential for its prompt surgical management. The diagnosis of hydatid disease and the existence of CBF is based primarily on both of the clinical presentation and the
characteristic appearance on ultrasonographic [US] and/or computed tomographic [CT] imaging, and confirmed by endoscopic retrograde cholangiography [ERC]. The aim of this work was to study the different diagnostic and therapeutic aspects of cystobiliary fistula in hydatid disease of the liver. From 1996 to 2003, among 63 patients treated for hydatid cysts of the liver, 17 with complicated cysts were included in the current study. They were 11 males and 6 females with a mean age of 34.5 years [ranged from 12 to 72 yrs]. According to the clinical presentation, they were divided into 3 groups; group A: nine patients presented with cholangitis, group B: five patients had history of jaundice and group C: three patients presented with jaundice. In 14 patients [groups A and B], the diagnosis of CBF was suspected by abdominal US and/or CT imaging and confirmed by ERC. In the remaining 3 patients [group C], CBF was not documented and they were excluded. Preoperative endoscopic sphincterotomy ES was done in group A with retrieval of hydatid daughter cysts. Among the patients of group A, Seven patients [subgroup A1] were subsequently submitted to surgery entailing endocystectomy in 5 and hepatic resection in two. The remaining 2 patients in group A [subgroup A2] were managed by endoscopic therapy only. Patients of group B [n = 5], were not submitted to preoperative ES and were subsequently managed by hepatic resection in one patient and endocystectomy in four. There was no mortality in the studied group. Postoperative bile leak occurred in four cases; one after hepatic resection and three after endocystectomy in group B for whom preoperative endoscopic sphincterotomy [ES] was not done. In contrast, none of the patients who were submitted to preoperative ES [subgroup A1] had bile leak. Postoperative wound infection was reported in three patients and minimal subphrenic collection that was aspirated under US guidance was in two. A chest complication in the form of atelectasis was recorded in one patient. The mean hospital stay was 12.4 days. All patients received albendazole treatment. Surgery still remains the treatment of choice for hydatid cysts of the liver complicated with cystobiliary fistula [CBF]. The results of this work highlight the validity of diagnostic ERC in confirming the diagnosis of CBF in suspected patients with complicated hydatid cysts of the liver. Also, therapeutic ERC has a place in the treatment algorithm of CBF as it was found to be a safe and a reliable therapeutic alternative especially in high risk patients for surgery.

Education, Dental

[Comparative assessment of educational services in dental schools of Iran, 2003]
Ministry of Health and Medical Education - Education and Student Affairs
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 409-417, 10 (20 ref.)
Keywords: Educational Measurement; Schools, Dental; Dentistry
Abstract: Comparing medical universities is a useful tool to identify best practices and situation analysis in educational services and may be used as a benchmark tool for planning and identifying goals and priorities. In this study we designed criteria to compare dental schools structures and performances and identified best practices among them. In this experimental study, in the project's expert panel committee, consisting of dentistry faculty members and medical education experts, a benchmarking tool was devised by using goal analysis and brain storming methods. This tool was used to measure the educational performances of dental schools nationwide. Indicators' weights were defined through consensus developing methods. Each school was asked to introduce a representative who would complete a questionnaire, which was designed to collect schools' information. In the next step, all the divisions were visited by project's members. Then, data retrieval was performed and verified at the project's office. Fifty seven criteria for evaluating educational services in dental schools were classified in 7 subgroups: 1. national university entrance exam [2.1%], 2. faculties [15.7%], 3. equipment and facilities [23.2%], 4. management [31.6%], 5. help and support systems [7.4%], 6. outputs [14.6%] and 7. faculty products [5.4%]. Shahid Beheshti Dental School gained the first rank, with the score of 70.12 out of 100. Authorities have used practical strategies and benchmarks of this study for qualitative and quantitative improvement of educational services.

Education, Medical

organization and administration

[Using private medical centers in training medical students: The viewpoints of the faculty members of Isfahan University of Medical Sciences]
Tavakoli, M.; Yamani, N.; Sohrabi, A.
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Isfahan University of Medical Sciences - Medical Education of Research Center
IJME - Iranian Journal of Medical Education 2008; 7 (2): 217-225 (10 ref.)
Keywords: Students, Medical; Private Practice; Schools, Medical; Education, Medical-methods; Teaching; Universities
Abstract: Taking advantage of faculty members' private offices for educational intentions has been recommended as a strategy for students' attendance in society and their encounter with patient management. This study was performed to investigate the viewpoints of administrators and clinical faculty members toward using private medical centers for training students. This descriptive study was carried out on all clinical faculty members who owned private offices. The data gathering tool was a questionnaire with five point Likert scale and including 20 items about using private medical centers. Data was analyzed by SPSS software using methods for descriptive statistics, t-test, and Pearson. In total, 173 persons
returned the questionnaires. The mean of the total score of the questionnaires was 3.02 +/- 0.78 out of five. The most agreement was on the role of in-office education on identifying students’ future job, teaching new cases to them, and promoting researches and studies in medical sciences. Most of the respondents believed that education in private offices could reduce offices’ income, the number of patients, and patients’ confidence in physician. Faculty members believed that using private medical centers could promote the education of clerkship students, interns, and residents, but the total mean shows that their general view is not that positive. It is recommended to conduct interventional studies concerning the effect of training in private centers on learners' knowledge and skills.

**standards**

[Medical education effectiveness from the viewpoints of medical students of Tehran University of Medical Sciences]
Zahedi, M.; Amirmaleki, H.
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Higher Institute for Education - Management and Curriculum Studies

**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 289-298 (38 ref.)

**Keywords:** Program Evaluation; Students, Medical; Curriculum; Teaching-standards; Schools, Medical; Universities

**Abstract:** Curriculum revision, teaching activities and interaction in instruction are required for the improvement of effectiveness of education. This research was conducted to study the effectiveness of medical education from the viewpoints of students in Tehran University of Medical Sciences. This survey was carried out on fifth year medical students in the first semester of the academic year of 2005-2006. One hundred and sixty two students were selected through stratified random sampling method. The data gathering tool was a questionnaire including 74 questions which was designed using McDonald model and consisted of three parts of curriculum, organizing teaching activities, and interaction in education. The questionnaires were distributed in educational hospitals affiliated to Tehran University of Medical Sciences. The data was analyzed by SPSS software using descriptive and inferential statistical methods. The mean and standard deviation obtained from students' viewpoints toward effectiveness of curriculum, teaching activities, and interaction in education were 2.35 +/- 0.34, 2.5 +/- 0.35, and 2.46 +/- 0.35, respectively. The first one was less than theoretical mean, while the second and third ones were equal to the theoretical mean. The mean obtained for effectiveness of curriculum was lower than the theoretical mean [2.5] which shows the necessity of revising medical curriculum. The mean of the interaction in instruction and teaching activities calls for a need to improve different kinds of interaction and promote the skills of instructors.

**Education, Medical, Graduate**

**methods**

Learning opportunities in postgraduate training programs.
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**Gezira Journal of Health Sciences** 2008; 4 (1): 31-52 (45 ref.)

**Keywords:** Teaching; Learning; Ambulatory Care Facilities

**Abstract:** Postgraduate training programmes need to have critical internal review processes. An evidence-based review on morning clinic reports lectures in postgraduate training programmes outpatient clinics and journal clubs is presented.

**Education, Nursing**

[Challenges of nursing students during their study : a qualitative study]
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**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 397-407 (48 ref.)

**Keywords:** Students, Nursing; Qualitative Research; Needs Assessment

**Abstract:** Several studies have recommended revisions in educational programs based on learners' feedbacks and needs. This study was performed with the aim of exploring and describing the meaning of challenges and feelings experienced by nursing students during their study. This qualitative study was performed as phenomenology on 20 senior nursing students selected by purposeful sampling method. In-depth and semi-structured interviews were used for data gathering. Data was analyzed by the team of researchers using hermeneutic analysis method. Findings were categorized into three major themes including challenge of "integrating knowledge and practice" with minor themes of employing theory in practice, using nursing procedure, and following scientific principles in clinic, the challenge of "management of learning environment" with the minor themes of environmental factors' effect on students' learning,
causes of hopelessness and disappointment with nurses, preference in evaluation, deficiencies of educational programming, and lack of respecting patients' rights and privileges, and the challenge of "lack of community's respect to the value of nursing" with the minor themes including recognizing stAuts of nursing discipline, and the necessity for its revision, attitude of individuals and society toward nursing and limited independence of nursing. Interviewing students provided an insight into the challenges of educational environment which students had faced, during their study. Using the results of this study, nursing educators could build a positive and stimulating environment for students' learning and motivate them to maintain their interest in education and learning.

**Methods**

[The effect of adapted model of mastery learning on cognitive and practical learning of nursing students]

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IJME - Iranian Journal of Medical Education 2008; 7 (2): 267-277 (32 ref.)

**Abstract:** Effective clinical teaching requires educational methods capable of developing an appropriate level of knowledge and practice in students. The aim of this study was to investigate the effect of adapted model of mastery learning on cognitive and practical learning of nursing students. In a quasi-experimental study using pre-test and post-test with two group design, 52 nursing students were selected through census sampling method and placed randomly in 6 experiment and 6 control groups, each group containing 4 to 5 people. After taking the cognitive and practical pre-tests, control group received traditional education and experiment group went under clinical education using adapted model of mastery learning for 12 days. At final step, the post-tests were held. An achievement test and 4 checklists were designed for data gathering. The results were analyzed by SPSS software using Wilcoxon and Mann Whitney tests. Both methods of clinical education were effective in promoting cognitive and practical learning of students. Comparing the difference between the means of pre-test and post-test of cognitive and practical learning in the two groups, showed a higher difference in the experiment group in all items. The effect of adapted model of mastery learning on cognitive and practical learning of nursing students was more than the traditional method of clinical education. Therefore, it is recommended to use this model in clinical education.

**Standards**

[Assessing clinical education fields from the viewpoints of nursing and midwifery instructors in Tabriz University of Medical Sciences, 2006]

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IJME - Iranian Journal of Medical Education 2008; 7 (2): 299-307 (32 ref.)

**Keywords:** Clinical Competence; Educational Measurement; Nursing; Midwifery-education; Students, Nursing; Nursing Evaluation Research; Universities

**Abstract:** Promoting clinical education quality, requires continuous assessment of the current situations in clinical education fields, identifying the strengths, and improving the weaknesses. The aim of this study was to assess clinical education fields of School of Nursing and Midwifery from the viewpoints of its faculty members. This study which is a description of current situation in clinical education fields, was carried out during the second semester of 2004-2005 academic year. The study population included clinical education teachers of school of nursing who were selected by census sampling method through 4 sessions held with the members of different departments of medical surgical, midwifery, pediatrics, health and psychiatric nursing. The data gathering tool was a questionnaire consisted of two parts: Clinical teachers' demographic data and the characteristics of clinical education field including 5 parts of the FaAutres of compiled education program in the field, appropriate learning fields, method of education, method of evaluation, and other indices. Clinical teachers assessed educational departments of pediatrics [54.2 percent], medical-surgical [43.8 percent], midwifery [61.6 percent], and health and psychiatric nursing [57.5 percent] as good and excellent. Considering compiled program, clinical education fields were described as good and excellent by 74.9 percent of the participants. Some strength of this aspect included introducing the course objectives at the first day of clinical education as well as presenting references according to the references introduced by the related ministry. Appropriate position of nursing students and instructors in the field and also the unimportant role of the educational department in the management of the educational field were amongst weaknesses of this aspect. Although some aspects of clinical education field were good and excellent, improving positive aspects and modifying the weaknesses may be an effective step in clinical education quality promotion. Continuous assessment of clinical fields and comparing the current situation with the previous situation can reveal the strengths and weaknesses of clinical education.

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[Nursing students' experiences and perceptions of effective instructor in clinical education]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 325-334 (33 ref.)
Keywords: Clinical Competence; Students, Nursing; Nursing Evaluation Research; Teaching-standards
Abstract: Clinical education program was designed to promote nursing education which its processes are mainly aimed at students. Despite all of this, less attention has been paid to students' feedback in this process. This study focused on nursing students' personal experiences about instructors' roles in clinical education program and intended to clarify the concept of "effective instructor" in clinical education. Using purposeful sampling method, 12 nursing students of Isfahan University of Medical Sciences, who had passed at least one clinical education course, were selected and studied through phenomenological approach. Data was gathered through in-depth interview. Raw data was analyzed using Colaizzi method. The validity and reliability of the study was acquired through considering four elements of factual value, applicability, consistency and neutrality. The interview texts were analyzed and the codes were extracted. Then, the codes were categorized into eight major concepts of presence, instructor as evaluator, instructor as communicator, instructor as experience provider, instructor as motivator, instructor as supervisor, instructor as moderator, and instructor as supporter. Participants in this study emphasized the instructor's key role in forming an appropriate or safe working environment. They revealed that the instructor can play an effective and useful role in clinical learning by providing new information, supporting the students thoroughly, and supervising their performance. In addition to experiencing some levels of dependence, participants accentuated the necessity for establishing a safe environment in order to provide learning opportunities for students. They also confirmed effective role playing by the teacher as an appropriate input for nursing students' needs.

Educational Measurement

methods

The clinical examination long case the most valid test in a medical school.
Mirghani, Omer Ahmed; Mohammed, Mohammed Elsanousi; Kalfa, Hanan
Gezira Journal of Health Sciences 2008; 4 (1): 4-30 (3 ref.)
Keywords: Clinical Competence; Physical Examination; Schools, Medical; Problem Solving
Abstract: This article includes [1] the basic contents of clinical examination long case [ii] the strengths of the examination with justify labeling it as the most valid [iii] guidelines for conduction of the examination [iv] guidelines for marking [v] the place of the short case and objective structured clinical examination [OSCE] in the end of course examination.

Efficiency, Organizational

[Internal efficiency evaluation indicators in universities of medical sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 409-421 (31 ref.)
Keywords: Quality Indicators, Health Care; Schools, Medical-standards; Accreditation; Universities; Education, Medical-organization and administration; Education, Medical-standards
Abstract: Internal efficiency indicators will be able to present the quality of higher education, quantitatively through assessing the interaction between inputs, processes, and outputs. This could be used as a compiled, scientific, and institutionalized evaluation system in universities. This study was carried out to compile internal efficiency indicators in Medical Sciences Universities. In a descriptive study, at first all performance indicators were collected and categorized through literAutre review. Then, a checklist including 8 areas and 152 indicators was developed based on instructional design studies and using theoretical definition model and focus group discussion. The checklist was delivered to 50 educational experts in Isfahan University of Medical Sciences who were selected purposefully. Data was analyzed by SPSS software using frequency distribution tables. In experts' viewpoints, all 152 indicators in 8 compiled areas had four essential criteria of an indicator including possibility of planning, evaluation, measurement, and quality promotion, and were assessed as desirable. They were identified appropriate for the evaluation of internal efficiency in universit-ies of medical sciences. In accordance with the country's political, social, and cultural situations, internal efficiency evaluation indicators, introduced in this study, could be used as a tool for comparing present and optimal situation in universities. Moreover, they can be used for the evaluation and accreditation of medical universities and help the managers to promote educational quality.
Enterobacteriaceae Infections

epidemiology

Prevalence of extended spectrum beta-lactamase-producing enterobacteriaceae by phenotypic and genotypic methods in intensive care units in Tehran, Iran.
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Tehran University of Medical Sciences - Faculty of Medicine - Department of Microbiology
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 169-173 (21 ref.)

Keywords: Prevalence; Enterobacteriaceae; beta-Lactams-adm inistration and dosage; beta-Lactams-therapeutic use; Cephalosporin Resistance; Clavulanic Acid-diagnostic use; Intensive Care Units; Polymerase Chain Reaction; Infection Control-standards; Anti-Bacterial Agents-adverse effects

Abstract: The occurrence of Extended Spectrum beta-Lactamase [ESBL]-producing Entrobacteriaceae has been steadily increased in recent years, resulting in limitation of therapeutic options. The purpose of this study was to determine prevalence of ESBL-producing Entrobacteriaceae isolated from Intensive Care Units [ICUs] and to investigate their phenotypic and genotypic characteristics. A total of one hundred fifty isolates were collected from urine and urinary catheter, sputum, blood, wound and other clinical samples from patient admitted in ICUs. All isolates were identified by biochemical tests and then were screened for ESBL production by Disk Agar Diffusion [DAD] according to the Clinical and Laboratory Standards Institute [CLSI] guideline. The species that met screening criteria were further tested for the effects of clavulanic acid by confirmatory method. ESBL-positive species were tested for bla[TEM] and bla[SHV] genes by PCR assay. Of total of 150 bacterial isolates, 133 [89.3%] isolates were positive in the resistance to all tested cephalosporin indicators; and 89 [59.3%] isolates were confirmed as ESBL producer. Klebsiella pneumoniae, Escherichia coli and Entrobacter spp. were the most ESBL-producing species. All isolates were sensitive to imipenem. The bla[TEM] [55.5%] was the most common gene detected in ESBL phenotypic-positive isolates using PCR method. The present study shows high prevalence of ESBL-producing Entrobacteriaceae from ICU patients. The increased rate of these species is mainly due to the inadequate and unnecessary antimicrobial therapy. Rational administration of beta-lactams and appropriate infection control policies may reduce prevalence of ESBL-producing bacteria in ICUs.

Environment

An estimate of the environmental status of lebanese littoral waters using nutrients and chlorophylla as indicators.
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Lebanese Science Journal 2008; 9 (1): 43-60 (44 ref.)

Keywords: Seawater; Chlorophyll; Food; Eutrophication

Abstract: In the aim to estimate the environmental status and to detect the signs of eutrophication in the Lebanese coastal waters using nutrients and chlorophyll-a as indicators, surface water analysis was run monthly for a period of 12 months, from March 2005 till February 2006, along 18 stations that extend from Tripoli in the north, to Naqoura in the south. Physico-chemical and biological parameters of the water samples were also studied. During this period, the temperature followed its normal cycle usually noted in the Lebanese waters; whereas salinity varied spatially and temporally presenting sometimes low values due to the rivers inputs. Significant fluctuations of nutrients and chl-a concentrations were observed in most of the stations and during year cycle. High levels of nitrate [30.68 micro M/L] were observed at stations located near river and sewers, whereas high levels of orthophosphates [5.17 micro M/L] were detected in zones around the Selaata factory. However the high values of phosphate and nitrate at some sites have caused an important increase in the primary production as shown by high chlorophyll-a concentrations [15.02 mg/m[3]]. According to the results and in relation with continental input and the first trophic level which react to this man-made disturbance, stations can be divided into 5 categories: reference [mean values of P-PO4 < 0.15 micro M/L, N-NO2 < 0.05 micro M/L, N-NO3 < 0.34 micro M/L and chl-a < 0.12 mg/m[3]], slightly enriched, enriched indirectly by river input or phosphorus input, directly by river input and directly by sewage input stations. Three stations are classified as moderately eutrophied whereas the other stations present a weak eutrophication. The principal component analysis confirms this result by showing the factors influencing on the various parameters and determining the existing correlation among them. Consequently, the concentrations of nutrients and chlorophyll-a biomass can be considered good indicators to assess the environmental status of the sites.
Esophageal and Gastric Varices

therapy

Study of endoscopic aspects and therapeutic options of ectopic gastrointestinal varices.
Sidkey, F.; Osman, M.O.
Alexandria University - Faculty of Medicine - Internal Medicine Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 153-159 (44 ref.)
Keywords: Liver Cirrhosis; Hypertension, Portal; Endoscopy, Gastrointestinal; Ligation; Sclerotherapy; Treatment

Abstract: Ectopic varices are best defined as large porto-systemic venous collaterals occurring anywhere in the abdomen except in the cardio-esophageal region. The aim of this work was to study the pattern of presentation and options of management of eighteen cases with ectopic varices in portal hypertensive patients. Eighteen patients with portal hypertension secondary to liver cirrhosis of different etiologies and ectopic gastrointestinal varices were studied. Gastrointestinal endoscopy was done for all patients and the exact location of ectopic varices was reported. Bleeding ectopic varices were managed endoscopically either by injection sclerotherapy or endoloop ligation according to the situation. Surgical treatment was tried only after failure of endoscopic management. Ten patients presented with gastrointestinal bleeding, while in the other eight patients varices were asymptomatic. Ectopic varices were located in the gastric antrum in two patients, in the duodenal bulb in three, in the descending duodenum in four, in the anorectal region in seven, and at the site of a percutaneous enterostomy [stomal varices] in two patients. Non-bleeding ectopic varices were managed conservatively. Management of bleeding ectopic varices included endoscopic injection sclerotherapy in four, endoscopic endoloop ligation in two, and surgical ligation of the bleeding varix after failure of endoscopic treatment in two patients. An excellent outcome was observed in all patients without any reported morbidity or mortality. Bleeding did not recur in any of the patients studied during a follow up period of one year. Ectopic varices should be expected in patients with portal hypertension especially at the sites of previous surgery. Treatment is applied to bleeding varices, while non-bleeding ectopic varices would conservatively be followed-up.

Euphorbiaceae

In vitro antioxidant property of the extract of Excoecaria agallocha [Euphorbiaceae].
Subhan, Nusrat; Alam, M. Ashraful; Ahmed, Firoj; Abdul Awal, M.; Nahar, Luffun; Sarker, Satyajit D.
Northern University - Department of Pharmacy
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 149-154 (36 ref.)
Keywords: Plants, Medicinal; Antioxidants; Picrates; Lipid Peroxidation; Thiobarbituric Acid Reactive Substances-diagnostic use; Nitric Oxide-diagnostic use; Hydrogen Peroxide-diagnostic use; Reactive Oxygen Species; Liver Cirrhosis, Alcoholic- etiology; Liver Cirrhosis, Alcoholic-prevention and control; Plant Extracts

Abstract: Excoecaria agallocha L. [Family: Euphorbiaceae] is a Bangladeshi medicinal plant found predominantly in the tidal forests and swamps of the Sundarbans and other coastal areas in Bangladesh. As part of our on-going phytochemical and bioactivity studies on medicinal plants from Bangladeshi flora, the in vitro antioxidant property on the bark of this plant was evaluated. The hydroalcohol extract of the dried and ground bark of E. agallocha was assessed for antioxidant activity using a series of well-established assays including the 2, 2-diphenyl-1-picrylhydrazyl [DPPH], the lipid peroxidation by thiobarbituric acid [TBA], the reducing power, the nitric oxide [NO] and the hydrogen peroxide [H₂O₂] scavenging assays. In the DPPH, the NO and the H₂O₂ scavenging assays, the extract of E. agallocha displayed significant antioxidant activities with the IC₅₀ values of 179.16, 120.24 and 134.29 microg/ml, respectively. The reducing power of the extract increased dose-dependently, and the extract reduced the most Fe³⁺ ions to the extent less than butylated hydroxy toluene [BHT]. In the lipid peroxidation assay, the extract showed significant inhibition of peroxidation effect at all concentrations, with an IC₅₀ value of 189.27 microg/ml. Since reactive oxygen species are important contributors to serious ailments such as atherosclerosis, alcoholic liver cirrhosis and cancer, the antioxidant property of the extract of E. agallocha as observed in the present study might be useful for the development of newer and more potent antioxidants.
Eye pathology

Ocular complications in head and facial injuries: a retrospective study.
Hashim, Shakeel P.; Al Mansouri, Fatima Ali
Hamad Medical Corporation - Ophthalmology Section
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 28-31 (18 ref.)
Keywords: Craniocerebral Trauma-complications; Facial Injuries-complications; Retrospective Studies; Eye Injuries-etiology; Eye Injuries-epidemiology
Abstract: To assess the prevalence of ocular injury and its severity among the trauma patients admitted with head and facial injuries [which may be missed as the priority is given to save the life of the patient]; and to develop guidelines for the optimum ophthalmology referral in such cases. The medical records of 134 patients who were admitted to the trauma intensive care unit of Hamad General Hospital with head and facial injury, during a one year period from 1/1/2005 to 31/12/2005, were reviewed. Presence of ocular trauma, its severity and the ophthalmology referral were noted. Visual outcome, periorcular signs and relevant radiological findings were also recorded. Among the 134 charts reviewed, 94% were males. Head injury was the commonest [69.4%], followed by combined head and facial injury [27.6%]. Fifty-two [38.8%] cases were found to have either ocular or periorcular signs. Twenty [14.9%] were found to have both. Among the 52, four patients [7.7%] lost vision completely in one eye and in one case [1.9%] visual acuity was reduced to hand movements in one eye. Fifteen [28.8%] patients had serious ocular complications and 32 [61.5%] patients had transient ocular or periorcular signs. Among the 52 patients only 22 [42.3%] received ophthalmology referral. In all patients with head and facial injury, visual acuity, colour vision and ocular motility should be assessed as soon as the general condition permits. Patients with ocular or periorcular signs and those with radiological evidence of orbital or periorbital fractures should be referred to an ophthalmologist without delay.

Eye Foreign Bodies

Intraorbital foreign body : clinical presentation, radiological appearance and management.
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Sultan Qaboos University - Sultan Qaboos University Hospital - Department of Ophthalmology
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 69-74 (10 ref.)
Keywords: Eye Injuries, Penetrating; Retrospective Studies; Treatment Outcome; Tomography, X-Ray Computed; Early Diagnosis; Prognosis
Abstract: Intraorbital foreign bodies usually occur after a high velocity injury such as gunshot or industrial accidents; more rarely they occur following trivial trauma. A retained foreign body can give rise to serious complications, the most devastating of which is loss of the eye. This retrospective, interventional case report reviews the clinical features, radiological appearance and surgical management of two patients who presented at Sultan Qaboos University Hospital, Oman with intraorbital foreign bodies. Details of ocular history, preoperative ocular examination findings including visual acuity, surgical procedure and subsequent management were noted. The two patients, aged 10 years and 9 years old respectively, sustained orbital trauma with sharp objects. Both patients were found to have intraorbital foreign bodies that were documented clearly by computed tomography [CT] scans of the orbit. The first patient presented straight after injury, had no ocular involvement, underwent immediate surgical exploration and ended up with full recovery. The second patient presented to us after a delay of 4 days, and was found to have endophthalmitis. This patient ultimately lost all visual function in the affected eye. A CT scan is the modality of choice for orbital foreign body detection and localization. Early surgical exploration and foreign body extraction greatly influence the visual prognosis and final outcome.

Fasciitis, Necrotizing

etiology

Necrotizing fasciitis following tetanus toxoid injection for a young adult male with no risk factors or co-morbidity.
Howaidi, A.F.; Al Naama, A.; Hussein, S.A.
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Hamad General Hospital - Emergency Department
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 57-60 (25 ref.)
Keywords: Fasciitis, Necrotizing-diagnosis; Tetanus Toxoid-adverse effects; Risk Factors; Comorbidity
Ficus

Macro and micromorphology studies of the leaf, stem and stem bark of Ficus pandurata hance. cultivated in Egypt.
Ramadan, M.A.; Ahmad A.S.; Nafady, A.M.; Mansour, A.I.
Assiut University - Faculty of Pharmacy - Department of Pharmacognosy
Keywords: Moraceae; Plant Components; Plant Stems; Plants, Medicinal; Histology
Abstract: Ficus pandurata [Hance] Fiddle leaf fig [Family, Moraceae] is a tree indigenous to South Africa and cultivated in Egypt for its shade in public and private gardens. Previous investigations of Ficus species showed many medicinal uses; externally they have been used for treatment of leprosy, ulcers, itching, leucoderma and warts. Internally used as anti-inflammatory, to reduce fever, cure tuberculosis and against intestinal parasites. In the present work, the detailed macro-and micromorphological characters of the leaf, stem and stem bark of Ficus pandurata Hance were studied with the aim to find out the diagnostic elements of these organs, which facilitate their identification in both entire and powdered forms.

Fistula

mortality

Aortoesophageal fistula: fatal result of an esophageal foreign body.
Demircan, Ahmet; Keles, Ayfer; Karamercan, Ahmet; Aygencel, Gulbin; Kurtoglu, Gulhan
Gazi University Hospital - Department of Emergency Medicine
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 53-56 (15 ref.)
Keywords: Esophageal Fistula; Aortic Diseases-mortality; Fatal Outcome; Foreign Bodies; Esophagus; Chest Pain
Abstract: Esophageal perforation and aortoesophageal fistulas are potentially life-threatening conditions requiring early recognition and repair. After thoracic aorta aneurysms, ingested foreign bodies are the second most frequent cause of aortoesophageal fistula. We present the case of a 63-year old man who presented to the emergency department [ED] with chest pain that began with a foreign body sensation after eating meat three days earlier. Physical examination was normal, but his chest x-ray revealed a wide mediastinum. Computed tomography [CT] of the thorax showed a foreign body in the subcarinal space and air in the mediastinum. With a pre-operative diagnosis of esophageal perforation, the patient was taken to the operation room. The chest surgeons found the foreign body to be a bone which extended to, and perforated, the aorta. It was impossible to save the patient. The triad of midthoracic pain, sentinel arterial hemorrhage, and exanguination after a symptom-free interval has been termed Chiari's triad which is seen among aortoesophageal fistula patients. Patients coming to the ED with a complaint of chest pain, hemoptysis, hematemesis and history of foreign body ingestion must be evaluated carefully; aortoesophageal fistula must be recognized and treated early.

Fluorometholone

chemical synthesis

Shafiee, A.; Zahmatkesh, M. Haddad; Hosseini, N. Mohammad; Khalafy, J.; Emami, S.; Moshafi, M.H.; Sorkhi, M.; Foroumadi, A.R.
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DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 189-195 (17 ref.)
Keywords: Fluorometholone-therapeutic use; Ciprofloxacin-analogs and derivatives; Ciprofloxacin-therapeutic use; Norfloxacin-analogs and derivatives; Norfloxacin-therapeutic use; Enoxacin-analogs and derivatives; Enoxacin-therapeutic use; Ketones-therapeutic use
Abstract: Fluoroquinolones are an important group of antimicrobial agents that are used widely in the treatment of various infectious diseases. The purpose of the present study was to synthesize new N-piperazinyl quinolone derivatives with 5-chloro-2-thienyl group having possible antimicrobial activity. Reaction of ciprofloxacin [1], norfloxacin [2] and enoxacin [3] with alpha-bromoketone 10 or alpha-bromooxime derivatives 11a-c in DMF, in the presence of NaHCO3 at room temperature, afforded corresponding ketones 4a-c or oxime derivatives 5-7[a-c], respectively. The synthesized compounds were tested against a series of Gram-positive and Gram-negative bacteria. The results of MIC tests against both Gram-positive and Gram-negative bacteria revealed that ciprofloxacin derivatives [compounds 4a, 5a, 6a and 7a]
were more active than norfloxacin and enoxacin analogues. Compound 5a, containing N-[2-[5-chlorothiophen-2-yl]-2-hydroxyiminoethyl] residue provided a high in vitro antibacterial activity against Gram-positive bacteria, with MIC of 0.06, 0.125, 0.5 and 0.125 micro g/mL against S. aureus, S. epidermidis, E. feacalis and B. subtilis, respectively. Its activity was found to be 4 to 8 times better than reference drug [ciprofloxacin] against all Gram-positive bacteria with the exception of E. feacalis.

Gastrointestinal Neoplasms

surgery

Management of gastrointestinal stromal tumors [GIST]: 22 cases studied.
EL Riini, Mohamed Tewfik
University of Alexandria - Faculty of Medicine - Department of gastrointestinal surgery
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 63-80 (65 ref.)

Keywords: Stromal Cells; Signs and Symptoms; Gastrointestinal Hemorrhage; Postoperative Complications; Follow-Up Studies; Survival Rate; Treatment Outcome

Abstract: Gastrointestinal stromal tumors [GIST] are extremely unusual neoplasms arising from Cajal's interstitial cells. Diagnosis is complex and always requires immunohistochemical staining for the expression of c-KIT protein [CD117]. They are classified into different risk classes based on tumor size and mitotic count. Surgical resection is considered the treatment of choice. However, surgery is not curative in many cases; and recently, targeted therapy with inhibitors of tyrosine kinase receptors [Gleevec] has been introduced for the management of advanced and metastatic tumors. The aim of this study is to present the results of management of patients with GIST admitted to the gastrointestinal surgery unit, faculty of medicine, University of Alexandria. All patients data, clinical presentations, laboratory and radiological investigations, tumor characteristics, pathological findings, surgical procedures, intra and postoperative complications, as well as follow-up and survival data were collected, reviewed and analyzed retrospectively. Between 1997 and 2006, 22 patients presenting with suspected GIST, on clinical grounds, were identified. There were 15 males and 7 females. Their mean age was 49.86 +/- 17.56 years. The most frequent presenting symptom was GI bleeding in 9 patients [40.91%]. The stomach was the most common site of localization. Twenty patients had surgical treatment. Two patients were excluded as they proved to be mesenteric paraganglioma and duodenal carcinoid. Two patients presented with advanced disease and were treated by Gleevec. Eighteen patients had their results analyzed. Complete resection was achieved in 15 patients [83.3%], while three patients [16.7%] had incomplete resection. The mean tumor size was 8.26 +/- 6.91 cm. The mitotic count was low [2-5/50 HPF] in 60% of the patients, and high [ > 5/50HPF] in 40%. Tumors were classified as low risk in 55% of the patients, intermediate risk in 5%, and high risk in 40%. The 5-year overall survival was 91.7% [SE = 0.76]. The 5-year disease free survival was 73.3% [SE-0.109]. There was a statistically significant difference between tumors < 5 cm and > 10 cm in diameter, between tumors with low and high mitotic count, and between complete and incomplete resection. High-risk tumors had a significantly shorter survival than those with low risk. This study shows that the prognosis is strictly related to size and number of mitosis and completeness of surgical resection. No GIST can be considered benign. Surgery is still the gold standard treatment in localized GIST. Two recent developments are important with regard to GIST. The first is the ability to diagnose the tumor based on immunohistochemical staining for c-KIT [CD 117]. The second is the development of target therapy Imatinib [Gleevec] to combat metastatic and recurrent GIST. We strongly advocate that all patients with a GIST be carefully and regularly followed-up for an indefinite period.

Gingival Recession

therapy

[Coronally advanced flap with connective tissue graft with or without epithelial collar in the treatment of localized gingival recession and increasing width of Keratinized gingiva a comparative study]
Tabibzadeh, Nouri Z.; Golpasand, Hagh L.
Shahid Beheshti University of Medical Sciences - Dental School - Department of Periodontics
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 379-386, 6 (24 ref.)

Keywords: Connective Tissue-transplantation; Gingiva-pathology; Double-Blind Method; Transplants; Epithelium; Surgical Flaps

Abstract: Regarding to the prevalence of gingival recession, esthetic and sensitivity problems of denuded roots, a variety of surgical techniques have been used to cover recession type defects. This sequential matched randomized double blind clinical trial was designed to compare the clinical outcome following treatment of localized gingival recession by subepithelial connective tissue graft [SeCTG] with and without epithelial collar. Nine consecutively patients with bilateral 24 Miller class I gingival recession in non- molar teeth, were participated in this study. The surgical areas were randomly selected as split mouth and were treated by SeCTG with or without epithelial collar. Clinical measurements including recession height [RH], recession width [RW], probing depth [PD], keratinized gingiva [KG], and clinical
attachment level [CAL] were measured at baseline and 3 months post operatively by means of Williams probe, caliper and stent. Changes in these clinical parameters were calculated in and between groups and analyzed statistically with paired T test. Both treatments resulted in a significant decrease in RH [1.88 +/- 0.93 mm, P<0.000 in SeCTG with collar epithelium; 1.54 +/- 1.11 mm, P<0.001 in SeCTG without collar epithelium] and RW [1.62 +/- 1.38 mm, P<0.002 in SeCTG with collar epithelium; 1.22 +/- 1.62 mm, P<0.024 in SeCTG without collar epithelium]. The mean changes in RH, RW, KG, CAL in each group to baseline were significant. However, the amount of these variables were not significant between the two groups. The subepithelial connective tissue graft with epithelial collar offers a more convenient approach for handling and suturing as a root coverage procedure and increasing width of keratinized gingiva in Miller class I recession defects specially in fixed and removable partial dentures for abutment teeth.

**Glioblastoma**

**prevention and control**

Preliminary report on tumor stem cell/B cell hybridoma vaccine for recurrent glioblastoma multiforme.

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Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 3-13 (50 ref.)

**Keywords:** Hybridomas; Neoplastic Stem Cells; B-Lymphocytes; Cancer Vaccines

**Abstract:** Glioblastoma multiforme [GBM], the most aggressive glioma, presents with a rapid evolution and relapse within the first year, which is attributed to the persistence of tumor stem cells [TSC] and the escape of immune surveillance. Mixed leukocyte culture [MLC] cytokipient has been shown to function as a powerful intratumor pro-inflammatory cytokine pump. Tumor B-cell hybridoma [TBH] vaccines have been shown to function as antigen-presenting cells. We evaluated the toxicity and efficiency of each treatment alone and in combination. In an open study, 12 consecutive patients were evenly divided into 3 groups, each group receiving 3 different treatments. Patients in Group 1 were treated, after diagnosis, with debulking surgery [DS] +radiotherapy [Rx], and after the first relapse underwent DS+MLC treatment. Patients in Group 2 were similarly treated but after the first relapse underwent DS+MLC+TBH. Finally, patients in Group 3 were similarly treated but after the first relapse underwent DS+TBH. Nestin PAP stain assessed TSC participation in TBH. Treatment with MLC had strong and rapid therapeutic effects, but was limited in duration and induced various degrees of brain inflammation. Treatment with MLC+TBH acted synergistically, provoking a rapid, strong and lasting therapeutic response but also generating different degrees of brain inflammation. A lasting therapeutic effect without generating high degrees of brain inflammation occurred in patients treated with TBH vaccine alone. TSC vaccine consisting of TBH alone seems to have potent adjuvant reactions overcoming both persistence of tumor stem cells and immune escape of GBM without provoking an encephalitic reaction.

**Glucosamine**

**Drugs Update.**
Bastaki, Salim Mohammed Abdulrazzaq
United Arab Emirates University - Department of Pharmacology and Therapeutics
Emirates Medical Journal 2008; 26 (2): 125-128 (36 ref.)

**Keywords:** Osteoarthritis-drug therapy; Isotretinoin; Mifepristone; Tacrolimus; Pharmaceutical Preparations

**Goats**

Seasonal and altitudinal variations on adaptation, growth and testicular activity of baladi goats with vertical transhumance in eastern mediterranean.

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Lebanese University - Faculty of Agricultural Sciences

**Keywords:** Tests; Seasons; Altitude; Adaptation, Biological; Growth; Respiration; Heart Rate

**Abstract:** The effects of transhumance on body growth and adaptation parameters in the Baladi goat, and testicular activity in bucks were studied over a period of one year. Thirty two animals were allocated to 4 similar groups according to age [100 days for 8 male and 8 female kids, and 3-4 years for 8 bucks and 8 does] and sex. Goats were raised in a coastal pasture area for the winter period [WP], then transhumed towards a mountainous area in May for the summer period [SP]. Every 21 days, animals were weighed and monitored for a whole day to estimate the distance travelled; four
Health Knowledge, Attitudes, Practice

Exploring public knowledge and attitude towards hepatitis B infection in Tripoli, Libya.
Ehmadi, Meluda Rajab; Gabr, Manal Hassan; Bisheya, Adnan; Abu Kenda, Entesar
Al Fateh University - Faculty of Medicine - Department of Family and Community Medicine

**Libyan Journal of Infectious Diseases [The]** 2008; 2 (2): 31-38 (24 ref.)

**Keywords:** Hepatitis B; Cross-Sectional Studies; Health Education

**Abstract:** The aim of the present study was to assess the knowledge and attitude towards hepatitis-B among general population in Tripoli city, Libya, and their sources of information. A further aim was to assess whether people's knowledge and attitude differ according to their demographic characteristics. A cross-sectional study was conducted in Tripoli city from May 2004 up to August 2004. A structured questionnaire of 10 different sections concerning basic knowledge about hepatitis B, particularly modes of transmission and risk behaviors, natural history and sequel of infection, availability of preventive vaccine, and about their attitude towards the need for diet modification, and towards infected people. The questionnaire was distributed to 4000 person aged 18 years and older, of different educational levels. Data was analyzed using SPSS program. The study showed that the majority of respondents had correctly identified most of the routes and risk behaviors for HBV transmission; there was a big deficiency in their knowledge about the natural history and sequel of the disease. Their attitudes towards HBV and infected persons were improper. Talk with non medical personnel and television were the commonest sources of their information. Despite the good HBV public knowledge about most of the routes and risk behaviors for HBV transmission, some important misconceptions in their knowledge and attitude need to be corrected. Nationwide health education programme is recommended.

Health Personnel education

Assessment of needle stick injuries and related knowledge among health care workers participating in an infection control-training program at El Minia University Hospital.
Mahfouz, Eman M.; Mossalam, Fadia Abdel Hamid; Abdal Rahman, Safaa M.; Abood, Sahar A.; Abdelwahab, Sayed F.
Minia University - Faculty of Medicine - Departments of Public Health and Preventive Medicine

**Egyptian Journal of Community Medicine** 2008; 26 (1): 29-41 (17 ref.)

**Keywords:** Needlestick Injuries; Cross Infection; Knowledge, Attitudes, Practice; Health Education; Hospitals, University; Program Development; Program Evaluation; Physicians-questionnaires; Dentists; Hepatitis B Vaccines

**Abstract:** Needle stick injuries are an important and continuing cause of exposure to serious and fatal diseases among health care workers [HCWs] who suffer daily accidental occupational exposure to needle stick injuries during the course of their role of caring for patients to determine the burden of needle stick injuries, its causes and knowledge related to it among HCW participating in an infection control training program at Minia University Hospital [MUH]. A well-structured pre and post training questionnaires about general infection control knowledge was used and included also 10 basic knowledge questions and inquiries about incidents of needle sticks, its frequency and cause, and history of hepatitis B vaccination. A total of 278 physicians and 56 dentists participated in this study. Dentists were younger than physicians, and had a slightly higher knowledge score than physicians. We found that 63.2% of the participating physicians and dentists experienced at least one needle stick during their practice. About 61% and 71.4% of the physicians and dentists experienced at least one needle stick during their practice, respectively, suggesting that dentists were more likely to be exposed to needle stick injuries than physicians. The overall mean of needle stick injuries per year among the participants was 4.42 [ +/- 1.83]. However, the average numbers of sticks were 4.51 [ +/- 1.87] and 4.03 [ +/- 1.77] among the participating physicians and dentists, respectively. Self-inflicting injuries during bending or recappping of a used needle was the most frequent cause of needle sticks [41% for physicians and 59% for dentists]. Nearly 72% of the participants were categorized as excellent in basic knowledge regarding infection control. Also, knowledge of needle
stick management significantly improved by 63.3% and 7.8% post-training among dentists and physicians, respectively. Importantly, as the knowledge score increases, the liability to be injured by needles decreased. On the other hand, physicians were three times more likely to be vaccinated against Hepatitis B virus [HBV] than dentists although the overall vaccination rate was very low [15.2% vs. 4.2% among physicians and dentists, respectively]. needle stick injuries are common among HCW of MUH and recapping and bending of needles are prevalent inappropriate practices that increase the likelihood of needle sticks. Ensuring that HCW are properly trained on safe use and disposal of sharps will make this practice safer.

Health Services

Re: our efforts are reflected in our health.
Khan, Mushtaq A.
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Family Medicine and Public Health
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 103 (2 ref.)
Keywords: Life Style; Hypertension; Overweight; Hypercholesterolemia; Health Promotion

Heat Stroke

epidemiology

Heat stroke victims in Sukkur city of Sindh - Pakistan.
Kolachi, Hussain Bux A.; Kazi, Akber; Almani, Suhail; Shah, Ashfaqe Hussain
Medical College - Department of Community Medicine LUMHS
Biomedica 2008; 24 (Jan.-Jun.): 67-70 (13 ref.)
Keywords: Heat Stroke-prevention and control; Heat Stroke-diagnosis; Cross-Sectional Studies; Age Distribution; Sex Distribution; Heat Stroke-therapy; Emergencies; Demography
Abstract: This is a descriptive, cross-sectional study, conducted on 14 cases of heat stroke and hyperpyrexia admitted in Civil Hospital, Sukkur between 1st Jan. and 31st Dec, 2006. The objective was to evaluate the clinical presentation, socio-demographic pattern and to suggest preventive strategies for the control of this problem. Data analysis showed mean age was 32.86 with S.D. +/- 17.06. 85.7 were males and 14.37 females, making a male to female ratio of 6:1 occupation wise, date showed 7.17, house wives, 28.47, labourers, 43.9% farmers and 21.4% were children. With proper and efficient management the cure rate was 100%. Study concluded that the lives of the victims of heat stroke and hyperpyrexia could be saved with proper preventive measures, first aid programmes and efficient treatment practices.

Helicobacter pylori

immunology

Seroprevalence of Helicobacter pylori in Nahavand: a populationbased study.
Alizadeh, A.H.M.; Ansari, S.; Ranjbar, M.; Shalmani, H.M.; Habibi, I.; Firouzi, M.; Zali, M.R.
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Keywords: Helicobacter Infections-immunology; Helicobacter Infections-blood; Seroepidemiologic Studies; Cross-Sectional Studies; Population; Questionnaires; Immunoglobulin G-blood; Risk Factors; Age Factors; Sex Factors
Abstract: In this cross-sectional study, we evaluated H. pylori seroprevalence and the relevant factors in 1518 people aged > = 6 years from the general population of Nahavand, western Islamic Republic of Iran. Questionnaires covering sociodemographic variables were completed by interview. Blood samples were taken from each individual. Sera were tested for anti-H. pylori IgG using commercial enzyme immunoassay. Overall, seroprevalence of H. pylori was high, 71.0% [95% CI: 69.0%-73.0%]. There was a gradual increase with age. Based on multivariate adjustment, only female sex and age could be considered risk factors.
A simple and cost-effective method for rapid purification of alkyl hydroperoxide reductase [AhpC] from helicobacterpylori and its antibody production.
Mohammadian, T.; Doosti, M.; Paknejad, M.; Siavoshi, F.; Massarrat, S.
Tehran University of Medical Sciences - School of Medicine - Department of Medical Biochemistry
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 174-181 (27 ref.)
Keywords: Helicobacter pylori-isolation and purification; Cost-Benefit Analysis; Peroxiredoxins-isolation and purification; Peroxiredoxins-immunology; Antibody Formation; Vaccines-biosynthesis; Electrophoresis, Polyacrylamide Gel; Immunoenzyme Techniques-methods
Abstract: Helicobacter pylori express abundant amounts of AhpC enzyme that functions to reduce organic hydroperoxides [ROOH] into the corresponding non-toxic alcohols [ROH]. This conserved antigen has been earlier described as specific and unique for H. pylori and therefore, both H. pylori AhpC and Anti-AhpC could be useful in the development of serologic and stool antigen tests, to detecting and monitoring H. pylori infection. AhpC may also serves as a potential target for an antimicrobial agent or for vaccine development. The aim of this study was to simplify isolation and purification of the AhpC and production of a highly specific polyclonal antibody against it. In this paper a simple method was used for protein purification and antibody production which avoids both the long term AhpC protein purification procedure and the addition of Freund's adjuvant. One-dimensional preparative gel electrophoresis allows a single and short purification step and the high resolution capacity of this technique leads to a high level of purity of the protein and consequently to a very high specificity of the antibody. Moreover, it avoids contamination by other non-specific proteins which often appear during protein purification by column chromatographic techniques. The present method is simple, rapid and cost-effective and makes it possible to produce antibody for stool antigen enzyme immunoassay in short time and at low cost.

Hemoglobinopathies

epidemiology

Haemoglobinopathies encountered at Khoula Hospital, Oman: a retrospective study.
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SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 59-62 (9 ref.)
Keywords: Hemoglobinopathies-prevention and control; Sickle Cell Trait-epidemiology; Prevalence; Retrospective Studies; Health Education; Anemia, Sickle Cell-epidemiology; Genetic Counseling
Abstract: The objective of this study was to find out the frequency of abnormal haemoglobins [Hb] in patients referred to Khoula Hospital, Oman and compare the data from other studies by assessing a large number of patients. The results of 27,403 patients, either admitted to Khoula Hospital or referred to it from different health centres during the 4 years of the study from January 2001 till December 2004, were analysed for haemoglobinopathies. The laboratory methods used for detection of abnormal haemoglobins were sickle cell solubility test and haemoglobin electrophoresis. The frequency of sickle cell trait was 7.5%, sickle cell disease 0.46% and other Hb variants were 0.102%. The results correlate well with that of the National Genetic Blood Disorder Survey carried out by the research and studies department, Ministry of Health, Sultanate of Oman, during a 4 year period from January 2001 till December 2004. This retrospective study demonstrates the high prevalence of haemoglobinopathies among the studied group of patients. More attention to the importance of health education and genetic counselling is required for the prevention of this public health problem in the country.

Hepatitis B Vaccines

chemical synthesis

Aluminum phosphate shows more adjuvanticity than Aluminum hydroxide in recombinant hepatitis-B vaccine formulation.
Fazeli, M.R.; Dinarvand, R.; Samadi, N.; Mahboubi, A.; Ilka, H.; Sharifzadeh, M.; Azadi, S.; Moghanlou, A.; Salehabady, M. Mirzaei; Valadkhani, M.
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Tehran University of Medical Sciences - Faculty of Pharmacy and Pharmaceutical Sciences Research Center - Department of Drug and Food Control
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 143-148 (19 ref.)
Keywords: Hepatitis B Vaccines-immunology; Aluminum Compounds-analysis; Aluminum Compounds-immunology; Aluminum Hydroxide-immunology; Adjuvants, Immunologic; Antigens; Mice; Hepatitis B Surface Antigens-biosynthesis; Hepatitis B Surface Antigens-immunology; Injections, Intraperitoneal; Phosphates
Abstract: Although a number of investigations have been carried out to find alternative adjuvants to aluminum salts in vaccine formulations, they are still extensively used due to their good track record of safety, low cost, and proper adjuvanticity with a variety of antigens. Adsorption of antigens onto aluminum compounds depends heavily on electrostatic forces between adjuvant and antigen. Commercial recombinant protein hepatitis B vaccines containing aluminum hydroxide as an adjuvant is facing low induction of immunity in some sections of the vaccinated population. To follow the current global efforts in finding more potent hepatitis B vaccine formulation, adjuvanticity of aluminum phosphate has been compared to aluminum hydroxide. The adjuvant properties of aluminum hydroxide and aluminum phosphate in a vaccine formulation containing a locally manufactured hepatitis B [HBs] surface antigen was evaluated in Balb/C mice. The formulations were administered intraperitoneally [i.p.] and the titers of antibody which was induced after 28 days were determined using ELISA technique. The geometric mean of antibody titer [GMT], seroconversion and seroprotection rates, ED50 and relative potency of different formulations were determined. All the adjuvanticity markers obtained in aluminum phosphate formulation were significantly higher than aluminum hydroxide. The geometric mean of antibody titer of aluminum phosphate was approximately three folds more than aluminum hydroxide. Aluminum phosphate showed more adjuvanticity than aluminum hydroxide in hepatitis B vaccine. Therefore the use of aluminum phosphate as an adjuvant in this vaccine may lead to higher immunity with longer duration of effects in vaccinated groups.

immunology

Serological immune status of hepatitis-B in vaccinated healthy individuals.
qureshi, Majida; Bhatti, M.S.
Lahore Medical and Dental College - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 75-77 (29 ref.)
Keywords: Immunization; Students, Dental; Students, Medical; Hepatitis B Antibodies-blood; Enzyme-Linked Immunosorbent Assay; Age Factors; Immunization, Secondary
Abstract: This study was planned to assess the Hepatitis-B serological immune response in previously vaccinated students and staff members of various faculties of Lahore Medical and Dental College Lahore. The objective was to evaluate the effectiveness of hepatitis B vaccination in prevention of hepatitis infection, chronic liver disease and recommendation of booster dose after primary course of vaccination. The study group comprised of 276 volunteers including MBBS/BDS students and 16 staff members of different faculties. Age range among students was 17-25 years whereas staff members were 30-50 years in age. Among 276 volunteers 46% were males and 54% were females. The levels of hepatitis B surface antibodies were assessed in blood/serum by enzyme linked immunosorbant assay [ELISA] technique. Among 276 volunteers 230 SIGMA had detectable antibodies against hepatitis B surface antigen [aHBs] while 46 [18%] showed no detectable level of antibodies against hepatitis B surface antigen [aHBs] in their serum. The titer of antibodies against hepatitis B surface antigen [aHBs] was low among staff members who were in age group of 30-50 years [n4, 0.25%] A decline in titer was observed during adolescence.

Hepatitis B virus

Audit of hepatitis b and c viruses in patients attending dental clinics.
Sultan, M.; Bhatti, M.S.; fakhar Us Nisa; Nagi, A.H.
Lahore Medical and Dental College - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 50-53 (22 ref.)
Keywords: Hepacivirus; Dental Audit; Dental Clinics; Retrospective Studies; Age Distribution; Sex Distribution; Occupational Exposure; Infection Control, Dental
Abstract: This study was carried out to audit hepatitis B and C viruses, detected in the department of pathology. on the patients who visited the dental clinics of Lahore Medical and Dental College, Lahore. This was a retrospective study conducted between March 2006 and January 2008. A total of 575 patients visited the clinic during this period, [250 males and 325 females], of these 80[13.91%] were positive for hepatitis B or C viruses. HCV was positive in 49 and HBV in 31 patients. Majority of infected patients were females i.e., 45 [7.8%]. Maximum number of patients were seen in the age groups between 50 and 60 years and 10-20 years respectively.

Hepatitis C

epidemiology

Frequency of lichen planus in patients with hepatitis C virus infection.
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Keywords: Lichen Planus-epidemiology
Abstract: Lichen planus is a chronic inflammatory dermatosis of unknown etiology. Its association with liver diseases, particularly hepatitis C virus [HCV], has been widely approached since 1990 when serology for detection of HCV became available. The aim of the present study was to determine the frequency of lichen planus in patients infected with HCV attending the viral hepatitis clinic at Al jamahiriya hospital, Benghazi. Two hundred patients of hepatitis C infection and 100 individuals, served as a control group, were enrolled in this study and were assessed for the presence of Lichen planus. In addition the route of HCV transmission, viral genotype and duration of HCV infection were also assessed. Out of two hundred patients, 104 were females and 96 were males, with age range 15-80 years. One case of oral Lichen planus [0.5%] and one case of cutaneous Lichen planus [0.5%] were found compared to two cases [2%] and one case [1%] of cutaneous and oral Lichen planus found in the control group, respectively [p > 0.05]. The diagnosis of Lichen planus was confirmed with histopathology findings in all cases. The findings of the present study indicate that there is no association between oral and cutaneous Lichen planus and hepatitis C infection. Further studies are needed in a larger number of patients to determine the association between HCV virus infected patients and Lichen planus.

Hepatitis C genotypes and its relation to risk factors among patients attending the virology clinic at Central Hospital, Tripoli.
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Central Hospital - Department of Infectious Disease
Keywords: Genotype; Risk Factors; Hepatitis C-epidemiology; Substance-Related Disorders; Hospitals, General
Abstract: The aim of this study was to determine the distribution of genotypes among hepatitis C infected patients attending the virology clinic at Central Hospital of Tripoli and its relation to risk factors. A total of 552 newly diagnosed patients were registered between June 2002 and July 2006 [who had genotype done], the data gathered include patients demographic and risk factors, baseline ALT and baseline quantitative PCR. The mean age 40.5 years, males were 385 [70%]. Normal ALT at diagnosis was recorded in 53% of patients, baseline HCV RNA was > 500,000 IU/ml in 40% of patients. Genotype 1 was found in 181/552 [32.8%] patients of them 1a [8.1%], Ib [12.5%], and 1 non classified [12%]. Genotype 2, Genotype 3a, and Genotype 4 were found in [17.4%], [21%], [28.8%] of patients respectively. Risk factors were known in 490 [88.8%] patients, history of blood transfusion was reported in 128 [26.1%] patients, intravenous drug [IVD] abuse in 105 [21.4%] patients. 102 [20.8%] patients gave history of surgical intervention and history of dental procedure in absence of other risk exposures was found in 88 [18%] patients. Sexual contact with HCV infected patient was reported in 15 [3.1%] patients. Genotype 3a was frequently associated with history of IVDU [55%] followed by genotype 1 [33% mainly genotype 1 a]. History of blood transfusion associated with genotype 4 [39%] followed by genotype 1 [34%]. Genotype 1 was the most prevalent HCV-genotype, followed by genotype 4, among patients attending the Virology Clinic of Tripoli Central Hospital. HCV genotype 3a might be recently introduced by IVD abusers. Our results suggest the need for strict prevention control measures in hospitals and dental clinics to minimize the nosocomial risk exposure to HCV.

Hepatitis E epidemiology
Seroepidemiology of hepatitis E virus infection in 2-25-year-olds in Sari district, Islamic Republic of Iran.
Saffar, M.J.; Farhadi, R.; Ajami, A.; Khalilian, A.R.; Babamahmodi, F.; Saffar, H.
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Mazandaran University of Medical Sciences - Department of Paediatrics
Keywords: Hepatitis E-blood; Seroepidemiologic Studies; Health Surveys; Immunoglobulin G-blood; Rural Population; Age Distribution; Cross-Sectional Studies; Prevalence; Hepatitis E-epidemiology; Hepatitis E-prevention and control
Abstract: The seroprevalence of hepatitis E virus infection [HEV] in children and young adults was determined in a community-based survey in an area of northern Islamic Republic of Iran. Serum samples were taken from 1080 randomly selected apparently healthy 2-25-year-olds from urban and rural regions of Sari district. Anti-HEV IgG antibodies were detected in 25 individuals [2.3%]. Seroprevalence increased significantly with age from 3/255 [1.2%] in children < 10 years to 8/110 [7.3%] in those aged 10-25 years. No differences in HEV status were noted between the sexes. Earlier age at exposure to infection and a higher infection rate were found in people residing in rural areas than in urban areas.
**Hepatolenticular Degeneration**

**Neurological and neuropsychiatric spectrum of Wilson's disease in local population.**
Javed, M. Athar; Zia, Samar; Ashraf, Sara; Mehmood, Shahid
King Edward medical University - Mayo Hospital - Department of Neurology
*Biomedica* 2008; 24 (Jan.-Jun.): 37-41 (17 ref.)

**Keywords:** Prospective Studies; Population; Magnetic Resonance Imaging; Ceruloplasmin-diagnostic use; Tomography, X-Ray Computed; Age Distribution; Sex Distribution

**Abstract:** This prospective observational study was conducted in the department of Neurology, King Edward Medical University/ Mayo Hospital, Lahore over a period of six months from July to December 2007. The objective was to study the clinical and laboratory features of Wilson Disease in local population and compare the results with national and International data. All consecutive patients who presented with Wilson's disease during this period were included in the study. Their clinical and laboratory features were recorded and compared with the available National and International data. We collected a total of 10 patients from 5 different families. Eight were confirmed cases examined and investigated by the authors. Two cases were probable and dead siblings of these families in whom clinical features strongly supported the diagnosis of Wilson's disease. Clinical and laboratory data of only confirmed cases was tabulated and compared. Of the eight patients six were males and two females with a male to female ratio of 3:1. Mean age at presentation was 12.6 years with a range of 6 to 19 years. Presenting features were as follows: dysarthria in 6 [75%]; dystonia 5 [63%]; extrapyramidal rigidity and bradykinesia 4 [50%]; emotional lability 6 [75%]; cognitive decline 2 [25%] and signs of chronic liver disease in 1 [13%]. Hepatic functions were abnormal in 1 [13%] while 4 [50%] patients had coarse echo texture of liver on abdominal ultrasound. Serum copper levels were within normal range in 8 [100%] patients. Serum ceruloplasmin was low in 8 [100%] patients. Twenty four hour urinary copper excretion was elevated in 5 [63%], KF ring on slit lamp examination was positive in 8 [100%] patients. CT scan of brain was done in 6 [75%] and showed hypodensity of basal ganglia mainly affecting the putamen and globus pallidus along with subcortical white matter disease in frontoparietal region in 4 [50%] patients. MRI was done in 5 [63%] patients and showed evidence of cortical atrophy with hyperintense signals in thalamf brain stem and basal ganglia in all five patients [100%]. Six confirmed cases belonged to three families and no family history was available in two cases [25%]. History of consanguineous marriage was positive in all [100%] cases. We conclude that Wilson's disease is not an uncommon problem in our population with patients presenting at an early age but with advanced stage of the disease. However, poor recognition is the possible cause of it's under and delayed diagnosis. Wilson's disease in children and young adults can present with neuropsychiatric features alone without any hepatic manifestations. Neuropsychiatric features along with KF ring and a low Serum Ceruloplasmin level are sufficient to establish a diagnosis of Wilson's disease.

**History of Medicine**

**The Ibn’Sina Rounds. Not just a care of thyrotoxicosis.**
Abubakr
*Emirates Medical Journal* 2008; 26 (2): 129-130 (4 ref.)

**Keywords:** Thyrotoxicosis-history; Graves Disease-history

**HIV Infections**

**pathology**

**Articular manifestations associated with HIV infection.**
Benjilali, L.; Harmouche, H.; Azeroual, A.; Tazi Mezalek, Z.; Adnaoui, M.; Aouni, A.; Maaouni, A.
*Maroc Medical* 2008; 30 (1): 47-55 (50 ref.)

**Keywords:** Arthritis-diagnosis; Arthralgia; Arthritis, Psoriatic; Spondylarthritis; Anti-Retroviral Agents; Arthritis-drug therapy

**Abstract:** During the infection by human immunodeficiency virus, there is dysfunction in the immune system because of the coexistence of immunodeficiency and immune hyperactivity, and a disregulated production or activity of cytokines. Some of these mechanisms explain the development of articular manifestations associated with HIV infection. Highly active anti retroviral therapy has changed the spectrum of the HIV-associated articular manifestations. New syndromes have emerged. A variety of disorders may be seen. Their prevalence is controversion. Several points remain obscurres such as the existence of genetical predisposition for these manifestations, the role played by the anti retroviral therapy and utilisation of immunosuppressors like inhibitors of TNF alpha.
Holoprosencephaly

diagnosis

Prenatal MRI image of a fetus with semilobar holoprosencephaly.
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Sultan Qaboos University - Sultan Qaboos University Hospital - Department of Radiology and Molecular Imaging
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 93-94 (6 ref.)
Keywords: Magnetic Resonance Imaging; Fetus; Prenatal Diagnosis

Hypercalcemia

diagnosis

Hypercalcemia in elderly patient.
Raffali, J.; Harmouche, H.; Tazi Mewlek, Z.; Aouni, M.; Maouuni, A.
Maroc Medical 2008; 30 (1): 38-46 (25 ref.)
Keywords: Hypercalcemia-etiology; Hypercalcemia-therapy; Aged
Abstract: Hypercalcemia is not rare among elderly patients. Hyperparathyroidism and neoplasia are the most frequent causes of hypercalcemia in old patients. Symptoms due to hypercalcemia are usually non specific in old subjects, leading to consider easily this diagnosis and to measure plasma calcium level. Biological diagnosis of hypercalcemia is not always obvious in old patients because of frequently decreased plasma albumin levels leading to lower plasma total calcium level. Thus, it is always necessary to calculate plasma total calcium level corrected by albumin. The symptomatic treatment of hypercalcemia rests on the intravenous administration of isotonic saline and the use of the bisphosphonates which currently represent the therapeutic of choice. Specific treatment depends on the etiology. The short-term risk of hypercalcemia is acute hypercalcemia, which may be lifethreatening. The long-term risk of hypercalcemia is renal failure.

Imidazoles

cultural synthesis

Synthesis and pharmacological screening of certain imidazoquinazolone derivatives.
Ragab, Fatma A.; Hassanein, Hassanein H.; Ali, Enayat I.; Georgey, Hanan H.
Cairo University - Faculty of Pharmacy - Department of Pharmaceutical Chemistry
Keywords: Quinazolines-therapeutic use; Anticonvulsants; Analgesics, Non-Narcotic; Anti-Inflammatory Agents
Abstract: Certain imidazoquinazolin-5[4H]-one derivatives have been synthesized by replacement of the 4-amino group compound I with different moieties of expected biological activity. Representative example of the synthesized compounds were tested for their anti-inflammatory, analgesic, antipyretic and anticonvulsant activities. Certain derivatives showed activities higher than that of the reference drugs.

Incisor

injuries

Pattern of traumatic injuries to maxillary permanent incisors related to age and incisal overjet.
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Fatima Jinnah Dental College Hospital - Department of Operative Dentistry
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 92-99 (28 ref.)
Keywords: Maxilla-injuries; Age Distribution; Sex Distribution; Malocclusion-classification
Abstract: To determine the pattern of dental trauma to maxillary permanent incisors with relation to age and overjet. A complete history and examination findings of 100 patients, aged between 7 and 17 years, presenting with trauma to
permanent anterior teeth were recorded on a specifically designed proforma. Extraoral and intraoral examinations were performed and radiographs were taken when indicated. Andreasen and Andreasen's Classification [1993] was applied for the classification of dental injury. Overjet of the subjects were also recorded and classified accordingly. Hundred patients with one hundred and twenty nine traumatized teeth were observed and recorded. The average age considered was 12 years. It was noted that boys [62%], were more often involved with trauma as compared to girls [38%]. The maxillary central incisors were found to be the most affected teeth [84%]. The most common cause of injuries was fall [59%]. Uncomplicated crown fracture cases were more frequently observed [31%]. Compared to patients with normal overjet, trauma was significantly higher in patients with increased overjet [P = 0.001]. Boys suffered more trauma than girls with a ratio of about 1.6:1. Children with increase overjet were two times more prone to dental trauma with normal overjet.

**Insulinoma**

**Insulinoma : a rare cause of a common metabolic disorder - hypoglycaemia.**

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SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 63-67 (9 ref.)
Keywords: Hypoglycaemia-etiology; Octreotide; C-Peptide; Laparoscopy; Pancreatectomy
Abstract: We describe the first patient diagnosed with an insulinoma in Oman and successfully managed with a distal laparoscopic pancreatectomy. The importance of obtaining a good history from the patient and/or his family is stressed. All patients with loss of consciousness must have a Reflow check carried out and, if hypoglycaemic, this should be documented in the laboratory and a simultaneous serum sample stored for measurement of insulin, C-peptide proinsulin and sulphonylurea levels, if subsequently indicated. If magnetic resonance imaging fails to locate the tumour, endoscopic ultrasound of the pancreas, or indium 111 labelled octreotide scanning is indicated if the patient's hypoglycaemia has previously responded to treatment with octreotide.

**Interferon-alpha**

**adverse effects**

**Graves' disease following interferon therapy for chronic hepatitis C infection.**

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Sultan Qaboos University - College of Medicine and Health Sciences - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 75-77 (8 ref.)
Keywords: Graves Disease-etiology; Thyroid Function Tests; Hepatitis C, Chronic-drug therapy
Abstract: We describe the first case of Graves' disease occurring at Sultan Qaboos University Hospital, Oman, in a patient who was under treatment with interferon alfa for HCV infection. INF-alpha is now being widely used to treat patients with a variety of disorders including infection with hepatitis C virus. Clinical thyroid disease, hypo and hyperthyroidism can occur in up to 15% of patients. We emphasize the need for thyroid function screening before and during therapy to identify patients early in the course of their disease.

**Intra-Aortic Balloon Pumping**

**Misplacement of an intraaortic balloon pump into the inferior vena cava - a case report.**

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Baghiatollah University of Medical and Research Sciences - Department of Echocardiography
Middle East Journal of Anesthesiology 2008; 19 (6): 1401-1404 (5 ref.)
Keywords: Vena Cava, Inferior; Medical Errors; Aorta, Thoracic; Echocardiography; Coronary Artery Disease; Coronary Artery Bypass
Job Satisfaction

Job satisfaction and burnout among Palestinian nurses.
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Jordan University of Science and Technology - Faculty of Nursing
Keywords: Burnout, Professional; Nurses; Questionnaires
Abstract: An exploratory descriptive study design was used to investigate job satisfaction and burnout among Palestinian nurses. A random sample of 152 nurses was recruited from private hospitals. The instruments included a demographic questionnaire, the Minnesota satisfaction questionnaire and the Maslach burnout inventory. Respondents reported moderate levels of job satisfaction and moderate burnout. Palestinian nurses face many challenges in their daily work due to decreased chances of job advancement and emotional exhaustion which may lead to job dissatisfaction. Health care administrators and policy-makers have a responsibility to find solutions to problems that cause job dissatisfaction and burnout among nurses to ensure the delivery of quality health care services.

[Job satisfaction and its affecting factors from the viewpoints of faculty members of Kermanshah University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 335-342 (11 ref.)
Keywords: Schools, Medical; Staff Development; Cross-Sectional Studies; Education, Medical; Universities
Abstract: Human resource is one of the factors for organizations' survival. Generally, every organization's success depends on its employee's efforts as well as their job satisfaction. The aim of this study was to investigate the factors influencing job satisfaction from the viewpoints of faculty members of Kermanshah University of Medical Sciences. This descriptive cross-sectional study was performed on 156 full time faculty members of Kermanshah University of Medical Sciences. In order to collect the data, the demographic features questionaire and the standard questionnaire of Smith, Kendall-Halley with little modifications were used. Data was analyzed by SPSS software using t-test, ANOVA, Pearson correlation coefficient, and Tukey test. The highest satisfaction belonged to nature of the job [4.41 +/- 0.70] and welfare opportunities proved to be the factor for lowest satisfaction [2.13 +/- 0.83]. Furthermore, there was a significant relationship between some occupational variables and job satisfaction. Faculty members of Kermanshah University of Medical Sciences are satisfied with their job and their job satisfaction would increase if some factors such as salary, lack of welfare opportunities, and their progress were taken into consideration.

[Job satisfaction among faculty members of Isfahan University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 227-236 (31 ref.)
Keywords: Teaching; Salaries and Fringe Benefits; Workplace; Universities; Schools, Medical
Abstract: Identifying the factors leading to job satisfaction could be useful in increasing faculty members' job satisfaction and motivating them to perform their educational and research activities. This study was conducted to determine job satisfaction rate among faculty members of Isfahan University of Medical Sciences in the year 2005-2006. In a descriptive study, 210 faculty members of Isfahan University of Medical Sciences were selected through stratified random sampling. A researcher-made questionnaire including 45 items in the areas of salary and rewards, promotion opportunities, management stAuts and communications, job security, physical conditions, environment, and nAutre of the work was completed as self-administered. It was analyzed by SPSS software using frequency distribution, mean, and standard deviation. The mean and standard deviation for the areas under investigation including nAutre of the work, manage-ment stAuts and communications, job security, salary and rewards, promotion opportunities, physical condi-tions and working environment were 82.5 +/- 13.31, 65.3 +/- 17.52, 63.99 +/- 21.64, 61.8 +/- 20.9, 58.7 +/- 20.05, and 58.02 +/- 21.49, respectively, out of the total score of 100. Faculty members were well satisfied with their jobs. Their satisfaction about the nAutre of their work was desirable, and about management stAuts, job security, and salary and rewards, was partially desirable. They were less satisfied with promotion opportunities and physical conditions of working environ-ment. Taking faculty members welfare into consideration and revising promotion procedures could improve the current situation.
Abstract: Literature review revealed major variations in the anatomic characteristics of the right internal jugular vein (IJV) and carotid artery (CA) by the use of the ultrasound machine. The purpose of this study is to examine the anatomical characteristics of the right IJV and CA and to evaluate the IJV cannulation outcomes by the standard ultrasound guided vs. ultrasound localized technique as suggested by [n and colleagues. Additionally, the study assessed the impact of changing the ultrasound transducer direction on the location of right IJV relative to the CA. Patients [n = 100] were randomly assigned to either an ultrasound-guided or ultrasound-localized technique for IJV cannulation. The "Site Rite" II ultrasound transducer was directed perpendicular to the floor at the apex of the clavicle-sternocleidomastoid triangle at the level of the cricoid cartilage with the head turned to contralateral side of cannulation and table tilted to 30° in Trendelenburg position. Cannulation outcomes, including successful cannulation, access time, success time, and difficult cases were evaluated. Aborted difficult cases included prolonged procedural tulle exceeding four minutes and carotid puncture, and these were examined by technique. IJV size and its location relative to CA. The location of the IJV relative to CA was evaluated firstly with the ultrasound transducer directed perpendicular to the floor and secondly with the transducer directed perpendicular to the skin [Fig 1]. With the ultrasound transducer directed perpendicular to the floor, the depth of the IJV from the skin [15 mm] was comparable to its diameter [14.1 mm], while the CA A-P diameter was around half that of the IJV [7.4 mm] [Table 2]. Also, the majority of patients showed lateral [51%] and posterolateral [14%] positions of the IJV relative to the CA. Directing the transducer perpendicular to the skin resulted in more anterolateral positions [77%] with 6% total overlap. Cannulation of the IJV was successful in 94% in both randomization groups, with 91.5% of the patients achieving first pass cannulation in the ultrasound-guided group and 87.2% in the ultrasound-localized [Table 3]. Access time [6.9 +/- 13 sec and 5.9 +/- 14.6 sec] and success time [13.5 + 14.2 sec and 13.2 + 15.0 sec] were comparable for both groups. Reasons for aborted difficult cannulation included prolonged procedural time in 2% and carotid puncture in 4%. Compared to the successful cases, difficult cases were characterized by a significantly greater degree of anterolateral [exceeding 15°] location of the UV relative to the CA [p-value=0.046] and a significantly smaller IJV site [mean 10.3 mm vs. 14.3 mm, p-value = 0.035] [Table 4]. However in multivariate analysis controlling for the technique utilized, only the relation between the size of IJV and the occurrence of difficult cases remained significant. With each 1 mm decrease in IJV size, there was a 37% significant increase in the risk of difficult cases. Findings of the study show that both ultrasound guided and ultrasound localized techniques yield similar cannulation outcomes. Additional to the anterolateral position of the IJV relative to the CA, a small IJV site constitutes a powerful predictor for the incidence of prolonged procedure time and carotid puncture for IJV cannulation. Finally the transducer direction has a significant impact on the assessment of the location of the IJV relative to the CA.

Keywords: Carotid Arteries-ultrasonography; Catheterization

Epidural ketamine for postoperative analgesia in the elderly.

Epidural ketamine for postoperative analgesia in the elderly.

Ketamine pharmacology

Epidural ketamine for postoperative analgesia in the elderly.

El Shobary, Hanan M.; Sonbul, Zainab M.; Schricker, Thomas P.
McGill University - Department of Anesthesia

Keywords: Analgesia, Epidural; Postoperative Period; Pain-drug therapy; Aged; Abdomen-surgery; Bupivacaine; Morphine; Postoperative Nausea and Vomiting; Analgesia

Abstract: We assessed the epidural use of ketamine in elderly patients undergoing major abdominal surgery. Patients older than 65 years were randomly allocated to receive preemptive epidural bupivacaine 0.125% [20 ml] combined with either epidural ketamine 40 mg [ketamine group], or epidural morphine 2 mg [morphine group]. Postoperatively, boluses of 0.125% bupivacaine [5 ml] supplemented with ketamine [2 mg/ml] or morphine [0.1 mg/ml] were given until a pain score of two was established. Analgesia at rest was assessed by a verbal rating score [0 = no pain, 1 = mild pain, 2 moderate pain, 3 = severe pain] at 1h, 2h, 6h, 12h and 24h after surgery. The patient’s degree of sedation was assessed using the Ramsay sedation score and episodes of nausea and vomiting [PONV] were recorded. Patients in the morphine group were more sedated but had significantly lower pain scores and requested less rescue analgesic than patients receiving epidural ketamine [P <0.05]. In the morphine group three patients were treated for PONV while none of the
patients in the ketamine group showed PONV. Epidural ketamine, when compared to epidural morphine, appears to be associated with less sedation and a smaller risk of PONV, but necessitates more frequent or continuous administration to achieve comparable analgesia.

**Ketoprofen**

Formulation and evaluation of ketoprofen cellulose acetate microcapsules.

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Al Azhar University - Faculty of Pharmacy

**Keywords:** Chemistry, Pharmaceutical; Capsules; Delayed-Action Preparations; Hydrogen-Ion Concentration; Microscopy, Electron, Scanning

**Abstract:** Ketoprofen is a potent non-steroidal anti-inflammatory, analgesic, and antipyretic drug used for treatment of various rheumatic diseases and painful conditions. It is rapidly absorbed regardless the route of administration. Its half life is only 1-2 hrs after oral administration. The aim of this work was to formulate some controlled release oral dosage forms containing ketoprofen. Cellulose acetate was chosen for this purpose. Ketoprofen-cellulose acetate microcapsules were prepared by solvent evaporation technique, Polyvinyl alcohol was used as an emulsifier. The prepared microcapsules were evaluated in terms of their release and surface characteristics. Also, the anti-inflammatory activity of ketoprofen was evaluated using the carrageenan-induced rat's pawedema method. The release of ketoprofen from the microcapsules was pH dependant and decreased by increasing the polymer content and by increasing the organic phase volume. The particle size of the produced microcapsules was decreased by increasing the volume of organic phase, whereas it was increased by increasing the polymer content. In conclusion, these results suggested that microencapsulation of ketoprofen using cellulose acetate could be a useful approach for controlled release of the drug.

**Kidney Diseases**

prevention and control

Protective effect of Curcuma longa extract on acetaminophen induced nephrotoxicity in mice.

Khorsandi, L.; Orazizadeh, M.
Jundi Shapour University of Medical Sciences - Faculty of Medicine - Department of Anatomical Sciences
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 155-159 (19 ref.)

**Keywords:** Kidney Diseases-chemically induced; Kidney Diseases-etiology; Acetaminophen-adverse effects; Curcuma; Analgesics-adverse effects; Mice ; Antioxidants; Blood Urea Nitrogen; Creatinine-diagnostic use; Uric Acid-diagnostic use

**Abstract:** Acetaminophen is a commonly used analgesic and antipyretic agent which, in high doses, causes liver and kidney necrosis in man and animals. Curcuma longa has been reported to have anti oxidant and hepato-protective properties. In this study the protective effect of Curcuma longa extract on acetaminophen induced nephrotoxicity has been evaluated. Sixty NMRI male mause were randomly divided into 6 groups. Control group received normal saline. Curcuma longa group received 1000 mg/kg of the extract of the plants, positive control group received 500 mg/kg acetaminophen. Acetaminophen and Curcuma longa extract at doses of 400, 800 and 1000 mg/kg were administered to the tested groups \[T[1] T[3]\] at the same time. The jugular arteries of the mice were cut for biochemical testes after 48 hours and the kidney removed in 10% formalin solution for histopathology testes. BUN, Cr and Uric acid reduced significantly in the T[3] group \[p < 0.05\]. Necrosis of kidney reduced in test groups especially in T[3] group. The results of this study indicate that Curcuma longa extract may protect kidney against acetaminophen - induced tubular necrosis in mice.

**Kidney Failure, Chronic**

Effect of peritoneal dialysis and hemodialysis on oxidation end products in end stage renal disease patients.

Naga, Salah Said; El Lakkany, Sohair Ahmed; Barghash, Ayman Abdo; El Deep, El Deep Mabrook; Fawzy, Rania Mohamed
Alexandria University - Faculty Of Medicine - Internal Medicine Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 97-104 (47 ref.)

**Keywords:** Renal Dialysis; Peritoneal Dialysis; Oxidative Stress; Glutathione; Glutathione Peroxidase; Superoxide Dismutase; Malondialdehyde; Antioxidants; Ascorbic Acid; Vitamin A; Vitamin E; beta Carotene

**Abstract:** Chronic renal failure [CRF] is a worldwide public health problem. It is a progressive disease characterized by gradual and persistant impairment of both glomrerular filtration and tubular functions, so the kidneys are no longer able to keep normal internal environment. Oxidative and carbonyl stresses are considered among the mechanisms involved in
the pathogenesis of CRF. Oxidative stress is known as imbalance between reactive oxygen species and antioxidants in favour of the former, while carbonyl stress is characterized as an overload of reactive carbonyl compounds [RCOs]. Both oxidative stress and carbonyl stress can cause damage to important biological structures e.g. proteins, carbohydrates, lipids, and nucleic acids resulting in the generation of new compounds and modified structures which can serve as markers of these mechanisms such as advanced glycation end products [AGEs] and advanced oxidation protein products [AOPPs]. AOPPs are proteins, predominantly albumin and its aggregates, that are damaged by oxidative stress. The present work aimed to study the effects of two different renal replacement modalities, peritoneal dialysis [PD] and hemodialysis [HD], on oxidation products of glucose, lipids, and proteins in patients with end stage renal disease [ESRD]. It also aimed at studying the effects of these therapies on the antioxidant defenses of these patients. The present study was conducted on 20 patients with ESRD. Patients were divided into two groups; group I consisted of 10 patients maintained on continuous intermittent peritoneal dialysis [PD] thrice weekly, and group II consisted of 10 patients maintained on bicarbonate hemodialysis [HD] thrice weekly. 10 healthy volunteers of matched age and sex served as a control group. All patients and control subjects were subjected to the following investigations; serum malondialdehyde [MDA] serum AOPPs, blood glutathione [GSH], erythrocyte glutathione peroxidase [GPx] and superoxide dismutase [SOD] activities, plasma vitamins A and C, serum vitamin E and beta carotene. For all patients, these markers were measured before the start of dialysis and 4 weeks after the first dialysis session. For control volunteers, these markers were measured only once. There was significant increase in the predialysis values of MDA and AOPPs when all ESRD patients were compared with the control group. There was also significant decrease in the predialysis values of GSH, GPx, SOD, vitamins A, E, and C, and beta carotene when all ESRD patients were compared with the control group. There was significant increase in the postdialysis values of MDA and AOPPs and significant decrease in the postdialysis values of GSH, GPx, SOD, vitamins A, E, and C, and beta carotene compared to their corresponding predialysis values in both PD and HD groups. There was no significant percentage change in all studied markers between PD and HD except GPx and vitamin C where the percentage change was significant. This study also revealed significant positive correlation between serum levels of MDA and AOPPs and significant negative correlation between each of them in one hand and all the antioxidant markers except for vitamin E in the post dialysis phase in the other hand. It is concluded that both PD and HD therapies, as practiced currently, are associated with increased oxidative stress. AOPPs are new uremic toxins that appear to be important components in the complex pathophysiology of oxidative stress and inflammation and therefore should be taken as a potential target to interrupt the vicious circle of oxidation and inflammation in uremia. AOPPs can be also used as a marker of oxidative stress. Prevention of oxidative stress in dialysis patients might focus on improving the biocompatibility of the dialysis system and supplementation of deficient patients with antioxidants.

physiopathology


Mikhail, Nabil; Abou Rwash, Nayer; El Kholy, Zenat; Adam, Abdel Nasser Ismail; EL Yamani, Mamdouh; El Sharief, Mohammed

Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 253-259 (52 ref.)

Keywords: Renal Dialysis; Blood Platelet Disorders; Sodium-Potassium-Exchanging ATPase; Monoamine Oxidase; Cholesterol; Triglycerides; Proteins

Abstract: Patients with chronic renal failure CRF suffer form abnormalities of primary hemostasis due to platelet dysfunction. Dialysis improves platelet abnormalities but does not eliminate the risk of hemorrhage. Hemodialysis can even contribute to the bleeding through the continuous platelet activation induced by the interaction between blood and artificial surfaces. The aim is to study the changes in the biostructure of platelets in ESRD and the effect of HD on it, and to find its relation to its function. The platelet biostructure [total protein, total lipids, total carbohydrates, total phospholipids [PL], total cholesterol] and enzymatic activities [Na[+]-K[+] ATPase, monoamine oxidase, [MAO] often healthy control, 15 undialyzed CRF patients, and 15 hemodialyzed CRF patients [before and after dialysis] were studied. The results revealed an increase of total lipids, total PL concentrations and decrease in the activities of Na[+]-K[+] ATPase, MAO of platelets of CRF compared to their healthy controls. After dialysis results as compared to those before dialysis revealed decreased concentration of total PL of the platelets and increased activity of Na[+]-K[+] -ATPase. Whereas if the results after dialysis were compared to those of healthy controls total lipids, PL, total cholesterol concentration and Na[+]-K[+] ATPase showed significant increased values whereas MAO activity decreased significantly. Correlation studies showed insignificant correlation for all the parameters studied before or after dialysis as compared with the age of patients or duration of dialysis-in years. It may be concluded that the biochemical aberrations that were revealed form the present study concerning End Stage Renal Disease [ESRD] patients [dialyzed and undialyzed] may be looked upon as a causative factor in the well known physiological impairment of platelet function in uremia which appears not to be totally corrected by hemodialysis.
Language

education

[A critical view of Arabic curriculum as a requirement for medical schools, Gezira University]
Mohamedani, Ahmed Abdallah; Abdal Rahman, Samira Hamed; Al Abbas, Omar Al Sayed
El Gezira University - Faculty of Medicine - Medical Laboratory Sciences
Keywords: Curriculum; Schools, Medical; Arabs; Students, Medical
Abstract: We compared the present Arabic syllabus used in Gezira University Medical School with previous ones. We also surveyed students and Arabic professors in medical sciences on their views on the content and teaching/evaluation procedures and how these contributed to students' understanding of the medical science syllabus. The current syllabus was designed to provide students with Arabic language skills with particular reference to scientific language. The students' opinions differed regarding their understanding of clinical medicine and their interaction with patients and also the benefits to them of research procedures and reporting. The professors considered the syllabus was adequate to achieve its aims but emphasized the importance of varying teaching methods and evaluation.

Lead Poisoning

Lead poisoning: an unrecognized and growing public health problem.
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Emirates Medical Journal 2008; 26 (2): 75-77 (8 ref.)
Keywords: Environment and Public Health; Intelligence; Child; World Health Organization; Environmental Exposure; Health Promotion; Awareness
Abstract: United Arab Emirates [UAE] is considered to be one of the modernized countries due to the presence of wealth which enabled the government to fulfill many programmes at high levels, with proper resources for education, health, industry, and economics. UAE government is committed to World Health Organization objectives, and conducting programmes for implementing the international resolutions regarding public health by using the adequate resources, and continuous supervision over community developmental needs. The UAE government is setting up new rules and regulations in order to protect public health and to control any forthcoming environmental hazards.

Learning

[The relationship between learning characteristics and academic achievement in nursing and midwifery students]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 443-450 (29 ref.)
Keywords: Students, Nursing; Midwifery; Achievement; Educational Status; Internal-External Control
Abstract: One of the reasons causing academic failure among students is disregarding factors affecting learning. The aim of this study was to determine the relationship between academic achievement of nursing and midwifery students and their learning characteristics including study style, control locus, and self-organized learning factors which are modifiable issues in learning. In this correlational study, all nursing and midwifery students with average grade of 17 and above [high academic achievement] or average grade of 14 and lower [low academic achievement] in Tabriz School of Nursing and Midwifery were investigated through census sampling method in the year 2005-2006. Data was gathered using questionnaires of "Kolb's Learning Styles Inventory," "Karami Study Methods;" "Julian Rotter Locus of Control,;" and "Motivational Strategies for Learning" and then, was analyzed through descriptive statistics and logistic regression test by SPSS software. Logistic regression analysis showed that control locus [P=0.008] and motivational strategies for learning [P= 0.032] had a significant relationship with academic achievement of students. Control locus and motivational strategies for learning, were recognized as determining factors in academic achievement. Taking the results of this study into consideration, running workshops or seminars on the issue of "Locus of control related to learning" and "motivational strategies for learning" are recommended for learning improvement in first year students.
Leukemia, Lymphocytic, Chronic, B-Cell

Large B-cell transformation of chronic lymphocytic leukemia presenting as a penile mass and skin lesion.
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Loannina University Hospital - Department of Hematology
Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 199-200 (4 ref.)
Keywords: Leukemia, Lymphocytic, Chronic, B-Cell-therapy; Lymphoma, Large B-Cell, Diffuse-pathology; Antibodies, Monoclonal-therapeutic use; Penis-pathology; Skin-pathology; Prognosis

Leukemia, Myelocytic, Acute

The challenge of risk stratification in acute myeloid leukemia with normal karyotype.
Zaidi, Syed Z.; Owaidah, Tarek; Al Sharif, Fahad; Ahmed, Said Y.; Chaudhri, Naeem; Aljurf, Mahmoud
King Fahad Medical City - Prince Sultan Hematology Oncology Center - Hematology and SCT Department
Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 141-158 (143 ref.)
Keywords: Prognosis; Risk Assessment; Karyotyping; Cytogenetics; Leukemia, Myelocytic, Acute-therapy; Tumor Markers, Biological; Mutation; Treatment Outcome; Tandem Repeat Sequences
Abstract: Cytogenetic aberrations have long been recognized as the most important prognostic variable in acute myeloid leukemia [AML] and are now a major stratification tool for post-remission therapy. Cytogenetics-based stratification improves survival. Patients with AML and normal cytogenetics, the largest single subgroup, have had a very heterogeneous outcome with standard chemotherapy in multiple clinical trials. Hence it is difficult to recommend a [one size fits all] kind of treatment for this heterogeneous population of AML patients. New emerging data from preclinical, retrospective, and large, randomized controlled studies indicate that in addition to cytogenetic abnormalities, many other molecular aberrations are operative in the response to treatment as well as in the risk of relapse. Such molecular markers are being tested for developing targeted therapies and may help in improved stratification of patients in the selection of post-remission therapy. Emerging evidence reveals that at the submicroscopic level, AML with normal cytogenetics may carry poor prognostic genetic lesions or [molecular signatures] as is the case with FLT3 mutations and overexpression of BAALC, ERG or MN1, or may have aberrations that predict better risk as is the case with isolated NPM1 or CEBPA mutations. Later studies have tried to explore the interaction of various prognostically important genes in this group of AML patients. The utility of the evolving data for bedside management of such patients is expected to improve with the wider application of modern tools, using the proposed clinical outcome models, and probably by development of a risk-scoring system based on the relative risk associated with each molecular aberration. The goals include identifying those patients most likely to benefit from upfront allogeneic HSCT and sparing good-prognosis patients from unnecessary transplant-related morbidity. The following is an outline of the most common molecular changes, their impact on the outcome of AML patients with normal cytogenetics and challenges in their wide scale application in risk stratification.

Leukemia, Myelomonocytic, Chronic, BCR-ABL Positive

Additional chromosomal abnormalities in Philadelphia-positive chronic myeloid leukemia.
Syed, Naveen Naz; Usman, Mohammad; Adil, Salman; Khurshid, Mohammad
Aga Khan University Hospital - Department of Pathology
Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 166-170 (18 ref.)
Keywords: Philadelphia Chromosome; Chromosome Aberrations; Prognosis; Prospective Studies; Leukemia, Myelomonocytic, Chronic, BCR-ABL Positive-therapy; Piperazines-therapeutic use; Karyotyping; Cytogenetics
Abstract: The emergence of non-random chromosomal abnormalities is a well-recognized occurrence in chronic myeloid leukemia [CML] and detection of these abnormalities is important in prognostic stratification. The frequency and types of additional chromosomal abnormalities in CML patients has not been determined in our region. We conducted a descriptive, prospective study of additional chromosomal abnormalities in patients with an established diagnosis of Philadelphia-positive CML from May 2001 to June 2007. Cytogenetic studies were repeated every three months with the
conventional G-banding technique and described according to the international system for Human Cytogenetic Nomenclature. All patients received imatinib mesylate. In 219 patients with Philadelphia-positive CML, 34 [15.5%] [median age, 38 years] developed 51 additional chromosomal abnormalities. Five cases had variant translocations prior to starting imatinib; the remaining 29 cases acquired chromosomal abnormalities after starting imatinib, including 8 cases that received prior interferon-alfa. Twenty-one patients were in chronic phase, 10 in accelerated phase and 3 were in blast crisis. Trisomy 8 was the most frequent abnormality followed by random chromosomal abnormalities and variants of the Philadelphia chromosome. The overall frequency of additional chromosomal abnormalities was similar to that in previous reports. Early identification of these abnormalities may help in adapting to a more appropriate therapeutic approach.

Life Expectancy

Direct estimation of life expectancy in the Islamic Republic of Iran in 2003. Pourmalek, F.; Abolhassani, F.; Naghavi, M.; Mohammad, K.; Majdzadeh, R.; Naeini, K. Holakouie; Fotouhi, A. E-mail:pourmalek_farshad@yahoo.com Tehran University of Medical Sciences - School of Public Health - Epidemiology and Biostatistics Department EMHJ - Eastern Mediterranean Health Journal 2009; 15 (1): 76-84 (23 ref.) Keywords: Population; Mortality; Age Distribution; Sex Distribution; Statistics as Topic Abstract: We estimated the life expectancy for 2003 for 23 provinces in the Islamic Republic of Iran using population and mortality data from the Ministry of Health and Medical Education. The underreporting of deaths above 4 years was corrected using the Brass Growth Balance method. We assumed that the distributions of population, deaths, and hence life expectancy in the 23 provinces were equal to those for all 28 provinces of the country. Thus we estimated life expectancy at birth to be 71.56 years for the total population [95% uncertainty interval [UI]: 71.52-71.62]; 70.09 [95% UI: 70.02-70.16] years for males, and 73.17 [95% UI: 73.10-73.24] years for females. Our estimates were higher than the model-based estimates of the Statistical Centre of Iran, United Nations agencies and the World Bank, due to differences in the estimation methods used.

Ligands

Thermal stability of Ni [II] and Cu [II] mixed ligand complexes derived from biologically important schiff bases, azoles and morpholine. Aly, Aref A.M.; Osman, Ahmed H.; Abdel Mottaleb, Mohamed; Gouda, Gamal A.H. Assiut University - Faculty of Science - Department of Chemistry Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31 (Part 1): 93-108 (17 ref.) Keywords: Nickle; Copper; Thermogravimetry; Azoles; Morpholines; Schiff Bases Abstract: Thermogravimetry [TG] and differential thermogravimetry [DTG] have been applied to the investigation of the thermal behavior of six mixed ligand complexes of Ni[II] and Cu[II] comprising the Schiff bases: o-hydroxyacetophenonethanolimine [OHAE], N-salicylidene-o-iminophenol [SOP] and N-salicylidene-o-toluidine [SOT] as well as morpholine [Morph] and certain azoles. The azoles used are: 2-amino-thiazole [2-Atz], benzothiazole [Btz], 2-methylbenzothiazole [2-Mbtz], 3-methyl-2-selenoxobenzothiazole [3-Msbtz] and thiabendazole [Tbdz]. Heating the compounds first results in a release of the morpholine or the azoles. Kinetics of the decomposition reactions were studied using non-mechanistic equations.

Lipids

blood

Plasma cholesterol and lipoproteins profile in healthy Saudi persons. Abdul Rahman, Mohamed A.; Hassan, Mahmoud M.; Ibrahim, Ali A. Alqunfudah General Hospital - Hospital laboratory and blood bank Gezira Journal of Health Sciences 2008; 4 (1): 146-158 (16 ref.) Keywords: Lipoproteins-blood; Triglycerides-blood; Cholesterol, LDL-blood; Cholesterol, HDL-blood; Cholesterol-blood Abstract: to study the differences in the concentrations of plasma total cholesterol [TC], triglycerides [TG], LDL-C and HDL-C in normal healthy Saudi persons according to gender, age and lifestyle. For all tested research group the blood was drawn after an overnight fasting period [12-14hrs] using heparinized tubes. Enzymatic colorimetric method were used for analyse and the mean values and standard deviation for all parameters were obtained. The results showed lower T.C, TG and LDL-C levels through childhood group [ < 1-14 years] for both sexes with no significant differences between rural and urban areas. With the exception of HDL-C, other parameters increased with increasing of age for both sexes, indicating the effect of diet and lifestyle. However, HDL-C decreases during adolescence reaching its lowest level
at the age of 40 years. It remains constant up to the age of 55 years in both sexes, and then it started to rise to a constant level at later ages. This coincided with significant increase of total cholesterol, triglycerides and LDL-C that approached the dangerous levels in both city males and females above 40 years of age. This study suggests that differences in dietary habits and lifestyle were much more effective in the adult groups who lived in cities at an age above 40 years to be at risk of coronary heart disease. This was in line with the significantly higher levels of bad cholesterol and lower levels of the good one.

Liver Cirrhosis

complications

Study of annexin V in hepatic fibrosis with and without gastrointestinal haemorrhage. 
Helaly, Ahmed Z.; El Din, Salah B.; Noun, Hanan H.; Sharaki, Ola A.; Rasslan, Eman S. 
Alexandria University - Faculty of Medicine - Internal Medicine Department 
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 1-6 (36 ref.)

Keywords: Gastrointestinal Hemorrhage; Annexin A5; Abdomen-ultrasonography; Endoscopy, Gastrointestinal; Esophageal and Gastric Varices; Enzyme-Linked Immunosorbent Assay; Hypertension, Portal

Abstract: Annexins are family of proteins expressed throughout multicellular eukaryotic phyla but whose functions are poorly understood. Biochemically, annexins are defined as soluble, hydrophilic proteins that bind to negatively charged phospholipids in a Ca²⁺-dependent manner. This binding is reversible, and removal of Ca²⁺ by Ca²⁺ chelating agents will lead to a libration of annexins from the phospholipid matrix. Certain dysregulation in annexin expression, properties, or localization may contribute to the pathophysiology of disease phenotypes. This has led to the introduction of the term [annexinopathies]. The aim of this work was to study the role of annexin V in hepatic fibrosis with and without gastrointestinal haemorrhage. This study was carried out on sixty patients with hepatic fibrosis [diagnosed by liver biopsy], and were subdivided into two groups: Group I included 30 patients had no history of variceal bleeding, Group II included 30 patients had history of variceal bleeding, and 10 healthy subjects as a control group. Abdominal ultrasound with Doppler assessment of hepatic haemodynamic, upper GI endoscopic examination, measurement of plasma Annexin V level by enzyme linked immunosorbent assay were done. There was a significant increase of the mean plasma annexin V level in group [I and II] more than in controls, and it was being significantly higher in group II than in group I. There were no statistically significant relation between the plasma annexin V level and the Child-Pugh score, grades of esophageal varices, portal pressure or grades of portal hypertension in group I or in group II.

Liver Diseases

immunology

Diagnositic value of antisoluble liver antigen/ liver pancreas antigen [SLA/LP] and other autoantibodies in the diagnosis of patients with autoimmune liver disease. 
Shahin, Hisham Mahmoud; El Neanaey, Wafaa Ahmed; Abdel Rahman, Mohamed; El Refaey, Wael Abdel Hamid 
Cairo University - National Cancer Institute - Departments of Clinical Pathology and Laboratory Oncology 
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 7-11 (19 ref.)

Keywords: Hepatitis, Autoimmune-diagnosis; Autoantibodies; Antibodies, Antinuclear; Immunoglobulin G; Liver Function Tests; Biopsy; Liver; Histology; Liver Diseases-diagnosis

Abstract: This study aimed to evaluate the role of auto antibody profile in the diagnosis of patients with suspected autoimmune liver disease and their ability to define the putative type 3 autoimmune hepatitis [AIH]. Forty adult patients with abnormal liver function, elevated serum IgG and negative hepatitis markers were chosen from those attending the Hepatology Clinic and Internal Medicine Clinic of Alexandria Main University Hospital and Armed Forces Hospital. According to the results of liver biopsy, 36 patients were diagnosed as AIH, one patient as primary biliary cirrhosis [PBC] and the other 3 patients were still undiagnosed. Also, 10 patients with documented diagnosis of non-immune hepatitis B virus in addition to 10 age and sex matched healthy controls were enrolled in this study. Autoantibody profile of ANA, ASMA, AMA, LKM and p-ANCA was measured by indirect immunofluorescent technique [IF] and anti SLA/LP, LKM-1, LC-1 and AMA-M2 autoantibodies were detected by western blot assay. The sensitivity of ANA, ASMA, AMA, LKM, p-ANCA, SLA/LP and LC-1 were 48.6%, 51.4%, 2.7%, 8.1, 56.8%, 18.9% and 10.8% respectively with high specificity [100% for all auto-antibodies except that for ANA 95.7% and ASMA 87%]. However, the overall sensitivity of the complete profile was increased to 100% and specificity was 91.3% from this study we conclude that a complete profile of autoantibodies can be used as a useful tool for the diagnosis of patients with suspected autoimmune liver disease. Anti SLA/LP is an additional specific and diagnostic marker for the diagnosis of AIH type 1 and it remains to be seen whether the seropositivity of SLA/LP may characterize the patients who are more likely to relapse after corticosteroid therapy.
Lupus Erythematosus, Discoid

drug therapy

Mycophenolate mofetil in the treatment of systemic discoid lupus erythematosus.
Rabhi, S.; Harmouche, H.; Tazi Mezalek, Z.; Adnaoui, M.; Aouni, A.; Maaouni, M.
Maroc Medical 2008; 30 (1): 27-31 (18 ref.)

Keywords: Lupus Erythematosus, Systemic-drug therapy; Mycophenolic Acid-analogs and derivatives; Mycophenolic Acid-therapeutic use; Anti-Inflammatory Agents, Non-Steroidal-therapeutic use; Immunosuppressive Agents-therapeutic use

Abstract: The mycophenolate mofetil has been successfully used for the treatment of several autoimmune skin diseases in a case of a 27 year old female patient, who was diagnosed as acute disseminater SLE in may 2002, according to the ARA document revised in 1987. Two years later, she had an intrauterine fetal death of 32 weeks, causing a severe, psychological impact. She complained of a generalised discoid lupus face, thorax and both upper and lower limbs.
Due to the resistant oral and local hydroxychloroquine and local dapsone treatment, she had cortisonic diabetes, aseptic necrosis of the head of the femur, and macular toxicity caused by antimalarial therapy. The skin lesions was associated with proliferative segmental and focal lupus nephritis. Induction treatment with 29 per day of mycophenolate mofetil associated with corticosteroid therapy by prednisone 1 mg/ kg/ id lead to the disappearance of the skin lesions and portonurea.

Lymphatic Diseases

pathology

The pattern and frequency of diseases associated with lymphadenopathy.
Hussain, Nazar; Shazia, N.; Nadia, N.; Bushra, A.; Ali, Zulfqar
Baqai Medical University - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 64-66 (18 ref.)

Keywords: Tuberculosis-diagnosis; Lymphoma-diagnosis; Lymphadenitis-diagnosis; Hodgkin Disease-diagnosis; Lymphoma, Non-Hodgkin-diagnosis; Pseudolymphoma-diagnosis; Biopsy, Fine-Needle; Incidence; Lymphatic Metastasis

Abstract: A study of 351 patients of lymphadenopathy was carried out to observe the pattern of various diseases with which these patients were affected. There were 168 male and 183 female patients with male to female ratio of 1:1.09. The youngest patient was 1 year old and the oldest was 80 years of age. The commonest lesion found was tuberculosis in 165 [47%] followed by reactive hyperplasia in 121 [34.5%], metastatic carcinoma in 36 cases [10.3%], malignant lymphoma in 27 cases [7.7%], kikuchi's lymphadenitis in one case [0.28%], and fungal lymphadenitis in one [0.28%].

Lymphatic Metastasis

Co-relation of sentinel lymph node metastases with the size of primary breast carcinoma.
Hameed, Sadia; Riaz, Sabiba; Hussain, Arif; Ahmed, Janbaz
University Medical College - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 57-60 (13 ref.)

Keywords: Breast Neoplasms-pathology; Sentinel Lymph Node Biopsy; Cross-Sectional Studies; Tumor Burden

Abstract: This is a cross-sectional study designed to explore the co-relation between the tumour size and incidence of metastases in the sentinel lymph node and was conducted at Departments of Pathology, Punjab Medical College, Faisalabad and Sheikh Zayed Hospital, Lahore and Departments of Surgery, Allied and DHQ Hospitals, Faisalabad from July 2002 - June 2003. The sentinel lymph node [SLN] was identified in 80 cases of early [T1 and T2] breast carcinoma by a localization technique using 1% Isosulphan Blue. The maximum size of the tumour was measured on gross examination and the margins were labelled with Alcian blue and fixed in Bouin's fluid. The entire tumour was embedded and the size of the tumour was confirmed on microscopic examination. Similarly the entire SLN was embedded and the microscopic measurement of tumour deposit was made in every case. The SLN was successfully isolated in 80 cases. Right sided carcinoma was seen in 52.5%. Stage T1 was seen in 37.5% and 62.5% were of stage T2. Most of the tumours [65%] were located in the upper outer quadrant. Nearly all [97.5%] were infiltrating ductal carcinomas. The microscopic measurement of the size of tumour varied between 5-70 mm and the size of the metastatic deposit of the tumour in the SLN varied from 2-22mm. It was noted that the involvement of SLN and non sentinel lymph node [NSLN] increased in relation to an increase in size of the primary tumour. The study concluded that as the size of the tumour increases, the chances of metastases occurring increases and thus has a linear relationship.
Lymphoma, B-Cell

pathology

Morphologic, immunophenotypic and clinical discriminators between T-cell / histiocyte-rich large B-cell lymphoma and lymphocyte-predominant Hodgkin lymphoma. 
Mourad, Walid A.; Al Thani, Sheikha; Tbahi, Abdelghani; Al Omari, Mohamed; Khafaga, Yasser; Shoukri, Mohamed; El Weshi, Amr; Al Shabana, Mohamed; Ezzat, Adnan
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University of Kentucky - Department of Pathology and Laboratory Medicine
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 22-27 (28 ref.)
Keywords: Lymphoma, B-Cell-immunology; Lymphoma, B-Cell-diagnosis; Hodgkin Disease-pathology; Hodgkin Disease-immunology; Hodgkin Disease-diagnosis; Immunophenotyping; Histiocytes
Abstract: Features of T-cell/histiocyte rich large B-cell lymphoma [THRLBCL] overlap with those of lymphocyte predominant Hodgkin lymphoma [LPHL]. The two lymphomas may represent a spectrum of the same disease, and differentiation between the two can sometimes be difficult. We looked at histomorphologic, immunophenotypic and clinical information that may help differentiate the two entities. Cases of THRLBCL and LPHL were blindly reviewed and studied for histological pattern [nodular vs. diffuse], nuclear features and pattern of expression of CD20, CD30, CD57, epithelial membrane antigen [EMA] and Epstein-Barr virus [EBV]. A score encompassing diffuse histology, high nuclear grade, CD20+ cells, CD30+, CD57-, EMA-, and EBV+ was estimated for the diagnosis of THRLBCL. There were 58 cases, including 30 cases of THRLBCL and 28 cases of LPHL. The median age was 36 years for THRLBCL and 21 years for LPHL [P=0.0001]. Three types of nuclei were identified [lymphocytic/histocytic, Reed-Sternberg and centroblast-like]. The latter two high-grade nuclei were suggestive of THRLBCL. THRLBCL and LPHL, respectively, showed diffuse histology, 90% vs. 4% [P=0.001], single CD20+ cells, 93% vs. 3.5% [P=0.00004], CD30+ cells, 30% vs. 0% [P=0.01], CD57+ cells, 41% vs. 93% [P=0.008], EMA+ cells, 27% vs. 60% [P=0.113], EBV+ cells, 24% vs. 0% [P=0.117], high nuclear grade, 70% vs. 0% [P=0.001], total score 2-7 [mean 4.68] vs. 0-2 [mean 0.72] [P=0.001], high stage, 86% vs. 7% [P=0.0001]. Our findings indicate that a combination of multiple parameters can help differentiate between the two diseases. Two cases originally diagnosed as LPHL were re-assigned the diagnosis of THRLBCL.

Magnesium

therapeutic use

Is there a role for nebulised magnesium in the emergency department? A systematic review of the literature.
Johnston, Jeremy J.E.
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 13-23 (46 ref.)
Keywords: Magnesium-administration and dosage; Nebulizers and Vaporizers; Emergency Service, Hospital; Asthma-drug therapy; Anti-Asthmatic Agents

Malaria

drug therapy

Antimalarial prescribing and dispensing practices in health centres of Khartoum state, 2003-04.
Mannan, A.A.; Malik, E.M.; Ali, K.M.
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Federal Ministry of Health - National Malaria Control Programme
Keywords: Practice Guidelines as Topic; Drug Prescriptions; Guideline Adherence; Cross-Sectional Studies; World Health Organization
Abstract: This indicator-based study assessed the antimalarial drug prescribing and dispensing practices of health care providers in health centres of Khartoum state, and compared these with national guidelines for malaria treatment. A total of 720 patients and their prescriptions in 24 health centres were included. Prescribers adhered to national treatment guidelines for only 278 [38.6%] of patients. Although all were treated for malaria, only 77.6% patients had fever or history of fever and only 64.6% had fever and positive blood films. More than 90% of prescriptions prescribed antimalarial drugs by generic names but dosage forms were correctly written in only 23.5%. There was a high rate of prescribing antimalarial injections. Only half the patients had adequate knowledge of their treatment.
Malocclusion

classification

Tooth size discrepancy in various malocclusion groups.
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Islamic International Dental College - HOD Orthodontics
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 79-85 (28 ref.)
Keywords: Malocclusion, Angle Class III; Malocclusion, Angle Class II; Malocclusion, Angle Class I; Tooth-anatomy and histology; Cross-Sectional Studies
Abstract: To compare tooth size discrepancy among dental class I, class II div 1, class II div 2 and class III malocclusions. This study was conducted during 2006-2007 at the Orthodontic department of Islamic International Dental Hospital, Islamabad. It was a cross sectional study conducted with sampling technique of non-probability [purposive]. Sample sizes were 200 patients with different malocclusion classes. Age ranged between 13 to 20 years. Bolton's ratio was used to determine the overall and anterior tooth size ratio amongst the various malocclusion groups. Bolton's anterior and overall ratios showed statistically significant differences among malocclusion groups. The mean anterior and overall Bolton's ratios for the different groups was in the order of Class III > Class I > Class II division 2 > Class II division 1. In our study statistically significant differences were found among different malocclusion groups and Class III group was found to have greater tooth size discrepancy than other malocclusion groups.

Mammography

utilization

Research in action: mammography utilization following breast cancer awareness campaigns in Lebanon 2002-05.
Adib, S.M.; Sabbah, M.A.; Hlais, S.; Hanna, P.
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Saint Joseph University - Faculty of Medicine - Family Medicine Program,
Keywords: Breast Neoplasms-radiography; Breast Neoplasms-diagnosis; Awareness; Health Promotion; Early Detection of Cancer; Health Education; Health Services Research; Cross-Sectional Studies; Age Factors
Abstract: Four consecutive annual surveys of 1200 women each were conducted in Lebanon in connection with the National Breast Cancer Awareness campaigns [2002-05] to measure the prevalence of mammography utilization and the impact of these campaigns, and to highlight regional and demographic differences. The utilization of mammography in the previous 12 months was low and increased only slightly over 4 years [from 11% to 18%]. In the 2005 campaign, it was twice as high [25%] in greater Beirut than in mostly rural areas, and among women aged 40-59 years [about 21%] compared with younger [12%] or older [11%] women. In each wave, repeat mammograms were less common than first time screening.

Measles-Mumps-Rubella Vaccine

immunology

Could the MMR vaccine replace the measles vaccine at one year of age in Egypt?
Abbassy, A.A.; Barakat, S.S.; Abdel Fattah, M.M.; Said, Z.N.; El Metwally, H.A.
University of Alexandria - Faculty of Medicine - Department of Paediatrics
Keywords: Measles Vaccine-immunology; Cross-Sectional Studies; Measles-Mumps-Rubella Vaccine-administration and dosage; Gestational Age
Abstract: This cross-sectional study evaluated the immune status of non-vaccinated healthy infants to determine if it is possible to replace both measles vaccine [at 9 months] and measles, mumps and rubella [MMR] vaccine [at 18 months] with a single dose of MMR at 12 months. Serum samples from 566 children in Alexandria, Egypt showed a significant decrease in the seropositive rate to the 3 viral diseases with increasing age, but a significant increase in the seropositive rate among infants who were ranked 1st or 2nd in their family, full-term or born to mothers with no history of hypertension during pregnancy. We recommend administration of the first dose of MMR vaccine between 9 and 12 months of age, and a booster dose of MMR vaccine at 4 years of age.
Medical Staff, Hospital

education

[Interns' viewpoints toward the stAuts of training by residents in Isfahan Univeristy of Medical Sciences]
Garakyaraghi, M.; Sabouri, M.; Avizhgan, M.; Ebrahimi, A.; Zolfaghari, M.
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Isfahan University of Medical Sciences - School of Medicine - Department of Internal Medicine
IJME - Iranian Journal of Medical Education 2008; 7 (2): 361-369 (11 ref.)
Keywords: Internship and Residency; Education, Medical; Cross-Sectional Studies; Schools, Medical; Educational Measurement; Universities
Abstract: Resident as a capable educational resource can make use of every opportunity for training interns and students. The aim of this study was to determine the interns' viewpoints toward the stAuts of their training by residents. In a descriptive cross-sectional study in educational hospitals of Isfahan University of Medical Sciences, 54 interns spending the last 6 months of their medical training were selected through simple random sampling. Data was gathered using a researcher-made questionnaire which was filled by interns in self-administered manner. Data was analyzed by SPSS software using frequency distribution, mean, and standard deviation. Mean and standard deviation of interns' viewpoints toward the training by residents in areas of knowledge, practice, individual characteristics, the most useful educational field, the process of education, and educational capabilities and responsibilities were 58.2 +/- 10.9, 66 +/- 12.5, 50.7 +/- 13.3, 64 +/- 17, 45 +/- 14.8, and 56.8 +/- 13 out of 100, respectively. Based on 70.4 percent of interns, first year residents were more motivated for training. According to interns, clinic and emergency ward were more suitable environments for training by residents while residents spent a little time on training. Interns' work load and lack of purpose and planning in residents' training were among problems mentioned by interns. The scores that interns gave to the stAuts of training by residents were in average level. The educational role of residents varies in different wards and shows that they can make better contributions to education. Holding workshops on teaching methods for residents and investigating the existing barriers for education are recommended.

Melanoma

pathology

The gallbladder as the first site of metastatic disease in a patient with melanoma.
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Velindre Cancer Centre - Department of Clinical Oncology
Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 197-198 (5 ref.)
Keywords: Neoplasm Metastasis; Gallbladder Neoplasms-pathology; Tomography, X-Ray Computed; Gallbladder Neoplasms-therapy; Prognosis; Gallbladder Neoplasms-secondary

Menopause

drug effects

Severe menopausal symptoms following an extended regimen of oral contraceptive pills.
Afram, Sabine Hanna; Prithviraj, Chitralekha
Dubai Hospital - Gynaecology Clinic - Department of Obstetrics and Gynaecology
Emirates Medical Journal 2008; 26 (2): 113-115 (18 ref.)
Keywords: Contraceptives, Oral-adverse effects; Risk Assessment; Bone Diseases, Metabolic; Androstenes; Awareness
Abstract: Continuous birth control pills are the latest method of extended cycle oral contraception designed to eliminate women's monthly cycle dependant and disorders. In this case we present the clinical course of a forty year old lady who took oral contraceptive pills as extended regimen to get her period every three month instead of monthly for a period of two years, and describing the clinical symptoms, laboratory tests and imaging findings throughout the study.
**Mental Disorders**

**epidemiology**

National survey of Prevalence of Mental Disorders in Egypt: preliminary survey.
Ghanem, M.; Gadallah, M.; Meky, F.A.; Mourad, S.; El Kholy, G.
Ain Shams University - Department of Neuro-Psychiatry

**Keywords:** Prevalence; Health Surveys; Mental Disorders- statistics and numerical data; Sex Distribution; Socioeconomic Factors; Questionnaires; Anxiety Disorders-epidemiology; Mood Disorders-epidemiology

**Abstract:** This study is an initial step for the National Survey of Prevalence of Mental Disorders in Egypt. We conducted a door-to-door household survey of 14,640 adults aged 18-64 years in 5 regions in Egypt. Mental disorders were diagnosed using the MiNI-Plus diagnostic interview. Overall prevalence was estimated at 16.93% of the studied adult population. The main problems were mood disorders, 6.43%, anxiety disorders, 4.75%, and multiple disorders, 4.72%. Mental disorders were associated with sociodemographic factors [e.g. being female, being unemployed, being divorced] and physical illness [e.g. heart disease, kidney disease, hypertension].

**Mentors**

[Organizing "nursing mentors committee": an effective strategy for improving novice nurses' clinical competency]
Golestan, N. Jaffari; Vanaki, Z.; Memarian, R.
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**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 237-247 (20 ref.)

**Keywords:** Education, Nursing-organization and administration; Education, Nursing-standards; Clinical Competence; Nurses; Nursing Evaluation Research

**Abstract:** One of the most significant problems in clinical environment is the unskilled and inexperienced nurses. This is while, most managers are not aware of nurses' proficiency and competency level. Therefore, applying the new strategy of "organizing nursing mentors committee" by managers as well as their orientation in this regard could be considered as a strategy to improve clinical competency. This quasi-experimental study as two group design was performed to assess the clinical competency level of five novice nurses and their performance on 72 patients hospitalized in medical-surgical wards in one of the hospitals in Tehran in 2005. They were divided into two experiment and control groups, and were evaluated before and after the intervention. Data was collected using observational checklists in communicative, cognitive, and psychomotor competency domains as double blinded. Number of patients in the experiment group was 32 and in the control group was 40 which were matched before and after the intervention in each group. The allocation of the novice nurses into groups and wards was done randomly. Data was analyzed by SPSS software. Clinical competency of the novice nurses increased in all three domains in both groups. Paired t-test showed this increase in both groups. Moreover, independent t-test demonstrated that the mean difference in the experiment group was higher than the control group. Novice nurses' clinical competency was in a primary level in both groups before the intervention, but, after 3 months was promoted to the advanced level in the experiment group who were exposed to mentors committee. Organizing "nursing mentors committee" is an effective strategy for nursing managers, in order to help novice nurses who need to acquire clinical competency in different domains in a limited time frame.

**Mesenteric Vascular Occlusion**

**diagnosis**

Role of multi-slice CT angiography in the diagnosis of mesenteric vascular disorders.
Kotb, Hisham; El Nekaidy, Abdul Azziz M.; El Fayiouny, Tarek, A.; Ghazal, Abdel Hamid
Alexandria University - Faculty of Medicine - Departments of Radio-diagnosis
**Bulletin of Alexandria Faculty of Medicine** 2007; 43 (1): 23-31 (31 ref.)

**Keywords:** Tomography, X-Ray Computed; Angiography; Abdominal Pain; Abdomen, Acute; Angiography-methods

**Abstract:** The diagnosis of mesenteric ischemia is a challenge to both clinicians and radiologists. Angiography is considered the standard of reference for the diagnosis of mesenteric ischemia; however, it is an invasive, time-consuming and may cause morbidity. Doppler ultrasonography is not useful in evaluating venous mesenteric ischemia. A detailed examination of the small bowel and mesenteric vessels is now possible to perform with the introduction of multi-slice CT and three-dimensional [3D] imaging. This study was designed to evaluate the role of Multi-slice CT angiography [CTA] as an imaging tool in the diagnosis of the various mesenteric vascular disorders in
patients with suspected mesenteric ischemia and its impact on management decision. A total of 43 consecutive patients who had been admitted to the Alexandria university hospital, emergency and general surgery departments from November 2005 through August 2006 who were presented with either acute or chronic abdominal pain and were clinically suspicious for mesenteric ischemia were included in the study. All patients were subjected to thorough history taking and clinical examination, routine laboratory investigation, erect and supine plain abdominal radiographs and abdominal sonography. Multislice CT [MSCT] angiography was performed to all patients using 6 detector row scanner. Each patient received 120-140 mL of contrast material and multiplanar reconstruction [MRP], maximum intensity projection [MIP], Shaded surface display [SSD] and volume rendering [VRT] was obtained. Only 16 patients [12 males and 4 females] out of the studied 43 patients had an abnormal Multi-slice CT angiographic [CTA] findings diagnostic of mesenteric ischemia as the etiology of the pain and they constituted the material of this study. Their ages ranged from 52 -79 years [mean 65.5 years]. 12 patients [75%] had chronic abdominal pains while only 4 patients [25%] were presented with an acute abdomen. Multislice CT angiography [CTA] showed arterial stenosis in 9 patients with stenosis of the main trunk of the superior mesenteric artery [SMA] in 8 patients and of the inferior mesenteric artery [IMA] in one patient. Complete arterial thrombotic occlusion was reported in 6 patients and involved the main trunk of the SMA in 2 patients, IMA in 2 patients, and the ileo-colic and jejunal branches of the SMA in 2 patients. Venous mesenteric thrombotic occlusion was detected in one patient with hepatic cirrhosis and portal hypertension. Surgical exploration was performed for 3 patients who presented with acute abdomen and CTA diagnosis of arterial thrombosis. At surgery there was occlusion of the main trunk of the SMA in two patients and the ileo-colic branch in the third patient. Resection of infected small bowel loop was performed. Medical treatment with anticoagulant and vasodilators were the regimen applied to the rest of patients. Multislice CTA with 3D reformatting displayed vessels similar to traditional angiography and should be applied in the protocol of abdominal CT examination of patients with acute or chronic abdominal pains. The increased speed and narrower collimation of Multislice CT, coupled with timed I. V contrast and the use of water as an oral contrast agent, improved visualization of the mesenteric vasculature in all patients with suspected acute or chronic mesenteric ischemia.

Metabolic Syndrome X

epidemiology

Prevalence of metabolic syndrome in pre and post menopausal diabetics.
Afzal, Saira; Bashir, M. Mustehsan
Mayo Hospital - Diabetic Clinic
Biomedica 2008; 24 (Jan.-Jun.): 26-30 (25 ref.)
Keywords: Prevalence; Menopause; Diabetes Mellitus; Cross-Sectional Studies; Questionnaires; Quality of Life; Lipids-blood; Diabetes Complications; Metabolic Syndrome X-diagnosis; Early Diagnosis; Premenopause; Postmenopause
Abstract: This study was designed to determine the frequency of metabolic syndrome in diabetic females and to compare the pre-menopausal and post-menopausal diabetics for the presence of metabolic syndrome. This is a comparative cross-sectional study carried out at the Out patient diabetic clinic Mayo Hospital, Lahore, from Jan., 2007 to May 2007. All adult diabetic females coming for regular checkup to outpatient department of diabetic clinic during our study duration were included and informed their consent was taken. The data was collected using a structured questionnaire. Metabolic syndrome was defined according to National Cholesterol Education Program Adult Treatment Panel III. There were 200 participants in the study, hundred were pre-menopausal and the remaining post-menopausal. Among them 30% cases were hypertensive, 28% cases were obese 10% had dyslipidaemia. Eight percent had increased triglyceride level and 2% had decreased high density lipoproteins level. Metabolic syndrome was found in 28% of diabetic females, 21% of post-menopausal and 7% of pre-menopausal diabetics. Thus the comparison for the presence of metabolic syndrome showed a significant value [p < 0.05]. All diabetics especially post-menopausal females should be assessed for the presence of metabolic syndrome for better quality of life and prevention of complications.

Metoprolol

therapeutic use

[Evaluation the metoprolol effects in controlled hypotension and reduction of bleeding during head and neck surgery]
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Iran University of Medical Sciences - Hazrat Fatemeh Hospital
Qom University of Medical Sciences Journal 2008; 1 (4): 37-43, 5 (13 ref.)
Keywords: Hypotension, Controlled; Hemorrhage-prevention and control; Intraoperative Period; Head-surgery; Neck-surgery; Metoprolol-Administration and dosage; Hypotension
Abstract: Intraoperative bleeding, which reduces visibility in the operative field, is one of the major problems of head and neck surgeries. Improvement of intraoperative visibility and reduction of bleeding is an important task for an anesthetist during head and neck surgery. It has been shown that preoperative beta-blockade decreases bleeding during the operation. In a 18 month period, 88 patients, who were candidate for nasal procedures in Hazrat Rasul Medical Complex, were selected in a randomized open clinical trial study. They were divided to 4 groups: 50 mg metoprolol at night before surgery, 50 mg metoprolol in the morning of the surgery, 50 mg metoprolol at night before surgery and in the morning of the surgery, placebo. Heart rate, Systolic and diastolic blood pressure was measured in a non-invasive way just both upon arrival on the operation bed and after induction of anesthesia during operation. For evaluation of the visibility of the operative field during operation the quality scale proposed by Fromm and Boezzart was used. SPSS 13 was used for assessment. There was significant relationship between metoprolol administration and bleeding during the operation. All patients who received two doses of metoprolol one in the last night and another in the morning of the operation day had only mild bleeding. There was statistically significant relation between agitation and time of administration of metoprolol. Nowadays, there are growing evidences that not only decrease in systolic blood pressure but also a low heart rate [< 60 beats per minute] can minimize surgical bleeding. Both of the above mentioned effects could be induced by beta blockers. In this study, two doses of metoprolol could decrease the amount of bleeding and improve the operation field significantly and also could decrease the agitation in recovery room.

Metronidazole

pharmacology

Study of aerobic granulocyte functional activity in the presence of a radiosensitizer [metronidazole]
Al Krawi, E.A.A.; Al Hashimi, A.H.M.
University of Basra - Basra College of Medicine - Department of Pharmacology
Keywords: Granulocytes-drug effects; Radiation-Sensitizing Agents-pharmacology; Reactive Oxygen Species; Nitroblue Tetrazolium
Abstract: The in vitro effects of metronidazole on the production of reactive oxygen species by polymorphonuclear (PMN) cells were studied by means of nitroblue tetrazolium and luminol-dependent chemiluminescence. At therapeutic doses of metronidazole [4.98-24.86 microg/mL] significant inhibition of the production of reactive oxygen species was noted in both methods. The inhibitory effect was in a dose-dependent pattern. The data suggest a scavenging mechanism of metronidazole on reactive oxygen species generated by PMN.

Midwifery

education

[What motivated midwifery students to choose this discipline? a survey among medical universities in Tehran].
Amirialakbari, A.; Arfaei, K.; Fardanesh, H.; Alavimajd, H.
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 451-453 (8 ref.)
Keywords: Students; Students, Nursing; Universities

Mouth Diseases

therapy

[Review of routine therapeutic management of common oral lesions] Bakhtiari, S.; Azimi, Hosseini S.; Ghaem, Maghami A.
Shahid Beheshti University of Medical Sciences - Dental School - Department of Oral Medicine
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 348-356, 2 (44 ref.)
Keywords: Disease Management; Stomatitis, Herpetic-therapy; Stomatitis, Aphthous-therapy; Lichen Planus-therapy; Candidiasis-therapy; Burning Mouth Syndrome-therapy; Xerostomia-therapy; Taste Disorders-therapy
Abstract: Since there are not specific pathogens for most of the intraoral lesions and there is not unique protocol for their therapies and also some of these drugs are not accessible in Iran, we decided to introduce the drugs most available
and appropriate in our country. This study has been done by review discussion procedures. The articles were extracted from native, foreign and international journals, medline, books and theses. Whole part of therapies were considered in these articles. The following lesions were discussed in this study: 1- Primary and secondary herpetic gingivostomatitis, 2- Recurrent Aphthus stomatitis, 3- Lichen planus, 4- Candidiasis, 5- Burning sensation in oral cavity, 6- Xerostomia and 7- taste disorder. As we know there are several kinds of medications for each lesion, although most of them have side effects, and some of them can not be found in our country, we have tried to do our best to suggest appropriate drugs for each intraoral disorders.

Multiple Myeloma

Expression of CD 117 antigen [C-KIT] in multiple myeloma patients and its clinical value in correlation with other prognostic factors.
Farahat, Nahla M.; El Bordiny, Magdy M.; El Ghandour, Ashraf H.; Abdel Aziz, Amro
Alexandria University - Faculty of Medicine - Department of Clinical Pathology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 91-96 (33 ref.)
Keywords: Proto-Oncogene Proteins c-kit; Angiogenesis factor; Endothelium, Vascular; Endothelial Growth Factors; Bone Marrow Cells; beta 2-Microglobulin; Prognosis
Abstract: Angiogenesis is increased in multiple myeloma [MM]. Vascular endothelial growth factor [VEGF] is associated with progression of haematological malignancies and plays a role in increased angiogenesis seen in MM. CD117 [c-kit] is expressed in cells committed to myeloid lineage. Evaluation of the expression of CD 117 in bone marrow myeloma cells and its correlation with other laboratory data and the level of VEGF. Forty patients diagnosed as MM were included in this study. Ten healthy controls of matched age and sex. Patients and controls were subjected to complete blood picture, serum protein electrophoresis, serum level of beta 2 micro globulin and VEGF by Elisa technique. Study the expression of CD38/CD117 in double color by Facscalibur from BD company. In MM cases VEGF was significantly higher than normal controls. It was positively correlated with monoclonal protein and beta 2 microglobulin which is established to be a good prognostic indicator in MM. Co-expression of CD38/CD117 was higher in myeloma cells and showed a positive significant correlation with monoclonal protein, bone marrow myeloma cells, beta 2 microglobulin and VEGF level in serum. Study the co-expression of CD38/CD117 and serum level of VEGF are beneficial in MM patients and can used as a good associated markers in MM. Also further studies on the role of c-kit in MM as a prognostic indicator would be of great benefit in raising the possibility of using tyrosine kinase inhibitors as a target therapy in MM patients.

diagnosis

Cyclin D1 positive plasma cell myeloma.
Aljawad, Hameed; Al Za’abi, Ali Mohammed; Sur, Monalisa
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University of Alberta Hospital - Department of Laboratory Medicine and Pathology
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 68-70 (11 ref.)
Keywords: Multiple Myeloma-pathology; Cyclin D1; Lymphoma, Mantle-Cell

Myasthenia Gravis

surgery

Bradycardia, hypotension and bronchospasm following remifentanil-propofol in a myasthenic patient treated by pyridostigmine - a case report.
Nauphal, Maud; Baraka, Anis
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American University of Beirut - Beirut Medical Center - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1387-1390 (8 ref.)
Keywords: Piperidines-adverse effects; Propofol-adverse effects; Anesthesia, Intravenous; Pyridostigmine Bromide-therapeutic use; Bradycardia; Hypotension; Bronchial Spasm; Thymectomy; Glycopyrrolate; Lidocaine
**Myelitis, Transverse**

**diagnosis**

Diffuse myelitis in a 9-month-old infant: case report and review of the literature.
Hudaoglu, O.; Yis, U.; Kurul, S.; Cakmakci, H.; Saygi, M.; Dirik, E.
Dokuz Eylul University School of Medicine - Department of Paediatric Neurology
Keywords: Magnetic Resonance Imaging; Cerebrospinal Fluid-analysis; Myelitis, Transverse-therapy; Prednisolone-therapeutic use; Gamma-Globulins-therapeutic use; Diagnosis, Differential

**Myocardial Infarction**

**diagnosis**

ST-segment elevation myocardial infarction resulting in head injury with epidural hematoma.
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Hamad General Hospital - Emergency Department
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 50-52 (15 ref.)
Keywords: Myocardial Infarction-complications; Electrocardiography; Cranio-cerebral Trauma; Hematoma, Epidural, Cranial
Abstract: A 32 year old male Sri Lankan with acute ST-segment elevation myocardial infarction presented to the Emergency Department following a fall from a 3 metre height. He had multiple skull fractures with an epidural hematoma. He had two episodes of cardiac arrest which responded to DC shock. Primary coronary intervention was required and a stent was placed in the left anterior descending coronary artery. The procedure was complicated by acute stent thrombosis which was treated by ballooning and stent overlapping. He had no sequelae from his head injury and he was discharged home with outpatient follow-up. In this case, there were no symptoms or sings of chest trauma, so most probably this patient had developed acute myocardial infarction leading to dizziness and a fall causing head injury with epidural hematoma.

**Naphthoquinones**

**chemical synthesis**

Synthesis and in-vitro cytotoxic activity of novel benzo[b]phenazine-6,11-Dione and 1,4-Naphthoquinone derivatives.
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Al Azhar University - Faculty of Pharmacy [Girls] - Department of Pharmaceutical Chemistry
Keywords: Chemistry, physical; Antineoplastic Agents; Doxorubicin
Abstract: 5, 12 - Dihydrobenzophenazine-6, 11-diones, 2-Arylamino-3-chloro-l, 4-naphthoquinones and 6, 11-dihydrobenzo[b]phenazine-6, 11-diones, were synthesized from 2, 3-dichloro-l, 4-naphthoquinone and arylamines/phenylenediamines. Studying the cytotoxicity using EAC and human cell lines revealed that 5, 12-dihydrobenzophenazine-6, 11-dione [3] and 3-chloro-2-[2-pyridylamino]-l, 4-naphthoquinone [10] showed selective cytotoxicity against the human lung carcinoma cell line [H460] superior to doxorubicin. Compound 3 [16.25 uM] was 1.3 times higher than that of doxorubicin. However, 1C50 value of compound 10 was 9.90 uM which was 2 times higher than that [20.10 uM] of doxorubicin. These compounds were inactive against liver carcinoma [HEPG2], brain tumor [U251], cervix carcinoma [HEL A] and breast carcinoma [MCF7] cell lines.
Neck

microbiology

T.B and pyogenic neck infection: different patterns in CT examination.
Desouki, Salah Eldin; Mostafa, Alaa Abdel Hamid; Ghazal, Abdel Hamid
Alexandria University - Faculty of Medicine - Department of Radiodiagnosis
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 145-152 (22 ref.)
Keywords: Infection-etioloxy; Tuberculosis; Lymph Nodes; Tomography, X-Ray Computed
Abstract: The aim of this work was to illustrate the different CT patterns of neck infections. This study included 28 patients with suspected neck infection were referred to the Radiodiagnosis Department. They were subjected to history taking, clinical examination and multislices computed tomography [CT] evaluation with contrast. 28 patients were included in this study, 19 males and 9 females, their age ranged from 2-73 years. The different affected neck spaces were as follows: 12 peritonsillar, 7 submandibular, 7 parapharyngeal, 4 retropharyngeal, 2 sublingual, anterior cervical, 1 posterior cervical, and 1 parotid space. Lymph nodal abnormalities were identified in 9 patients. Nine patients with chest involvement as mediastinal extension in 6 patients, lung parenchymal lesions 2, one with mediastinal lymph nodes. CT is sufficient in detection of the extension of various neck infections. CT chest in the same sitting with CT neck may add information about the extension of the disease or can give a due to the diagnosis.

Needlestick Injuries

Self-reported needle-stick injuries among dentists in north Jordan.
Khader, Y.; Burgan, S.; Amarin, Z.
Jordan University of Science and Technology - Department of Public Health and Community Medicine
Keywords: Incidence; Attitude; Dentists; Cross-Sectional Studies; Health Surveys; Age Distribution; Health Education; Occupational Exposure
Abstract: The incidence of needle-stick injuries and the reporting attitudes among dentists in the north of Jordan were assessed with a cross-sectional survey. The study included 170 general dental practitioners [119 males and 51 females], of whom 113 [66.5%] were injured within the preceding 12 months. Needle-stick injury was significantly associated with higher age and a higher number of patients treated daily. Of those who were injured, 77.9% did not report the injury. Reasons for not reporting needle-stick injury were: because it took place before use on a patient [41.2%], ignorance of the risk [20.8%], being busy [25.0%] and dissatisfaction with follow-up procedures [13.0%]. The study highlights the need for continuous education programmes about handling of sharp dental instruments and reporting injuries.

Neoplasms

epidemiology

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Ministry of Health - Medical Review Office
Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 175-182 (21 ref.)
Keywords: Incidence; Population; Registries; Sex Distribution; Early Detection of Cancer
Abstract: Cancer is the second leading cause of death, following cardiovascular diseases, accounting for 12% of annually reported deaths in Bahrain. We determined the epidemiological patterns of malignancies in Bahrain and compared them with those of other Gulf Cooperation Council [GCC] countries and other developed countries. Data for the study were obtained from the Bahrain Cancer Registry [BCR] database. The overall and type-specific 5-year average incidence rates were calculated for the years 1998-2002 and derived using the CANREG software formula. The incidence rates for the year 2000 were used for comparing Bahrain with those of other countries in the Arabian Gulf using the statistics of the Gulf Centre for Cancer Registration. During the 5-year period there were 2405 cancer cases in Bahrain [1239 males and 1166 females], with an annual average of 481 cases. The world age-standardized incidence rates [ASR] were 162.3 and 145.2 per 100000 for Bahraini males and females, respectively. Generally, Bahrain men had a higher ASR for most cancer types, and the most common type of cancer was lung for males [35.2 per 100000], followed by bladder [14.5] and prostate [14.3], and breast for females [46.8], followed by lung [12.2] and ovary [7.7]. Compared to other Gulf countries, Bahrain had higher incidence rates for cancers of the lung, prostate, colorectum, bladder, kidney, pancreas and leukemia among males and for cancers of the breast, lung, bladder, thyroid, uterus and ovary among females. A rising trend in cancer incidence is likely to continue for years or even decades to come.
Cancer prevention and control in the eastern Mediterranean region: the need for a public health approach.
Khatib, Oussama; Aljurf, Mahmoud
World Health Organization - Regional Office of the Eastern Mediterranean Region
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 44-52 (29 ref.)
Keywords: Public Health; Neoplasms-mortality; Neoplasms-epidemiology; World Health Organization
Abstract: Cancer is increasingly recognized as a major health concern in the Eastern Mediterranean [EM] region. The emergence of cancer and other non-communicable diseases [NCDs] in most EM region countries is related to increases in life expectancy, an increasing proportion of elderly people, and the successful control of most childhood communicable diseases, along with rapid strides in socioeconomic development. In the next 15 years, cancer incidence in the EM is expected to increase by 100% to 180%, according to World Health Organization [WHO] projection modelling, the largest increase foreseen among developing countries. Even though 30% of cancers can be prevented and controlled using available knowledge, death rates will increase by 17% by 2015 because of the challenges and barriers to implementing national strategic action plans. Other problems facing countries in the region are the lack of national cancer surveillance and little harmonization in monitoring and surveillance methodologies. Data on cancer mortality in the 21 countries is limited or lacking, with only 7 countries having national population-based registries. There is no linking of cancer mortality data to NCD prevention and control. A model of integrated care for NCD prevention programs in general and cancer in particular is lacking, and finally, there is inadequate national capacity-building and a lack of program sustainability. The WHO Regional Committee for the EM has adopted a resolution recognizing the considerable magnitude of cancer as a major cause of morbidity, human suffering, and mortality in the region. In the last 15 years, the WHO Cancer Control Programme has fostered the development of national cancer control programs as a primary intervention strategy for a comprehensive and cost-effective approach at the country level.

Cancer patients’ desire for information: a study in a teaching hospital in Saudi Arabia.
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King Faisal University - King Fahd Hospital of the University - Department of Internal Medicine and Medical Oncology
Keywords: Attitude; Access to Information; Knowledge; Questionnaires; Patient Rights; Prognosis; Family; Hospitals, Teaching; Health Surveys
Abstract: Relatives of cancer patients in Saudi Arabia tend to believe that telling the truth to the patient could lead to harm and suffering. This study assessed the attitudes of Saudi Arabian cancer patients towards disclosure of cancer diagnosis and prognosis, and benefits and adverse effects of therapy. A questionnaire survey was administered to patients attending the oncology service between January 2002 and December 2005 before they knew their diagnosis. Of 114 patients interviewed, all except 1 [99%] wished to know all the information about their disease and 100% rejected withholding information. Most of the patients [77%] wanted their family to know the diagnosis but few [17%] wanted their friends to be informed. Almost all patients wanted to know the benefits and adverse effects of therapy [98% and 99% respectively]. All patients wanted to know about the prognosis of their disease.

Cancer stem cell immunotherapy: the right bullet for the right target.
Ghebeh, Hazem; Bakr, Mohammad Mahmoud; Dermime, Said
King Faisal Cancer Center - King Faisal Specialist Hospital and Research Center
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 1-2 (11 ref.)
Keywords: Immunotherapy; Glioblastoma-therapy; Central Nervous System Neoplasms
Neurilemmoma

surgery

Removal of large infratemporal fossa schwannoma; case report and review of literature.
Iqbal, Hafiz Aamer; Chaudhry, Saima; Warraich, Riaz Ahmed; Khan Ayyaz Ali
SMTS/Services Hospital - Department of Oral and Maxillofacial Surgery
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 108-111 (10 ref.)
Keywords: Biopsy; Tomography, X-Ray Computed; Treatment Outcome; Follow-Up Studies; Neurilemmoma-diagnosis; Neurilemmoma-pathology
Abstract: Schwannomas are encapsulated benign tumors of the Schwann cells. Schwannomas arising in the infratemporal fossa [ITF] are rarely reported. We report a case of ITF schwannoma extending to the skull base and orbital floor, involving posterior ethmoidal cells, retrobulbar region, buccal space part of posterior maxilla and right maxillary sinus. A 35-year old female presented to us with swelling on the right side of the face. Biopsy revealed a schwannoma. The tumor was successfully removed via anterior approach through modified Weber-Ferguson incision. Modified Weber-Ferguson incision is a useful approach for the removal of large benign tumors arising in the infratemporal fossa that involve the maxilla and maxillary sinus.

Nurses

[The views of newly graduated nurses toward their supporting stAuts during transition stage in tabriz university of medical sciences]
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Islamic Azad University of Ardebil - Medical-Surgical Nursing Department
IJME - Iranian Journal of Medical Education 2008; 7 (2): 389-395 (20 ref.)
Keywords: Clinical Competence; Decision Making; Universities; Schools, Medical
Abstract: Recognizing the views of newly graduated nurses about their supporting stAuts during transition period [first 6 months of service] is necessary for decreasing their stress and increasing their retention in health centers. This study was performed to investigate the newly graduated nurses’ views toward their supporting stAuts during transition period in Tabriz University of Medical Sciences. In a descriptive study in the year 2005, two hundred nurses working in health centers, educational centers and the hospitals affiliated to Tabriz University of Medical Sciences who were passing the final days of their first 6 months of service were selected through convenience sampling method. A questionnaire consisting of two sections was developed, the first section included demographic feAutres and the second one comprised supporting stAuts of nurses. Descriptive statistics, mean, and standard deviation were used for data analysis. Majority of nurses had an inappropriate supporting stAuts during their transition period. The mean and standard deviation of the total score of supporting stAuts were 19.7 +/- 0.77. Having orientation sessio ns at the beginning of the service, providing opportunities for participation in decision-makings by administrators, assistance of the colleagues in improving the knowledge and clinical skills of the newly graduated, suitable manner and behavior of the administrators, being acceptable and reliable to the colleagues, and colleagues’ attention to newly graduated nurses’ views in working environment were introduced as less supporting factors, respectively. Insufficient support and education for majority of newly graduated nurses in working environment discloses the fact that administrators must act on it. This can be done by holding comprehensive orientation sessions for amateur nurses and providing opportunities for their participation in decision-making as well as providing the assistance of the colleagues in improving their knowledge and clinical skills, and also suitable manner and behavior of the administrators. These situations could facilitate newly graduated nurses' adaptation with the transition process and improve their clinical performance.

Obesity

epidemiology

Motivational readiness of Alexandria overweight and obese medical students to weight loss behavior.
Mohammed, Aida Mohey
Alexandria University - Faculty of Medicine - Community Medicine Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 197-209 (42 ref.)
Keywords: Students, Medical; Motivation; Weight Loss; Prevalence; Knowledge, Attitudes, Practice; Behavior; Exercise; Overweight
Abstract: The prevalence of obesity has reached epidemic proportions among Alexandria medical students. Physical inactivity and unhealthy eating habits are major risk behaviors for obesity. Each behavioral risk factor has its own set of knowledge, attitudes, intentions, decisional balance, self-efficacy, and barriers to overcome. Understanding the stage of readiness to control weight and its correlates may be particularly important to tailor interventions to an individual's level of motivational readiness to change behavior. was to determine the stages of motivational readiness to change to weight loss behavior among overweight and obese medical students in Alexandria and to identify factors related to readiness stages. A cross-sectional survey was carried out from 1[st] April to 31[st] July 2005. A total of 310 medical students, who were identified as being overweight or obese in a previous anthropometric survey, represented the target population. Data was collected both qualitatively and quantitatively. Students' motivational readiness to change to several weight-related behaviors was assessed using the Prochaska's stage of change conceptual framework. Bivariate analyses were performed to describe factors associated with stages of readiness to change. Ordinal logistic regression was also conducted to determine predictors of being in advanced stages of readiness to change. Regarding intention of medical students to control weight, precontemplators constituted more than a fourth of the sample [26.77]. More than a tenth [12.26%] was in the contemplation stage. The highest proportion of students [50.65%] was in the preparation stage of change. However, the least [10.32%] were in the action stage. Statistical significant associations were observed between age of the students, their academic level, monthly income, BMI and stage of motivational readiness to weight loss behavior [P = 0.001, 0.001, 0.032, and 0.001 respectively]. No statistical significant differences were observed between students in different stages of readiness to change as regards previous attempts to lose weight [X2[12] = 7.124, P = 0.850], mean recent weight gain [P = 0.521] ml mean doctor's visits in the last year [F = 1.284, P = 0.741]. However, students in the preparation and action stages reported recent weight change more significantly than those of early stages [P=0.014]. A statistical significant association was observed between expected weight loss and stage of motivational readiness to change [P = 0.018]. The four questions assessing attitude towards food, dieting and exercise were significantly associated with stages of readiness to change [P = 0.006, 0.040, 0.001, and 0.006 respectively]. Also, all of the questions regarding perception of what others think about weight were significantly associated to students' stage of motivational readiness to change. Statistical significant associations were observed between students' self-rated weight, body weight satisfaction and stage of motivational readiness to change [P = 0.008, and 0.001]. Moreover, each of the five Pros [perceived benefits] scale questions was significantly associated with stage of change to weight loss behavior. Students in the preparation and action stages were significantly more interested to discuss weight related behaviors with health care professionals, than those in precontemplation and contemplation stage. Lack of self-efficacy [confidence in ability to successfully make changes], unavailability of facilities and equipment for physical activity, and lots of stresses were the cited barriers that were significantly associated with the stage of motivational readiness to weight loss behavior. BMI [OR = 1.09], expectation of ideal body figure [OR = 2.03], attitude scale score [OR = 2.63], body weight satisfaction [OR = 1.93], perceived risks [OR = 1.94], Prosscale score [OR=3.64], and interest scale score [OR=1.72] were identified as significant predictors associated with stage of motivational readiness to change in the logistic regression model. The stage of change model is a promising approach for designing more appropriate interventions. It is particularly encouraging that in the present study, most students were in the ready stage for weight loss, dietary practice, physical activity change and willingness to communicate with health care professionals regarding these lifestyle changes. Students in the ready stage are the most amenable to University health interventions. Emphasizing the Pros for weight loss behaviors, decreasing the Cons for exercising and dietary practices, and increasing confidence in making change are strategies that can be used to help students become more ready to change behaviors for weight control.

Occupational Health

Occupational safety among personnel responsible for cleaning in Ain Shams University Hospitals.
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Ain Shams University - Faculty of Medicine - Department of Community, Environmental and Occupational Medicine

Keywords: Personnel; Hospital-education; Garbage; Medical Waste Disposal; Waste Management; Hospitals, University Health; Education; Questionnaires; Health Personnel; Cross-Sectional Studies

Abstract: The health care worker [HCW] is at substantial risk of acquiring blood borne pathogen infections through exposure to blood or infectious body fluids. Personnel responsible for cleaning as a part of HCW team, are susceptible to the high risk of exposure to infection and injuries. Inadequate management of biomedical waste can be associated with risks to health care workers, patients, communities and their environment to determine the occupational safety issues among personnel responsible for cleaning in Ain Shams University hospitals and their relation with the medical waste management in the hospitals. A cross-sectional study was done in Ain Shams University hospitals. Sample was selected randomly from all personnel responsible for cleaning in all hospital departments [Internal Medicine, Paediatric, Surgery, Gynaecology and Obstetric]. An interview questionnaire was constructed to collect demographic data and to evaluate the occupational safety of cleaning personnel. The study included 204 personnel responsible for cleaning from all departments of hospitals of Ain Shams University hospitals. 115 [56.4%] were males and 89 [43.6%] were females. Most of them were illiterate or can read and write [35.3% and 39.7%]. There was high percentage of exposure of personnel responsible for cleaning to the hazardous hospital waste. 67.6% reported exposure to infectious waste, about 60% were exposed to sharps waste and 25.5% reported one or more needle stick injuries in previous 6 months. 69.1% of personnel responsible for cleaning had pre-employment medical examination. Any worker did not report periodic medical examination. More than one third of personnel responsible for cleaning [37.7%] did not receive hepatitis B vaccine. The study revealed the availability of personal protective equipment such as uniform [84.3%], gloves [68.1%] and boots
[65.2%], but the percentage of use was different [76.0%, 55.9% and 58.8% respectively]. There was lack of separation between hazardous and non-hazardous waste at the point of generation [55.9%]. There was also less cooperation between HCW team personnel in separation of hazardous waste [68.6%]. Another point was insufficient training of personnel on proper packing of infectious waste and not following the already present regulations for waste disposal. The study shows that there is a need to improve occupational safety and hygiene of personnel responsible for cleaning in Ain Shams University hospitals by establishing standards and providing effective on-job periodic training program for them. In addition, another training program for proper waste management should be carried out for all healthcare workers. Infection control units need to identify methods to improve hepatitis B vaccination coverage levels among HCWs. Medical record is required for each employee and should be started with the first visit for pre-employment examination.

**Olfaction Bulb**

**anatomy and histology**

**Age and gender related differences in olfactory bulb glomeruli in human.**

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University of Health Sciences - Department of Anatomy

**Biomedica** 2008; 24 (Jan.-Jun.): 12-17 (30 ref.)

**Keywords:** Age Factors; Sex Factors; Olfactory Perception; Microscopy; Cadaver

**Abstract:** The present study was designed to investigate the age and gender related differences in glomeruli of the human olfactory bulb in normal Pakistani population. The study was conducted in the Department of Anatomy, University of Health Sciences, Lahore. The duration of the study was two years. Sixty olfactory bulbs, thirty each from male and female human cadavers [age 20-76 years] were collected from the mortuary of the King Edward Medical University, Lahore. Glomeruli were counted and their diameter was calculated from 10 micro m thick H and E stained histological sections. Statistical analysis was done using ANOVA for age related differences and Independent [t] test for gender related differences. The results showed significant decrease in the number ofglomeruli [p < 0.001] and their diameter [p < 0.05] with age. No gender related differences were observed. The number of glomeruli and their diameter both decreased with advancing age.

**Operating Rooms**

**microbiology**

**Microbial contamination in the operating theatre: a study in a hospital in Baghdad.**

Ensayef, S.; Al Shalchi, S.; Sabbar, M.

Al-Mustansiriyyah University - College of Science - Department of Biology


**Keywords:** Cross Infection; Incidence; Staphylococcus epidermidis-isolation and purification; Pseudomonas aeruginosa-isolation and purification; Delivery Rooms; Hospitals; Infection Control

**Abstract:** Contamination of the operating theatre is a major cause of nosocomial infection. This study aimed to evaluate the incidence of bacterial contamination of operating theatres in Al Imam Ali Hospital in Baghdad, and the source of contamination. From 1216 swabs collected from surfaces, equipment and antiseptic solutions from different operating theatres in 2001 and 2002, the rates of positive cultures were 3.7% in 2001 and 4.0% in 2002. Staphylococcus epidermidis was the most common isolate in 2001 followed by Pseudomonas aeruginosa, whereas in 2002 coliform bacteria were the highest, followed by P. aeruginosa. No clear pattern of isolates was found in different types of operating theatres, although coliforms and P. aeruginosa were mostly found in the delivery theatre.

**Organization and Administration**

**[Clinical supervision system: a method for improving educational performance of nursing personnel]**

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**IJME - Iranian Journal of Medical Education** 2008; 7 (2): 257-266 (29 ref.)

**Keywords:** Nurses-standards; Education, Nursing-organization and administration; Patient Education as Topic; Employee Performance Appraisal; Nursing Evaluation Research

**Abstract:** Employing supervision methods which focuses on educational aspects may increase the effectiveness of nursing personnel's educational activities, especially patient education. The aim of this study was to investigate the effect
of clinical supervision on the effectiveness of nurses’ educational performance. This quasi-experimental study was conducted using static groups’ comparison in which the control and experiment groups were compared by a post-test. Study samples included 72 patients who were matched and assigned into two distinct groups. Clinical supervision system was implemented through three steps in 3 wards of Samen-al-Aemme hospital in Mashhad for 6 months. The data gathering tool included patient information sheet, patient satisfaction from nurses’ educational practice and rating scale of self-care knowledge and practice of patients. Data was gathered through interview and observation methods and analyzed by SPSS software. The mean scores of self-care knowledge and practice of the patients were 30.6 and 57.1 out of 100, in the control and experiment groups, respectively. The mean score of patients’ satisfaction from nurses’ educational practice was 19.6 in the control group and 20.9 in the experiment group, out of 24. So that, independent t-test showed a significant difference between these two groups. Implementing clinical supervision system through observation, feedback, discussion, and investigation, may develop nurses’ knowledge and professional skills in patient education. Therefore, this supervision method could be regarded as an effective model for in-service education. More studies are required in order to investigate the effect of this model on other aspects of nurses’ practice.

**Otitis Media**

**diagnosis**

**Presentation and management of children with acute otitis media at primary care level.**

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King Saud University - College of Medicine, Riyadh - Department of Family and Community Medicine


**Keywords:** Otitis Media-drug therapy; Acute Disease; Primary Health Care; Physicians, Family; Child; Cross-Sectional Studies; Age Distribution; Disease Management

**Abstract:** To determine the patterns of presentation of acute otitis media [AOM] diagnostic ability and antibiotic prescription by family physicians. This is a cross-sectional study conducted at 11 PHCC in Riyadh city in Saudi Arabia over 3 month period. Twenty eight family physicians participated in the study. A total of 135 children, less than 5 years of age and presenting with a new episode of AOM were included. The age group (> 30) months had more children presenting with earache compared to other age groups [p < 0.05]. Redness of the TM had the highest (> 50%) certainty level compared to other TM signs [94%] p < 0.05, while retracted TM had the highest [< = 50%] certainty level compared to other TM signs [35%] p < 0.05. Ninety two percent were prescribed antibiotics. Amoxicillin [41%] was the commonly prescribed antibiotic. Presentation of AOM was linked to age group. Antibiotic -were widely and inconsistently prescribed for AOM.

**Outcome Assessment [Health Care]**

**Outcome as a measure of quality of care in oncology : experience at Sultan Qaboos University Hospital, Oman.**

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*SQUMJ - Sultan Qaboos University Medical Journal* 2008; 8 (1): 27-36 (60 ref.)

**Keywords:** Oncology Service, Hospital; Quality Indicators, Health Care; Survival Rate; Prognosis; Awareness; Lymphoma, Non-Hodgkin; Hodgkin Disease; Breast Neoplasms; Stomach Neoplasms

**Abstract:** Measurement of outcomes is increasingly employed as an indicator of the quality of clinical care. The most commonly measured outcome in many clinical studies, especially in oncology, still remains the overall survival rate. Sultan Qaboos University Hospital [SQUH], Oman, is striving for excellence through quality management. In seeking continual improvement, quality measurement exercises have been initiated throughout the Hospital. We present the overall survival rate of four of the ten most common cancers diagnosed in Oman. The cancers included non-Hodgkin’s lymphoma [NHL], Hodgkin’s lymphoma [HL], breast cancer, and stomach cancer. The studies were all retrospective and had been conducted previously. For present purposes, only the overall survival was compared with studies both from the region, and with bench-mark studies. For NHL, with a median follow-up of 8 months, the 2-year overall survival rate was 64%; 90% for low risk, 55% for intermediate risk, and 15% for high risk groups. For HL, the 5-year overall survival rate was 64%; 76% for low risk and 42% for high risk. For breast cancer, the 5-year survival rate was 67%; percentages were 88%, 75% and 59% for Groups I, II, and III respectively. For gastric cancer, the 5-year survival rate was 16.5 %; 24% for the non-metastatic group. The outcome of patients with early stages and fewer adverse prognostic factors is comparable to what has been reported in the international literature; however, the outcome is inferior for patients presenting with advanced stage disease and several adverse prognostic factors.
Ovarian Neoplasms

pathology

[Case report of a rare ovarian lymphoma in a 39 years old woman with rupture of small intestine]
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Qom University of Medical Sciences - General Surgery
Qom University of Medical Sciences Journal 2008; 1 (4): 61-64, 8 (4 ref.)
Keywords: Lymphoma-pathology; Abdomen, Acute-etiology; Abdomen, Acute-diagnosis; Rupture; Intestine, Small-pathology
Abstract: Ovarian cancer is one of the common gynecological cancers. Meanwhile it is the most lethal cancer and cause of more than 50 percent mortality among gynecological cancers. In early stages, this cancer is usually asymptomatic or symptoms may be equivocal so neither patient nor physician can diagnose it. In this study we report an ovarian lymphoma with acute abdominal presentation in 39 years old woman. A 39 years woman was admitted to Nekooei hospital in Qom because of abdominal pain and signs of peritonitis. At the time of admission pain pattern was colicky but it became constant in accompany to nausea and mild fever. In the early physical examination she showed generalized tenderness in abdomen without rebound and guarding. After several hours, abdominal signs got worse. Vital signs showed no significant abnormality. Ultrasonography was ordered for further evaluation. Finally patient was made ready for operation with primary diagnosis of ruptured ovarian cyst. Surgery team found out during operation rupture of small intestine due to tumoral growth in the bowel.

Oxazolidinones

therapeutic use

In-vitro activity of linezolid and other antimicrobial agents against methicillin resistant staphylococci.
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Elfateh University - Faculty of Medicine - Department of Microbiology
Keywords: Anti-Infective Agents; Acetamides-therapeutic use; Methicillin-Resistant Staphylococcus-drug effects; Drug Resistance, Microbial
Abstract: To evaluate the in-vitro activities of linezolid, vancomycin, ciprofloxacin, gentamicin, amikacin, trimethoprim and fusidic acid, against methicillin resistant isolates. Three hundred and twenty two non-duplicate archived Staphylococcal isolates recovered from routine cultures performed in the microbiology laboratory from wounds, and abscesses swabs, urine, blood, pus, derived from both in- and out patients were tested. A total of 274 S. aureus and 76 CNS clinical isolates were included in the study, 46.7% were MRSA and 21% methicillin resistant CNS [MRCNS]. None of the strains was found to be resistant to linezolid and vancomycin. The resistance rates of MRSA isolates to antibiotics were as follows: 86% to gentamicin, 84.3% to fusidic acid, 80% to trimethoprim, 78.2% to ciprofloxacin and 76.5% to amikacin. Similar trend were also obtained for MRCNS isolates. The majority [70%] of MRSA isolates were resistant to all used classes of antibiotics in the study, while only 4.3% were sensitive to such antimicrobial agents. Due to the high prevalence of multi-drug resistant MRSA, this study has provided valuable baseline information to clinicians regarding the benefit of linezolid, suggesting that it can be used as an alternative drug in such severe life threatening infections caused by MRSA, especially if the side effect of vancomycin was observed.

Oxides

therapeutic use

Repair of root perforation using mineral trioxide aggregate: two case reports.
Khan, Ali Akbar; Moeen, Faisal
Prince Philip Dental Hospital - Department of Endodontics
JPDA - Journal of the Pakistan Dental Association 2008; 17 (2): 105-107 (15 ref.)
Keywords: Aluminum Compounds-therapeutic use; Calcium Compounds-therapeutic use; Silicates-therapeutic use; Drug Combinations; Tooth Root-pathology; Treatment Outcome
Abstract: Root perforation repair has historically seen an unpredictable treatment modality with an unacceptably high rate of clinical failure. Inadequacy of the repair materials has been a contributing factor to the poor outcome of repair procedures. Mineral trioxide aggregate [MTA] is a relatively new material that is being successfully used to repair perforations. This article reports the findings of research done on MTA used as a material to repair root perforations and presents two clinical cases where MTA was successfully utilized to repair root perforation.

Pain

drug therapy

Pharmacological pain relief in pediatric patients.
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Department of Anesthesia
Middle East Journal of Anesthesiology 2008; 19 (6): 1255-1290 (80 ref.)

Keywords: Pediatrics; Pain Measurement; Analgesics-therapeutic use; Analgesia, Patient-Controlled-utilization; Analgesics, Opioid-therapeutic use; Analgesics, Non-Narcotic-therapeutic use; Cyclooxygenase Inhibitors-therapeutic use; Salicylates-therapeutic use; Adjuvants, Pharmaceutical; Anti-Inflammatory Agents, Non-Steroidal-therapeutic use; Analgesics, Opioid-adverse effects

Pancreatic Diseases

diagnosis

Immunochromatographic assays in diagnosis of parasitic diseases.
Abaza, Sherif M.
Suez Canal University - Faculty of Medicine - Parasitology Department
PUJ - Parasitologists United Journal 2008; 1 (1): 1-13 (100 ref.)

Keywords: Immunoassay; Sensitivity and Specificity; Intestinal Diseases, Parasitic; Parasitic Sensitivity Tests

Parathyroid Neoplasms

therapy

Non surgical management of parathyroid adenoma using percutaneous ethanol injection.
Malik, Azhar; Afandi, Bachar; Saleh, Ayman; Mohamadieh, Mohamed; Taha, Mazen

Keywords: Adenoma-therapy; Ethanol-therapeutic use; Injections, Intralesional; Hyperparathyroidism-therapy; Treatment Outcome; Disease Management

Patient Care Team

standards

Presence of admitting team in emergency department, does it make a difference?
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JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 32-34 (14 ref.)

Keywords: Admitting Department, Hospital; Emergency Service, Hospital-standards

Abstract: The Emergency Department [ED] Admitting Team was established on the 1st of September 2005 to attend patients admitted to Hamad General Hospital [HGH]. The team followed 1,065 patients for 3 months [September, October and November 2005]. The study reports the change noticed during the period, on admission-disposition duration.
The majority of patients were males [75%] and non-Qatari [72%], with medical cases more common than surgical cases. For the medical cases, chest infection was the leading cause of admission followed by coronary artery disease, while orthopedic cases followed by acute appendicitis were the main surgical causes of admission. The admitting team was able to cancel 10% of cases as most of them improved while pending admission. In addition, the admitting team facilitated admission of many patients to Intensive Care Units or to Operation rooms. The results were reviewed and the presence of the admitting team in ED was found to be beneficial.

**Peritonitis, Tuberculous**

**diagnosis**

A patient with ascites, pleural effusion, abdominocervical lymphadenopathy, Bilateral ovarian cystic lesions and elevated CA-125 mimicking advanced ovarian carcinoma.  
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Hera General Hospital  
**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (1): 66-68 (23 ref.)  
**Keywords:** Tuberculosis-diagnosis; Ascites-etiology; Pleural Effusion-etiology; Tuberculosis, Lymph Node; Ovarian Cysts; CA-125 Antigen; Ovarian Neoplasms

**Pesticides**

**adverse effects**

Evaluation of an educational intervention for farming families to protect their children from pesticide exposure.  
Farahat, T.M.; Farahat, F.M.; Michael, A.A.  
University of Menoufia - Faculty of Medicine - Department of Community Medicine and Environmental Health  
**Keywords:** Health Knowledge, Attitudes, Practice; Environmental Exposure; Parents; Health Education; Agriculture-education; Family; Questionnaires; Program Evaluation  
**Abstract:** A culturally appropriate educational intervention was developed and directed towards farming families in Menoufia governorate, Egypt, to improve their knowledge and practices in protecting their children from exposure to pesticides. Parents were randomly assigned to either a lecture or videotape training group. Ability to recall information or improve practices among parents was evaluated in 3 sessions: pretraining and 2 weeks and 1 month after training. Knowledge and practice scores after training of younger and more educated participants were significantly higher than older, less educated participants. Knowledge and practice performance of the videotape group was better than the lecture group and in both groups the improvement of knowledge scores after training was significantly higher than that of practice scores.

**Pheochromocytoma**

**diagnosis**

Extremes of hyper and hypotensions in pheochromocytoma-a perioperative management.  
Innayatullah; Mubeen, Muhammad; Hussain, Raja M.; Samiullah, A.; Sethi, shakeel A.; Khan, Shoaib A.  
Combined Military Hospital - Departments of Anaesthesiology and Intensity  
**Biomedica** 2008; 24 (Jan.-Jun.): 7-11 (14 ref.)  
**Keywords:** Pheochromocytoma-therapy; Pheochromocytoma-pathology; Hypotension-etiology; Hypertension-etiology; Hypertension-therapy; Electrocardiography; Catecholamines-diagnostic use; Adrenal Gland Neoplasms; Disease Management; Perioperative Care; Headache; Sweating  
**Abstract:** We report a case of 30 years old female who presented with history of frequent headaches, palpitation, sweating along with mass abdomen. Hypertension was accelerated as ECG reflected sinus rhythm with left ventricular hypertrophy and no papilloedema. Ultrasound abdomen revealed right sided, well defined solid mass posterolateral to the inferior vena cava. Urine analysis revealed raised metabolite vanillylmandelic acid. Patient was diagnosed as a case of pheochromocytoma of the right suprarenal gland. After control of blood pressure, laparotomy under general anaesthesia was performed. A big tumour was excised. Histopathology confirmed the diagnosis of pheochromocytoma.
Philadelphia Chromosome

Comparison between philadelphia positive and philadelphia negative adult acute leukemias.
Hasnain, Qaiser; Abidi, Iftikhar; Iftikhar, Michael
Lahore Medical and Dental College - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 31-36 (24 ref.)

Keywords: Leukemia-genetics; Retrospective Studies; Prognosis; Survival; Bone Marrow Examination; Acute Disease; Leukemia, Myeloid, Acute; Precursor Cell Lymphoblastic Leukemia-Lymphoma

Abstract: This was a retrospective study designed to evaluate the frequency and clinical significance of Philadelphia [Ph] chromosome in acute leukaemia. The place and duration of this work was Armed forces Institute of Pathology Rawalpindi from April 1988 to January 1990 and a private medical center from June 1999 to July 2002. A total of 50 cases of acute leukaemia were included in the study. Thirteen cases presenting de-novo ALL and thirty two cases as denovo ANLL [AML and AMML]. Two patients were diagnosed as blast transformation phase of CGL with ALL phenotype whereas 03 cases presented with acute leukaemia transformation from MDS with AML/AMML phenotype. The samples received were either peripheral blood or bone marrow aspirate. Chromosomal analysis was performed using culture, banding and staining technique. Morphology, clinical findings, therapeutic response and survival were compared in patients with and without the Ph chromosome. Ph chromosome was found to be +ve in 02 newly diagnosed patients presenting with ALL. Ph chromosome in association with additional chromosomal abnormalities persisted in 02 cases transformed into ALL from CGL, and it was found in 05 cases of de novo AML. The study failed to reveal any consistent chromosomal translocation involving chromosome 9 and 22 in 03 AML cases transformed from MDS. Patients with Ph+ ALL differed from those with Ph-ALL in being older, in having more frequent lymphadeno-pathy and splenomegaly and in demonstrating higher initial leucocyte count and more peripheral blasts. Complete remission was obtained in 09 patients with Ph-ve ALL but in only 2 of 4 with Ph +ve ALL. Adults with Ph -ve ALL also survived significantly longer. Five adults with ANLL [AML/AMML] who were Ph +ve did not respond to treatment and survived significantly shorter than adults with Ph -ve AML. No clinical or morphological features indicated which patients with acute leukemia would have Ph chromosome. The Philadelphia chromosome has been considered relatively specific for chronic granulocytic leukaemia. However patients with acute leukaemia [ALL and AML] can also present with positive Philadelphia chromosome. In our study, we have described 09 cases with positive Philadelphia chromosome. Comparison was made with the remaining 41 cases who were Ph negative. It can be concluded that the presence of Ph chromosome in adult acute leukaemia may have biological and clinical significance.

Pneumonia, Mycoplasma

Severe hemolytic anemia associated with mycoplasma pneumoniae pneumonia.
Abdul Hamid, Gamal; Kahiry, Waiel; Shukry, Safa
University of Aden - Faculty of Medicine and Health Sciences - Hematology/Oncology Department
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 45-46 (9 ref.)

Keywords: Anemia, Hemolytic-diagnosis; Mycoplasma pneumoniae; Agglutinins

Abstract: We report a case of Mycoplasma Pneumonia complicated with severe hemolytic anemia, which occurred as a result of a high titre of cold agglutinin. A 30 year-old male was admitted because of fever, jaundice and dyspnea. Chest x-ray showed diffuse small nodular infiltrates throughout both lung fields. Laboratory studies disclosed the following values: Hb 6 g/dl, Hct 16.4%, reticulocyte 10%, leukocytes 45x109/L, direct and indirect Coombs’ test were positive, ESR 116 mm/hr, cold agglutinin titre 1:1800, mycoplasma antibody titre 1:640. The diagnosis of autoimmune hemolytic anemia associated with Mycoplasma Pneumonia was made, and treatment with Erythromycin and Prednisolone observed striking clinical improvement. It was suggested that the cold exposure was possibly a major factor in the pathogenesis of hemolysis in this patient. [1] Mycoplasma Pneumonia patients would be highly suspected to be associated with cold agglutinin disease. [2] Corticosteroids and erythromycin are effective in treating severe hemolytic anemia associated with mycoplasma pneumonia.

Pneumonia, Ventilator-Associated

epidemiology

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Keywords: Pneumonia, Ventilator-Associated-etiopathology; Pneumonia, Ventilator-Associated-prevention and control; Cross infection; Pneumonia, Ventilator-Associated-mortality; Respiration, Artificial-adverse effects

Abstract: Ventilator-associated pneumonia [VAP] is the leading cause of morbidity and mortality in intensive care units [ICUs]. Intubation and mechanical ventilation [MV] is associated with a 7-fold to 21-fold increase in the incidence of pneumonia and approximately one third of patients receiving mechanical ventilation will develop this complication. Prevention of VAP must be regarded as one of the most important issues in critical care. It is possible through the use of several evidence-based strategies intended to minimize intubation, the duration of mechanical ventilation, and the risk of aspiration of oropharyngeal pathogens. Important components of effective preventive strategies focus on basic infection control principles like hand washing, adequate ICU staff education, and optimal resource utilization. Measures to prevent VAP extend into all aspects of daily intensive care practice, including antibiotic selection and duration of use, preferred routes of intubation, limitation of sedation, protocolized weaning, optimal use of noninvasive mask ventilation, patient positioning, ventilator circuit management, transfusion practices, stress ulcer prophylaxis, and glycemic control. However, strategies to prevent VAP are likely to be successful only if based upon a sound understanding of pathogenesis and epidemiology. In the first part of this article we review the evidence on prevalence, pathogenesis, microbiology, and prevention of VAP. Evidence-based recommendations for prevention of VAP are provided. Diagnosis and treatment of this condition are discussed in part two.

Poaceae

Rangeland degradation in two watersheds of Lebanon.
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Center for Remote Sensing - National Council for Scientific Research
Lebanese Science Journal 2008; 9 (1): 71-80 (12 ref.)
Keywords: Water; Climate

Abstract: A complex and rugged nature characterizes the Lebanese mountains. The climatic pattern prevailing in the country, deforestation and man made erosion caused increased rangeland degradation. The purpose of this study was to monitor two contrasting watersheds, representing the Lebanese agro-ecological zones, to analyze the vegetation dynamics and trace the state of rangeland degradation. The Kfarselouane [205 km²] and Aarsal [316.7 km²] watersheds are located in the Lebanon and Anti-Lebanon mountain chain and characterized by sub humid and semi-arid climate respectively. Using multitemporal spot vegetation images between 1999 and 2005 to analyze the normalized differential vegetation index [NDVI] revealed some improvement of the vegetation cover over recent years in Kfarselouane with a steady state in Aarsal. The NDVI trend curve inclines in spring and declines in summer and fall. Judging by the time scale amplitude change and highest magnitude between the peak and lower NDVI level in Aarsal, an increased vulnerability to drought is observed in the dry Lebanese areas. Comparing land cover/use in Aarsal area between 1962 and 2000 using aerial photos and large resolution Indian satellite images [IRS] showed wood fragmentation and slight increase of the degenerated forest cover from 1108 ha to 1168 ha. Landuse change was accompanied by a simultaneous increase of cultivated lands [mostly fruit trees from 932 ha to 4876 ha with absence of soil conservation and water harvesting practices. On the contrary, grasslands decreased from 29581 ha to 25000 ha. In Kfarselouane, the area of grassland was invaded by forestland where rangeland decreased from 8073 ha to 3568 ha and woodland increased from 5766 ha to 11800 ha. Forest expansion occurred even at the account of unproductive land which decreased from 2668 ha to 248 ha, while cultivated lands did not reveal any substantial change. Based on animals’ seasonal feeding pattern, a mismatch between land carrying capacity and grazing pressure is observed indicating the necessity to develop intermixed irrigated pasture-fruit tree production for supplemental feeding during the dry months.

Potassium

analysis

Potassium status in some lebanese soils.
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American University of Beirut - Faculty of Agricultural and Food Sciences
Lebanese Science Journal 2008; 9 (1): 81-97 (34 ref.)
Keywords: Soil; Thermodynamics; Kinetics

Abstract: This study was conducted to evaluate K content and availability in Lebanese soils using the traditional methods of K measurement, K-thermodynamics and K-kinetics measurements. Nine surface soil samples [0-30 cm] were collected from major agricultural regions in Lebanon and were later exposed to the following laboratory measurements. Extraction of K with H[2]O, IN NH[4]OAc and IN HNO[3], and calculation of: K-fixation capacity, ionic strength, K-activity ratio, free energy of replacement [- delta F], Q/I relationship. Five K-kinetic equations were compared by applying the least square regression analysis to determine the suitable ones for describing K release from soils. The results showed that the tested soil samples varied widely in K contents and K supplying power to plants. According to
NH₄OAc and HNO₃ extraction methods, the K levels of samples 5 is high, 7 is medium, 9 is medium/low and the other 6 samples are low. The values of H₂O-K didn’t follow the same order. The values of KSP were low in all samples except 5 and 6. The amounts of fixed K in the studied samples varied from 1.53 Cmol.Kg⁻¹ to 5.02 Cmol.Kg⁻¹. The activity ratio values ranged between 0.0008 and 0.018. The values of free energy of replacement [- delta F] showed that soils 5 and 6 have medium K supplying power. The values of K-buffering capacity ranged between 22.0 Cmol.Kg⁻¹/mol/L and 297.8 Cmol.Kg⁻¹/mol/L. The values of labile K were lower than those of available K. This means that a part of exchangeable K exists on sites with high bonding energy. The release capacity ranged between 9.5% and 59.1%. From the five mathematical models which were tested, the first order equation was the most suitable and was selected to determine the release rate coefficient of K. The results show that K content in Lebanese soils differs widely and the results of soil testing should be compared to field responses.

**Pre-Eclampsia**

**diagnosis**

Thrombomodulin as a marker of endothelial damage and severity in pre-eclampsia/eclampsia syndrome.
Deghady, Akram Abdel Moneim; Fawzy, Abdel Moneim Aly; Abbassy, Hadeer; Rizk, Ahmad
University of Alexandria - Faculty of Medicine - Departments of Clinical Pathology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 19-22 (21 ref.)

Keywords: Thrombomodulin; Enzyme-Linked Immunosorbent Assay; Biological Markers; Endothelium; Eclampsia

**Abstract:** Preeclampsia is an idiopathic multisystem disorder specific to human pregnancy characterized by gestational hypertension and proteinuria. It complicates many pregnancies and is the third common cause of maternal mortality. It is also associated with a high perinatal mortality and morbidity. The aim of the present work was to study Thrombomodulin [TM] as a marker of endothelial damage in pre-eclampsia/ eclampsia syndrome. Eighty pregnant females in the second half of pregnancy were enrolled in the study divided into control group [I], mild preeclampsia [IIa], severe preeclampsia [IIb], and eclampsia [IIc]. Thrombomodulin was measured by ELISA technique at presentation and 3 days post partum. The results showed that the level of TM is higher in patients with eclampsia and preeclampsia compared to the control group, furthermore, the level decreased with delivery and subsidence of the condition. In conclusion TM can be used as a marker for monitoring preeclampsia/ eclampsia syndrome.

**Precursor Cell Lymphoblastic Leukemia**

**immunology**

Expression of CD66c and CD25 in acute lymphoblastic leukemia as a predictor of the presence of BCR / ABL rearrangement.
Owaidah, Tarek; Rawas, Faisal I.; Al Khayatt, Mazen F.; Elkum, Nasser B.
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King Faisal Specialist Hospital and Research Center - Department of Pathology and Laboratory Medicine
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 34-37 (19 ref.)

Keywords: Immunophenotyping; Antigens, CD; Cytogenetics; Precursor Cell Lymphoblastic Leukemia-genetics

**Abstract:** Expression of myeloid or T cell lymphoid in precursor B cell acute lymphoblastic leukemia [pre-B cell ALL], which is referred to as aberrant expression, is quite a common phenomenon. CD66c is a myeloid marker which has aberrant expression in pre-B cell ALL, with strong correlation with non-random genetic changes [BCR/ABL rearrangement]. Another leukemia associated marker [CD25] is frequently expressed in pre-B cell ALL. The frequency of CD25-expressing lymphoblasts has been found to be significantly higher in BCR/ABL-positive vs. BCR/ABL-negative patients. In a cohort of 103 patients diagnosed with pre-B cell ALL or biphenotypic leukemia and studied for expression of CD66c and CD25 at presentation, we evaluated the frequency of expression of either or both in BCR/ABL positive cases. Surface CD66c was expressed by 70 cases [68%] and CD25 was expressed by 33 cases [32%] while both were expressed together on 29 cases [28%]. BCR/ABL was positive in 18/103 patients. All BCR/ABL positive cases were positive for surface CD66c and CD25. Positivity for both leukemia-associated antigens CD66c and CD25 in combination can predict the presence of BCR/ABL rearrangement in pre-B cell ALL. While this finding does not replace the detection of BCR/ABL abnormality by cytogenetic or molecular techniques, it does provide an early and handy tool for prediction and management of high-risk cases of pre-B cell ALL, especially in centers with limited laboratory facilities.
Prednisolone

chemistry

Khaled, Khaled A.; Sarhan, Hatem A.; Ibrahim, Mohamed A.; Naguib, Youssef W.
Minia University - Faculty of Pharmacy - Department of Pharmaceutics
Keywords: Chemistry, Pharmaceutical; Microspheres; Delayed-Action Preparations; Microscopy, Electron, Scanning
Abstract: The steroidal drug prednisolone was encapsulated into microspheres using the biodegradable polymer poly [DL-lactide] using emulsion-solvent evaporation method. The produced microspheres were characterized using scanning electron microscopy, X-ray diffractometry, FT-IR spectroscopy, DSC, and laser light diffraction. The morphology, particle size distribution, encapsulation efficiency [%EE], and drug release showed marked dependence upon formulation parameters viz. initial polymer concentration, surfactant concentration, drug-to-polymer ratio, and volume of the external aqueous phase. The effect of the addition of hydrophilic additives such as PVP or PEG 8000 was also investigated. The encapsulation efficiency percent and the mean particle size were increased by increasing the initial polymer concentration and drug polymer ratio. On the other hand, increasing the surfactant concentration resulted in decreasing the mean particle size and increasing the drug release from the microspheres. The probable mechanism of drug release was estimated and found to be via diffusion through channels and/or pores present within the polymeric matrix. Release data of almost all formulae fitted Higuchi's planar model better than spherical model. This finding could be due to the small extent of drug release [-40%], or the presence of a large fraction of the encapsulated drug nearby the surface of the microspheres.

pharmacokinetics

In-vitro studies of prednisolone pre-formulations released from various ointment-bases, factors affecting penetration rate and penetrated amount.
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Keywords: Prednisolone-administration and dosage; Chemistry, Pharmaceutical; Solubility
Abstract: In this pre-formulation study, the effect of individual factors influencing the penetration rate of drugs incorporated in various topical vehicles has been in-vitro investigated. The water poor soluble prednisolone is chosen as a model drug. To increase the dissolution behavior of prednisolone [P], co-precipitates of it with polyvinyl-pyrolidone[25] [P/PVP[25]-coprs], polyethylene glycol[6000], [P/PEG[6000]-coprs] and adsorbents with Aerosil[200] [P/A-[200]-adsrob] were prepared and in-vitro tested. A significantly increased dissolution in purified water was obtained with the co-precipitate F[1], consisting of 10-wt% prednisolone and 90-wt% PEG[6000]. As F[1] was incorporated in various model-vehicles insignificant penetration profile was achieved. This effect was in fact due to the high concentration of PEG[6000] in the vehicles, which has increased the bulk viscosity of the ointments, that resulted on the one hand in restricted drug particles movement between the phases and on the other between the external phase and the artificial membrane. In contrast, F[2] consisted of 50-wt% Prednisolone and 50-wt.% PEG[6000]-copr, showed a slight increase in drug solubility compared to the corresponding physical mixture as well to pure P. As F[2] was incorporated in aqueous emulsifying wool wax-base, [WHES] a greater penetration rate into the synthetic membranes has resulted, and no change in the crystal form of P could be observed throughout the study time period of 70 hours. All other pre-formulations, [prefs] showed negligible increase in the solubility of P. X-ray diffractions studies of prednisolone-PVP[25] -coprs and those of drug/Aerosil[200]-adsorbent, indicated changes in the crystal form of P into monohydrate, which probably happened during the co-precipitation and adsorption of the drug and also during the incorporation of the pre-formulations into ointments. This change was specifically due to the very few amount of water present in ethanol 96%v/v used as solvent for the preparation of the P-co-precipitates and adsorbents [= pref] and due to water available in the external phase of all used o/w-emulsions type ointment-base.
Pregnancy, Ectopic

diagnosis

Management of a heterotopic pregnancy presenting with haemorrhagic shock and massive haemoperitoneum.

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Welcare Hospital - Departments of Obstetrics and Gynecology

Emirates Medical Journal 2008; 26 (2): 111-112 (8 ref.)

Keywords: Pregnancy, Ectopic-therapy; Shock, Hemorrhagic-etiology; Hemoperitoneum-etiology; Laparoscopy; Ultrasonography; Pregnancy; Fallopian Tubes; Disease Management

Abstract: The incidence of heterotopic pregnancy is on the rise, from 1 in 30000 pregnancies, to as high as 1 in 3800 today. We report here a case of a 31-year-old Asian lady who presented with sudden onset of acute abdominal pain and massive haemoperitoneum. An ultrasound scan confirmed a viable 10 weeks intrauterine pregnancy, with massive free fluid in the abdomen warranting surgery. A provisional diagnosis of a ruptured corpus luteal cyst/ ruptured ectopic/ heterotopic pregnancy was made. Laparoscopy revealed a bleeding ectopic pregnancy in the isthmus region of the right tube, which was treated by linear salpingotomy. Skilled surgical expertise in dealing with the massive haemoperitoneum enabled us to accomplish the surgery with minimal trauma to the continuing intrauterine pregnancy.

Prenatal Care

[The effect of prenatal care group education on pregnant mothers' knowledge, attitude and practice]

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IJME - Iranian Journal of Medical Education 2008; 7 (2): 317-324 (20 ref.)

Keywords: Pregnancy; Education; Mothers; Health Knowledge, Attitudes, Practice

Abstract: Effective prenatal education may play an important role in decreasing diseases and morbidity and therefore promoting mother's health. The aim of this study was to examine the effect of group education [by a standard teaching model] on knowledge, attitude and practice of pregnant mothers. This study was a field trial which was performed on 60 pregnant women in their 6th to 8th gestational age. Samples were divided into two groups randomly. The experiment group was instructed using the standard protocol developed by maternal health unit of Isfahan Provincial Health Center and the control group received the routine prenatal instructions. In the standard protocol, the educational needs during the first, second and third trimesters of pregnancy were determined and 14 training sessions with prepared lesson plans were designed. The data were gathered by a questionnaire. Mother's knowledge in second and third trimester was significantly higher in intervention group compared to the control group. Also, it was almost significant in the first trimester. But, the educational program had no effect on mothers' attitude and no difference between the attitude of the two groups of intervention and control was observed. In contrast, the education had a positive effect on mothers' practice and a significant difference was revealed between the practices of the two groups. Considering the special features of this educational model, implementing this program as a continuous intervention in all health care centers could improve the quality of prenatal care.

Prescriptions, Drug

standards

[The status and necessity for teaching prescription writing : Viewpoints of general physicians in Lorestan and deans of Iranian Medical Universities]

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IJME - Iranian Journal of Medical Education 2008; 7 (2): 454-457 (18 ref.)

Keywords: Prescriptions, Drug-economics; Legislation, Drug; Universities; Education, Medical; Physicians, Family-education
Problem-Based Learning

[Comparing lecture and problem-based learning methods in teaching limb anatomy to first year medical students]
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Iran University of Medical Sciences - Medical School - Department of Anatomical Sciences
IJME - Iranian Journal of Medical Education 2008; 7 (2): 379-388 (23 ref.)
Keywords: Teaching-methods; Anatomy-education; Educational Technology; Education, Medical-methods; Students, Medical; Education, Medical, Undergraduate-methods
Abstract: Problem-based learning has replaced traditional teaching in most universities around the world but still there are many challenges in replacing traditional methods by this new method of learning. Two methods of lecture and problem-based learning [PBL] for teaching anatomy to junior medical students are compared in this study. Forty students of Artesht University of Medical Sciences, who entered university in 2005, were divided into two groups randomly. Groups were matched based on their Diploma average score, the raw score achieved in entrance exam, and the average score of their previous term. Then, limb anatomy was taught to both groups during two semesters, one group was taught through traditional method and the other through problem-based learning method. The headings of the lesson were the same for the two groups. Students were evaluated through a pre-test at the beginning of the semester and a post-test which was held at the end of the semester. Their viewpoints were also asked at the same time with post-test. Data was analyzed by SPSS software using independent T-test and paired T-test. Post-test scores in both groups were higher than the pre-test scores significantly. The mean difference for correct answers to judgment questions in post-test was higher significantly in PBL group compared with the traditional group. PBL group students were more satisfied with their teaching method. Students' viewpoints in PBL group concerning three domains of developing a sense of participation, encouraging students to study more and teacher's teaching abilities, earned higher scores compared to the traditional group. Students are encouraged to reflect more, and avoid memorizing the material in PBL method. Moreover, this method motivates students to study more by encouraging them into more group interaction.

Professional Competence

[Dental students' competencies in community dentistry course]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 201-208 (19 ref.)
Keywords: Students, Dental; Education, Dental-standards; Curriculum-standards; Community Dentistry-standards
Abstract: Graduated dentistry students ought to be competent in different fields of community dentistry such as health education, needs assessment, planning and policy making. The aim of this study was to assess the effect of community dentistry course on dental students' competencies in different fields of community dentistry through self-monitoring method in Isfahan School of dentistry. This quasi-experimental study was conducted on two groups using pre-test and post-test. Through census sampling method, 50 students were studied before and after passing the community dentistry course, as experiment group and 40 students who did not pass this course were studied as the control group at the time of graduation. The data gathering tool was a questionnaire which was completed by students as self-administered. The questionnaire assessed students' competencies in 6 determined areas with a scale ranging from unacceptable to excellent. The results were analyzed by SPSS software using Paired t-test and t-test. The difference between the scores of experiment group's competencies in all six determined areas was significant, before and after passing the course. Comparing the scores of the experiment and control groups showed significant differences in all areas except in "preventive dentistry services". Community dentistry course has been successful in making the students competent in community dentistry fields. In order to improve these results, it is recommended to devote more time and facilities to the subjects such as needs assessment and course planning.

Proliferating Cell Nuclear Antigen

Immunoreactivity of proliferating cell nuclear antigen in transitional cell carcinoma of urinary bladder.
Khan, Abdul Haseeb; Khan, Saeed Akhtar; Chaudhry, Naseer Ahmad; Tayyab, Muhammad
Postgraduate Medical Institute - Department of Pathology
Biomedica 2008; 24 (Jan.-Jun.): 46-49 (31 ref.)
Keywords: Carcinoma, Transitional Cell-immunology; Urinary Bladder Neoplasms-immunology; Time Factors; Follow-Up Studies
Abstract: This is a descriptive study designed to evaluate Proliferating cell nuclear antigen [PCNA] in transitional cell carcinoma. A total of fifty per urethra resected bladder tumour samples [TUR BT] were collected from Mayo Hospital and Services Hospital, Lahore and processed for H and E and PCNA stain. The grading of tumours were made on H and E
stain. While Proliferating cell nuclear antigen labeling index was recorded for each case. The mean PCNA labeling index was significantly higher in grade III when compared with tumours of grade II. [p < 0.001] carcinoma. Similarly mean PCNA labeling index was significantly higher [p < 0.05] in patients having duration of symptoms up to 3 month when compared with the patients having longer duration of symptoms. The mean PCNA labeling index had significantly higher value in high grade tumours as compared to low grade tumours [p < 0.001]. Although determination of PCNA labeling index is costly yet it has significant role in tumour grading.

**Propranolol**

**administration and dosage**

pH-independent release of propranolol hydrochloride from HPMC-based matrices using organic acids.

Bolourchian, N.; Dadashzadeh, S.

Shahid Beheshti University - Pharmaceutical Sciences Research Center - School of Pharmacy

DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 136-142 (23 ref.)

**Keywords:** Propranolol-pharmacokinetics; Arrhythmias, Cardiac-drug therapy; Hypertension-drug therapy; Delayed-Action Preparations; Solubility-drug effects; Biological Availability; Absorption-drug effects; Tartrates; Citric Acid-therapeutic Use; Fumarates-therapeutic Use; Hydrogen-Ion Concentration; Methylcellulose-analogs and derivatives

**Abstract:** Propranolol HC1, a widely used drug in the treatment of cardiac arrhythmias and hypertension, is a weak basic drug with pH-dependent solubility that may show release problems from sustained release dosage forms at higher pH of small intestine. This might decrease drug bioavailability and cause variable oral absorption. Preparation of a sustained release matrix system with a pH-independent release profile was the aim of the present study. Three types of organic acids namely tartaric, citric and fumaric acid in the concentrations of 5, 10 and 15% were added to the matrices prepared by hydroxypropyl methylcellulose [HPMC] and dicalcium phosphate. The drug release studies were carried out at pH 1.2 and pH 6.8 separately and mean dissolution time [MDT] as well as similarity factor [f[2]] were calculated for all formulations. It was found that incorporation of 5 and 10% tartaric acid in tablet formulations with 30% HPMC resulted in a suitable pH-independent release profiles with significant higher f[2] values [89.9 and 87.6 respectively] compared to acid free tablet [58.03]. The other two acids did not show the desirable effects. It seems that lower pK[a] of tartaric acid accompanied by its higher solubility were the main factors in the achievement of pH-independent release profiles.

**Prostate-Specific Antigen**

**blood**

Serum prostate-specific antigen, radiologic findings and Gleason score in prostate biopsies in Jordan.

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Jordan University of Science and Technology - Medicine Faculty

Hematology, Oncology and Stem Cell Therapy 2008; 1 (3): 171-174 (25 ref.)

**Keywords:** Prostatic Neoplasms-pathology; Prostatic Neoplasms-radiography; Biopsy; Sensitivity and Specificity; Predictive Value of Tests; Tumor Markers, Biological

**Abstract:** Prostate-specific antigen [PSA] and the PSA ratio are good screening tests for prostate carcinoma. The significance of PSA may be different from one ethnic group to another. Radiologic findings may be helpful in detecting prostate carcinoma. We reviewed the findings of 348 prostate biopsies performed in a 4-year period. Of these, 278 cases were performed under ultrasound guidance and 70 were performed transrectally under digital guidance. PSA, PSA ratio, Gleason score and radiology findings were determined. Forty-three percent of the cases were diagnosed as having adenocarcinoma. The mean age for cancer patients was 68.4 years. The mean PSA level for patients with carcinoma was 23.4 ng/mL compared to 11.2 ng/mL for benign cases. Carcinoma occurred in 11% [PSA < 4 ng/mL]; 48.7% [PSA = 4-10 ng/mL]; 50.6% [PSA = 10-30 ng/mL]; 72% [PSA > 30 ng/mL]. The PSA ratio for cancer cases was 9.9% compared to 13.7% for benign cases. The average Gleason score for all cancers was 7 of 10. There was no relationship between PSA level and Gleason score. The higher the Gleason score, the higher the percentage of carcinoma present in the cores. Most of the carcinomas [100/122] showed hypoechoic areas on ultrasound exam, while heterogeneous areas favored a benign lesion in 54/76, with a sensitivity of 82% and specificity of 38%.The higher the PSA, the greater the chance of having cancer. PSA has a low positive predictive value for prostate carcinoma. Twenty-eight percent of PSA > 30 can be attributed to benign conditions. A PSA ratio < 10 is suggestive of carcinoma. A radiologic finding of a hypoechoic lesion is a sensitive tool for detecting prostate carcinoma, but its specificity is low.
Psychodidae


Kaksarsulemankhe, J.K.
University of Balochistan - Mosquitoes and Arthropods Vectors Research/Zoology

PUJ - Parasitologists United Journal 2008; 1 (1): 47-54 (26 ref.)

Keywords: Phylogeny; Zoonoses; Gender Identity

Abstract: Sergentomyia [Parrotomyia] babu Annandale 1910 is for the first time recorded from the epidemic localities of cutaneous leishmaniasis in Sindh Province [Pakistan]. In view of the published reports about the detection of encephalitis viruses from the species of the genus Sergentomyia Franca and Parrot from the Indian localities and their possible role in kala-azar transmission, the correct identification of the species becomes of significant value in the study of epidemiology of leishmaniasis and other viral diseases. Therefore, in order to facilitate its correct identification for Zoologists and Medical researchers, S. babu Annandale is redescribed with special reference to its mouth parts, male and female genitalia. A key is also given for S. babu and its closest allies of the subgenus Parrotomyia Theodor now recorded from the country. In this light their relationships within the sub genus is also briefly discussed.

Pulmonary Disease, Chronic Obstructive

physiopathology

Chronic obstructive lung disease : perioperative management.

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Middle East Journal of Anesthesiology 2008; 19 (6): 1219-1239 (47 ref.)

Keywords: Perioperative Care; Disease Management; Pulmonary Disease, Chronic Obstructive-complications; Anesthesia; Bronchial Spasm-therapy; Anesthesia, General; Respiration, Artificial; Postoperative Care

Pulmonary Edema

Ipsilateral re-expansion pulmonary edema in a neurosurgical patient - a case report.

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India Institute of Medical Sciences - Department of Neuroanaesthesiology

Middle East Journal of Anesthesiology 2008; 19 (6): 1391-1395 (9 ref.)

Keywords: Glioma-surgery; Craniotomy; Pneumothorax; Glycopyrrolate; Neurosurgical Procedures; Anesthesia, General; Thiopental; Fentanyl; Androstanols; Isoflurane

Abstract: We report a case of a 42-year-old female with right parietal glioma, scheduled for elective craniotomy and tumor excision. The patient developed pneumothorax in the postoperative period. An incidence of unilateral pulmonary edema occurring as a result of rapid re-expansion of collapsed lungs is described. This type of pulmonary edema may delay postoperative recovery and have a catastrophic course especially in neurosurgical patients.

Pulmonary Embolism

diagnosis

64-slice CT diagnosis of pulmonary embolism.

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JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 38-41 (12 ref.)

Keywords: Pulmonary Embolism-radiography; Tomography, X-Ray Computed-methods; Retrospective Studies

Abstract: A retrospective analysis of CT findings was carried out in 44 patients who had a diagnosis of pulmonary embolism in MDCT [multi-detector computed tomography] examination. Low attenuated pulmonary artery filling defect was detected as 1.4 emboli per patient. The other secondary findings were pleural effusion in 17, wedge-shaped atelectasis in 10, oligemia in 4 and ground glass attenuation in 2. The CT findings are highlighted with a brief review of the literature. MDCT has a definite advantage of quick and high resolution scanning of the patients with multiplanner analysis of the data.
Purpura, Thrombotic Thrombocytopenic
diagnosis

Thrombotic thrombocytopenic purpura, at a tertiary care centre in Lahore, Pakistan.
Ahmad, Mona Aziz; Ahmad, Rabia; Mazari, Nazish; Shah, H.; Aizaz, M.; Khan, Anwaar A.; Waqar, S.
Sheikh Zayed Hospital - Department of Haematology
Biomedica 2008; 24 (Jan.-Jun.): 1-6 (25 ref.)
Keywords: Purpura, Thrombotic Thrombocytopenic-therapy; Prognosis; Treatment Outcome; Cross-Sectional Studies; Purpura, Thrombotic Thrombocytopenic-mortality; Plasma Exchange; Early Diagnosis
Abstract: Thrombotic thrombocytopenic purpura is a syndrome, characterized by microangiopathic haemolytic anaemia, thrombocytopenia, neurological symptoms, renal disease and fever. Commonly considered rare, but actually it is one of the most under diagnosed disorders. This study was aimed at evaluating the clinical features, course, prognostic factors and treatment outcome in 17 patients diagnosed as having thrombotic thrombocytopenic purpura [TTP]. It was a cross-sectional descriptive study at Sheikh Zayed Hospital Lahore. This study includes patients diagnosed as having TTP by the department of haematology from January 2005 to December 2007. Eight of 17 patients were treated with plasma exchange. Six of these 8 patients survived. Plasma infusions were performed in 9 patients, 5 of them recovered. Overall 65% patients recovered and mortality was 35%.

Quadriplegia
chemically induced

Quadriplegia due to lead-contaminated opium - case report.
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Middle East Journal of Anesthesiology 2008; 19 (6): 1411-1416 (14 ref.)
Keywords: Lead-adverse effects; Lead Poisoning; Opium; Motor Neuron Disease; Dimercaprol-therapeutic use; Edetic Acid
Abstract: Utilization of lead-contaminated opium may lead to severe motor neuron impairment and quadriplegia. Forty years oriented old male, opium addict, was admitted to the ICU, with headache, nausea and abdominal pain, and weakness in his lower and upper extremities without definitive diagnosis. The past medical and occupational history was negative. Laboratory investigation showed: anemia [Hb 7.7 g/dl]. slightly elevated liver function tests, elevated total bilirubin, and ESR. Abdominal sonography and brain CT scan were normal. FMG and NCV results and neurologic examination were suggestive for Guillain-Barre. He underwent five sessions of plasmapheresis. Blood lead level was > 200 micro g/dl. He received dimercaprol [BAL] and calcium disodium edetate [CaEDTA] for two five days session. Upon discharge from ICU all laboratory tests were normal and blood lead level was reduced, but he was quadriplegic. The delayed treatment of lead poisoning may lead to irreversible motor neuron defect.

Qualitative Research

Qualitative research and its uses in health care.
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SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 11-19 (33 ref.)
Keywords: Health Services Research; Anthropology, Cultural; Focus Groups
Abstract: Although relatively uncommon in health care research, qualitative research is now receiving recognition and is increasingly used in health care research with social and cultural dimensions. Unlike quantitative research, which is deductive and tends to analyze phenomena in terms of trends and frequencies, qualitative research seeks to determine the meaning of a phenomenon through description. It aims to develop concepts that aid in the understanding of natural phenomena with emphasis on the meaning, experiences and views of the participants. Differences among qualitative researchers exist on matters of ontology, epistemology, data collection methods and methods of evaluation. The aim of this article is not to act as a practical guide on how to conduct qualitative research, but is an attempt to give an introduction to qualitative research methods and their use in health-related research.
Radiography

Preliminary reporting of emergency plain radiographic examination by the primary physicians in pediatric emergency center: feasibility study and observations.
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JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 42-44 (13 ref.)
Keywords: Emergencies; Emergency Treatment; Physicians, Family; Prospective Studies; Pediatrics
Abstract: In a prospective study, preliminary reading of the plain radiographic films of pediatric emergency patients were compared with the reading of the same radiographs by the pediatric radiologists with the aim of evaluating the efficiency and accuracy of the initial reading by the treating physicians and to assess the effect on the overall patient management. Such readings may help those facilities where services of a qualified Pediatric radiologist are not immediately available. Our analysis indicates that in approximately 72% of patients, both reports are in agreement. However, there was a statistically significant difference in radiological observations in the patient group who had a discordant report [Kappa value=0.05]. Nevertheless, we did not come across any major discrepancy that needed altered management during the study period. Hence we conclude that under circumstances where expert help is not immediately available, primary physicians can be trained to read the plain radiographs without significantly affecting patient management.

Randomized Controlled Trials as Topic

Assessing the quality of randomized controlled trials from two leading cancer journals using the CONSORT statement.
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Turkey University - Medical Faculty - Department of Biostatics
Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 38-43 (21 ref.)
Keywords: Periodicals as Topic; Neoplasms; Quality Control
Abstract: No study has been conducted on the scientific quality of randomized controlled trials [RCTs] in the cancer field. Our objective was to determine whether adherence to the Consolidated Standards for Reporting Trials [CONSORT] statement is associated with scientific properties of RCT reports from two leading cancer journals. We conducted an observational study of RCTs published between 2002 and 2004 in two leading cancer journals that did not endorse the CONSORT statement during that period. We determined the adherence rates with confidence intervals of 33 RCTs according to the 19 methodological items of the CONSORT statement. Each RCT was blindly assessed by three independent evaluators; then the evaluators examined all judgments sequentially and obtained a consensus regarding each methodological item of the CONSORT statement. The average adherence of these 33 RCTs to the 19 methodological items of the CONSORT statement was 79.3% [95% CI, 75.3-83.4%]. Most descriptors from the checklist were determined to be methodologically adequate except sequence generation [56.1%; 95% CI, 40.9-71.3%], allocation concealment [27.3%; 95% CI, 13.2-41.4%], implementation [7.6%; 95% CI, 0.0-15.4%], blinding [30.3%; 95% CI, 14.4-46.3%] and sample size [74.2%; 95% CI, 59.5-89.0%]. Of all CONSORT checklist items, randomization implementation was the most often omitted. Some key methodological items of the CONSORT statement seem poorly addressed in RCTs from these leading cancer journals. Thus researchers should be urged to conform to the CONSORT statement when reporting on RCTs, and the poorly addressed items of the CONSORT statement should be reevaluated for RCTs already reported.

Receptors, Cannabinoid

[Mechanism of the interaction of cannabinoid system in central amygdale with opioid system]
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Ahwaz Jondishapour University of Medical Sciences - Faculty of Medical
Qom University of Medical Sciences Journal 2008; 1 (4): 15-24, 2 (46 ref.)
Keywords: Amygdala-drug effects; Rats; Anxiety; Morphine-administration and dosage; Injections, Intraperitoneal; Naloxone
Abstract: Cannabinoids which are active compounds of marijuana show some pharmacological effects similar to the opioids. There are also functional interactions between both cannabinoid and opioid systems. In this study we investigated the role of cannabinoid receptors in central amygdala and its interaction with opioid system. In the present
study, we investigated the effects of intraperitoneal injection of opioid drugs on response-induced by intra-amygdala [intra-Amyg] microinjection of cannabinoid agents in rats, using elevated plus-maze test of anxiety. Intraperitoneal injection of morphine [3, 6 and 9 mg/kg] increased%OAT and%OAE, but not locomotor activity, showing an anxiolytic response. However, some doses of the opioid receptor antagonist, naloxone reduced%OAT and locomotor activity as well. Intra-Amyg administration of CB1 cannabinoid receptor agonist, ACPA [at the dose of 1.25 and 5 ng/rat] increased%OAT and%OAE but not locomotor activity, thus showing an anxiolytic response, which was increased by morphine [6 mg/kg, i.p.] without any interaction. Naloxone also reduced ACPA effects. Intra-Amyg administration of CB1 cannabinoid receptor antagonist, AM251 [2.5, 25 and 100 ng/rat] did not alter%OAT and%OAE but higher doses of drug [25 and 100 ng/rat] reduced locomotor activity. However, the drug in combination of morphine anxiolytic response and with naloxone decreased anxiety. The results may indicate an anxiolytic for CB1 cannabinoid. Our results also showed that opioid system may have interaction with cannabinoid receptor in the amygdala.

Rectal Fistula

diagnosis

The role of magnetic resonance imaging in perianal fistula.
Baddar, Hassan Al Prince
Alexandria University - Faculty of Medicine - Department of Radiology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 81-90 (21 ref.)
Keywords: Anus; Diagnostic Techniques and Procedures; Magnetic Resonance Imaging
Abstract: Anorectal abscesses originate from infection arising in the cryptoglandular epithelium lining the anal canal. Infection of the stagnant glandular secretions results in abscess formation within the anal gland. The internal anal sphincter is believed to serve normally as a barrier to infection passing from the gut lumen to the deep peri-rectal tissues. This barrier can be breached through the crypts of Morgagni, which can penetrate through the internal sphincter into the intersphincteric space; there it has easy access to the adjacent perirectal spaces. Extension of the infection can involve the intersphincteric space, ischiorectal space, or even the suprarelevator space. Anorectal fistulas occur in 30-60% of patients with anorectal abscesses, other etiologies of anorectal fistulas are multifactorial and include diverticular disease, irritable bowel disease [IBD], malignancy, and complicated infections such as tuberculosis or actinomycosis. Clinical evaluation of these conditions is not sufficient and conventional fistulogram is non-favorable technique for patients and radiologists, so the role of MRI in the pelvis with different pulse sequences was studied in many centers, however no full agreement about the most suitable cost effective MRI technique to evaluate these patients. To evaluate the best pelvic magnetic resonance imaging protocol for different types of perianal fistulae to visualize its extent and anatomical relations. Fifty patients with clinical evidence of anal fistulas underwent pelvic MRI performed with phased-array coil. Images were obtained in the axial and coronal planes using T2-weighted high resolution sequences with and without fat suppression and TI-weighted sequences, with and without fat suppression, before and after gadolinium enhancement, STIR and gradient TI and T2. The following parameters were considered: presence of a fistula and relation with the sphincters, and presence of abscesses or side tracts. All patients underwent surgery. The MRI and surgical findings were assessed using the St. James MR imaging classification of perianal fistulas. Patients were thirty one males and nineteen females. The average age was twenty eight years. Grade I, [linear intersphicteric] perianal fistula were detected in 15 [30%] patients. Grade 2, [linear intersphicteric with abscess] perianal fistula were detected in 19 [38%] patients. Grade 3, [perianal fistula were detected in 5 [10%] patients. Grade 4, [trans-sphincteric with abscess] perianal fistula were detected in 5 [10%] patients. Grade 5, [translevator with or without abscess.] perianal fistula were detected in 6 [12%] patients. All fistulae were well seen in axial STIR sequences. Post contrast studies were more accurate in delineation of the abscess wall formation. T2 with fat sat was more accurate to delineate fine side branches. Axial planes were more sensitive to delineate the level of orifice entry into the anal canal. Magnetic resonance imaging is a reliable technique to evaluate the perianal fistulae, it is well tolerated form patients and it is easier for the radiologist as no need to canulate the fistula. Three MRI sequences are recommended for full evaluation of perianal fistula and abscess. Axial STIR T2 sequences are sensitive and should be done to delineate the level of orifice entry to the anal canal, followed by axial T2 with fat saturation to anal anatomical relations with fistula and coronal post contrast TI weighted with fat saturation to diforminate old scars from the wall of abscess cavity.
**Rectal Neoplasms**

**drug therapy**

A retrospective comparison of concurrent bolus 5-fluorouracil or raltitrexed in preoperative chemoradiation for locally advanced rectal cancer.

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**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (1): 28-33 (23 ref.)

**Keywords:** Rectal Neoplasms-surgery; Rectal Neoplasms-radiography; Fluorouracil-therapeutic use; Thymidylate Synthase-antagonists and inhibitors; Radiotherapy; Antineoplastic Agents; Retrospective Studies

**Abstract:** 5-fluorouracil [FU] is commonly used in preoperative chemoradiation in locally advanced rectal cancer, but not all patients cooperate in taking the 5-day continuous infusion regimen. Raltitrexed [RA], a thymidylate synthase inhibitor, is one of the agents used in place of FU in such cases. We retrospectively compared the toxicity, tumor downstaging, pathologic response and relapse rate with bolus FU or RA during concurrent radiotherapy [RT] to assess the role of RA in place of FU. We conducted a retrospective analysis of response rates and toxicity data on 59 patients diagnosed with locally advanced rectal cancer and treated with surgery following preoperative chemoradiation with either concurrent FU or RA between January 1999 and December 2004. Median follow-up was 38 months [range, 1-70]. Ten patients [10%] had grade 3 gastrointestinal [GIS] toxicity during chemoradiation. The pathologic complete response rates were 6% with FU and 7% with RA [P=0.844], while 66.7% of patients treated with FU and 37.1% with RA had downstaging of the T stage after chemoradiation [P=0.026]. The sphincter preservation rates were 45.8% with FU and 51.4% with RA [P=0.912]. The 5-year local control rates were 79.2% for patients treated with RT+FU and 85.76% for patients treated with RT+RA [P=0.510]. Compared with the RT+RA regimen, the incidence of downstaging was greater with RT+FU but RT+FU was associated with a correspondingly greater rate of acute grade 2 GIS toxicity. However, no significant differences were seen in sphincter preservation, pathologic complete response, local control and distant recurrences rates among patients. FU seems to be the best therapeutic choice, while RA seems to be as effective as bolus FU.

**Reproduction**

**Knowledge and attitude of adolescent girls towards reproductive health in Cairo, Egypt.**

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Al Azher University - Faculty of Medicine - Public Health and Community Medicine Departments

**Egyptian Journal of Community Medicine** 2008; 26 (1): 43-57 (21 ref.)

**Keywords:** Knowledge, Attitudes, Practice; Adolescent; Cross-Sectional Studies; Schools; Questionnaires; Marriage; Fertilization; Family Planning Services; Epidemiologic Studies

**Abstract:** Knowledge of adolescent girls - as future mothers - about reproductive health represents a major protective issue world wide and in Egypt. To identify knowledge and attitude of adolescent girls toward reproductive health among secondary school in Cairo, Egypt. A cross sectional study was carried out to assess the knowledge and attitude of adolescent girls toward reproductive health at secondary schools in Cairo, Egypt. By multistage random sample, a total of 346 girls were chosen to explore the underlying variables. The girls were enrolled from different departments either science or literature during their presence at school in the period from January 2007 to may 2007. Well structured questionnaire was used for collection of the required data. Scores for knowledge and attitude were done. Administrative and ethical issues including autonomy, confidentiality and informed consent were obtained during all stages of the study. Data collected were analyzed on SPSS program version 12. Descriptive and analytic statistics were done. The lowest accepted level of significance was 0.05 or less. The study revealed that the students have accepted score about pre-marriage period [6.45/10] with no statistically significant differences between those studying science and those of literature department. Premarital examination and counseling achieved the highest knowledge score; it was known by 93.6%. Adolescents have very poor knowledge regarding marriage, conception and family planning. The achieved score was 3.59/10 with no statistically significant differences between both departments. Breast feeding scored the highest score among elements of this component [known by 99.7%] of the studied girls. Immunization during pregnancy and knowing types of family planning scored the least scores among this component [19.7% and 31.8% respectively]. The total knowledge score achieved by the adolescents was very poor [12.47/24] with no statistically significant difference between both departments. The study revealed absence of family role as a source of information in more than half of the studied sample. The respondents show positive attitude towards the researched items of reproductive health [84.1% show positive attitude and 15.3% show neutral attitude]. In conclusion, there are great shortages in the knowledge about reproductive health. It would be a missed opportunity not to provide correct information about reproductive health in schools. This study suggests the need for education reforms through use of reproductive health curricula [international standards, mission, educational objectives, and well constructed curricula]. The role of families, mass media, and school seminars about reproductive health should not be ignored and must be enhanced Telephone helpline services may be provided both confidentially and free of charge.
Reproductive Techniques, Assisted

ethics

Ethical and social considerations of assisted reproductive techniques in the United Arab Emirates.
Robertson, David; Ghazal Aswad, Saad
Tawam Hospital - Departments of Obstetrics and Gynaecology
Emirates Medical Journal 2008; 26 (2): 79-83 (24 ref.)
Keywords: Fertilization in Vitro-ethics; Sperm Injections, Intracytoplasmic-ethics; Insemination, Artificial-ethics; Counseling; Age Factors

Respiration Disorders

drug therapy

Training on the Practical Approach to Lung Health: effect on drug prescribing in PHC settings in Jordan.
Abu Rumman, K.; Ottmani, S.; Abu Sabra, N.; Baghdadi, S.; Seita, A.; Blanc, L.
 Ministry of Health - National Tuberculosis Control Programme
Keywords: Medication Therapy Management; Practice Guidelines as Topic; Primary Health Care-education; Drug Prescriptions; Physicians, Family-education; Health Surveys; World Health Organization
Abstract: This study assessed whether training physicians on the Practical Approach to Lung Health [PAL] reduces drug prescribing and the cost of drugs prescribed to respiratory patients in the primary health care setting. Data were compared before and after training general practitioners on standard guidelines for case management of respiratory conditions in primary care. A total of 56 general practitioners practising in 25 health centres in 3 out of 12 governorates of Jordan participated in both the baseline survey [n = 6260 respiratory patients] and the impact survey [n = 2709 patients]. Training in PAL decreased by 12.2% the number of drugs prescribed per patient, increased the prescription of inhaled medications and reduced the mean cost of a drug prescription per patient by 8.7%.

Rhinitis, Allergic, Perennial

epidemiology

[Prevalence of allergic rhinitis in a rural area of Settat, Morocco]
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Hassan II Hospital - Internal Medicine Unit
Keywords: Rhinitis, Allergic, Perennial-etiologie; Prevalence; Risk Factors; Rural Population; Intestinal Diseases, Parasitic; Age Distribution; Eosinophilia
Abstract: We evaluated the prevalence of allergic rhinitis in a rural population of Settat and its relationship with intestinal parasitosis and living conditions. The sample comprised 336 subjects living in 3 clusters. Rhinitis was evaluated using the ISAAC questionnaire. Prevalence of rhinitis was 37.8%. It was higher in those aged 15-49 years, illiterate subjects, active smokers, those presenting with overweight and those with hypereosinophilia. It was significantly lower in children < 10 years. Rhinitis was associated with sibship size and literacy, but not with intestinal parasitosis and helminth infections.
Rifampin

administration and dosage

The effect of vehicles on spray drying of rifampicin inhalable microparticles: In vitro and in vivo evaluation.
Darbandi, M.A.; Najafabadi, A. Rouholamini; Gilani, K.; Tajerzadeh, H.
Tehran University of Medical Sciences - Faculty of pharmacy - Aerosol Research Laboratory
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2008; 16 (3): 128-135 (22 ref.)
Keywords: Rifampin-chemical Synthesis; Rifampin-pharmacokinetics; Solvents-pharmacokinetics; Absorption; Lyases; Water; Microscopy, Electron, Scanning; Spectroscopy, Near-Infrared; Densitometry; Rats, Wistar
Abstract: The aim of this study was to evaluate the effect of solvents used in the spray drying and the aerodynamic properties of the rifampicin microparticles and pulmonary absorption of the microparticles. Different mixtures of dichloromethane and water were used as solvents for spray drying of rifampicin microparticles. The water to dichloromethane ratios were 25:75, 50:50, 75:25, 80:20, 90: 10 and 100:0. The solutions were dried at inlet temperature of 70 °C. The powder properties of the samples were examined by laser diffraction, scanning electron microscopy [SEM], helium densitometer and infrared spectroscopy [IR]. The aerosolization performance of these formulations was investigated using an Andersen cascade impactor. Pulmonary absorptions of formulations were examined by the in situ pulmonary absorption described by Enna and Schanker method. The plasma concentration time profiles of rifampicin were constructed 8 hours following the intravenous and the intrapulmonary administrations. The pharmacokinetics parameters, C[max], T[max], t[1/2], AUC, mean residence time [MRT], K[a] and K[e] were determined for each formulations. The T[max] values for the samples decreased by increase in the amount of water in the initial feed. The T[max] values for the spray dried samples from the different mixtures of dichloromethane and water were 60 [min] and 30 [min] respectively. The solvent mixture as the spray drying vehicle played an important role in the in vitro and in vivo lung deposition. The type of spray drying vehicle showed significant effect on the aerodynamic behavior and pharmacokinetic parameters of the particles. The pulmonary absorption of drug revealed the possibility of achieving the minimal inhibitory concentration [MIC] of the antibiotics. The spray drying vehicle only affected absorption patterns of the formulations and it did not have any effect on the elimination rate of particle.

Rubella Vaccine

immunology

Distinguishing between primary infection and reinfection with rubella vaccine virus by IgG avidity assay in pregnant women.
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Tehran University of Medical Sciences - School of Public Health
Keywords: Immunoglobulin G-blood; Immunoglobulin G-diagnostic use; Pregnancy-immunology; Rubella-immunology; Antibody Affinity-immunology
Abstract: During the mass measles/rubella vaccination campaign in 2003 in Iran, many pregnant women were vaccinated mistakenly or became pregnant within 1 month of vaccination. To distinguish pregnant women who were affected by rubella vaccine as primary infection from those who had rubella reinfection from the vaccine, serum samples were collected 1-3 months after the campaign from 812 pregnant women. IgG avidity assay showed that 0.3% of the women had no rubella-specific IgG response; 14.4% had low-avidity anti-rubella IgG and were therefore not immune to rubella before vaccination; 85.3% had high-avidity antirubella IgG and were regarded as cases of reinfection.

Schistosomiasis mansoni

diagnosis

Detection of schistosoma mansoni DNA in human blood as a diagnostic method for schistosomiasis.
Sadek, Mohamed S.M.; El Missiry, Adel M.G.; El Tonsy, Manar M.S.; Hussein, Hesham M.; El Asmar, Mohamed F.; Ebrahim, Sabah A.A.
Ain Shams University - Faculty of Medicine - Departments of Parasitology
PUJ - Parasitologists United Journal 2008; 1 (1): 31-36 (22 ref.)
Keywords: DNA; Polymerase Chain Reaction; Hemagglutination Tests; Sensitivity and Specificity; Schistosomiasis mansoni-isolation and purification

Abstract: Schistosomiasis is a major health problem, the diagnosis of which relies on direct examination for ova, and/or serological assays for specific antibodies and circulating antigens. The present study aimed at evaluating the detection of Schistosoma mansoni DNA by polymerase chain reaction [PCR] versus the detection of antibodies by indirect haemagglutination test [IHAT] as means for diagnosis of Schistosomiasis in human blood. The individuals under study were categorized into four groups. Group I included 36 patients with active intestinal Schistosomiasis. Group II included 20 patients with past history of intestinal Schistosomiasis. Group III included 20 patients with Schistosoma haematobium and other parasitic infections, and finally group IV which included 15 individuals serving as negative controls. For all groups under study stool and urine were examined for parasitic ova; serum was examined for S. mansoni circulating DNA by PCR and for the detection of bilharzial antibody by IHAT. PCR proved highly significant in diagnosis of active intestinal Schistosomiasis with a sensitivity of 97.2%, specificity of 100%, predictive value of positive [PVP] of 100%, predictive value of negative [PVN] of 98.2% and a diagnostic accuracy of 98.9%. All cases in group II, III, and IV were negative. IHAT results showed a sensitivity of 77.8% in group I, 90.0% in group II, 25% in group III and in group IV all cases were negative. The specificity of IHAT in the diagnosis of active intestinal Schistosomiasis was 85.7%, with PVP 84.8% and PVN 78.9%; the diagnostic accuracy was 81.6%. S. mansoni DNA detection may be used as a valuable and species specific test for diagnosis of early infection or in situations of low worm burden in which other diagnostic methods show low sensitivity and specificity. Early treatment of such cases avoids the occurrence of irreversible pathological damage by the deposited eggs.

Seawater

Exceptional phenomenon of coloured waters in spring 2007 in Lebanese coastal zone of Zouk-Nahr el Kelb.

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National Center for Marines Sciences - National Council for Scientific Research
Lebanese Science Journal 2008; 9 (1): 61-70 (24 ref.)

Keywords: Seasons; Eutrophication; Algae

Abstract: A brownish coloring in the Lebanese coastal water of the area Zonk - Nahr el Kelb area was detected in May 2007. The qualitative and quantitative analyses, in comparison with preceding data, showed that this phenomenon was due mainly to the massive and exceptional bloom of both a centric diatom Skeletonema costatum [Greville] Cleve reaching 1, 6 x 10[7]L[-1] cells. and an ichthyotoxic raphidophyte Heterosigma akashiwo [Hada] Hada reaching approximately 9 x 10[6] L[-1] cells. The maximum of this proliferation was located in surface water opposite Zonk power plant where the measured rates of chl-a reached 32 mg.m[-3] indicating a phenomenon of eutrophication. Attempts were made at explaining the mechanism of development of this algal bloom. The hydro-climatic conditions prevailing during a heat wave coupled with nutrient availability are probably the cause to the development of this phenomenon. The fact that the benthic cysts produced by the cells of H. akashiwo may develop each year when the conditions of the environment heat wave coupled with nutrient availability are probably the cause to the development of this phenomenon. The individuals under study stool and urine were examined for parasitic ova; serum was examined for S. mansoni circulating DNA by PCR and for the detection of bilharzial antibody by IHAT. PCR proved highly significant in diagnosis of active intestinal Schistosomiasis with a sensitivity of 97.2%, specificity of 100%, predictive value of positive [PVP] of 100%, predictive value of negative [PVN] of 98.2% and a diagnostic accuracy of 98.9%. All cases in group II, III, and IV were negative. IHAT results showed a sensitivity of 77.8% in group I, 90.0% in group II, 25% in group III and in group IV all cases were negative. The specificity of IHAT in the diagnosis of active intestinal Schistosomiasis was 85.7%, with PVP 84.8% and PVN 78.9%; the diagnostic accuracy was 81.6%. S. mansoni DNA detection may be used as a valuable and species specific test for diagnosis of early infection or in situations of low worm burden in which other diagnostic methods show low sensitivity and specificity. Early treatment of such cases avoids the occurrence of irreversible pathological damage by the deposited eggs.

Securidaca

[Effect of aqueous seed extract of securigera securidaca on erythrocytes catalase activity in type 1 diabetic rats]
Roostazadeh, A.; Firouzrai, M.; Shabani, M.
Iran University of Medical Sciences - Department of Biochmistry
Qom University of Medical Sciences Journal 2008; 1 (4): 9-13, 1 (23 ref.)

Keywords: Plant Extracts-therapeutic use; Diabetes Complications-prevention and control; Catalase-drug effects; Erythrocytes-enzymology; Diabetes Mellitus, Type 1; Oxidative Stress-drug effects; Rats, Wistar

Abstract: Complications in diabetes mellitus are associated with free radicals and oxidative stress. The human body prevents these complications through antioxidant defense mechanisms. The aim of the study was to investigate the effect of aqueous seed extract of Securigera Securidaca on erythrocyte catalase activity in type 1 diabetic rats. At the present interventional study thirty male wistar rats were used. Animals were divided to two groups including normal and diabetic [n = 15 per each group]. Each group was divided further to control and experimental subgroups. The experimental subgroups were received 100 and 200 mg/kg/day of the plant extract intraperitoneally. After thirty days administration, blood sample was directly collected from the heart and erythrocyte catalase activity was assessed. Catalase activity decreased in diabetic control group significantly [P = 0.002]. Furthermore, catalase activity in groups treated at two doses of 100mg/kg and 200mg/kg was significantly different as compared to control group [P = 0.003]. The aqueous seed extract of Securigera Securidaca probably could be effective in decreasing diabetic complications through improvement of antioxidant response by altering catalase activity and consequently reducing oxidative stress.
Self-Evaluation Programs

standards

[Senior medical students’ self evaluation of their capability in general competencies in Shiraz University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 371-377 (13 ref.)
Keywords: Students, Medical; Professional Competence-standards; Clinical Competence; Education, Medical; Universities; Schools, Medical
Abstract: Evaluating graduates’ proficiencies can provide a helpful reflection of medical education performance and lead to its improvement. The aim of this study was to assess general competencies of final year medical students from their own viewpoints. In this descriptive-evaluative study, 71 graduating students of Shiraz University of Medical Sciences evaluated themselves based on a 101 item evaluation form with Likert scale, in 17 general medical competencies. Calculating the mean scores given to the items related to each competency, their score in each competency was determined. Medical graduates of this university had the mean scores of more than 3.5 for each competency. The highest scores belonged to the competencies including case presentation [4.94 +/- 0.75], basic procedures [4.83 +/- 0.47], tests interpretation [4.69 +/- 0.53], and diagnostic decision-making [4.69 +/- 0.66]. The lowest scores belonged to geriatrics [3.56 +/- 0.75], nutrition [3.56 +/- 0.84], practice management [3.73 +/- 0.80], and advanced procedures [4.02 +/- 0.75], respectively. The medical education program in Shiraz University of Medical Sciences is more patient-centered rather than community oriented. Therefore, improving the competencies needed by the society such as geriatrics, nutrition, practice management, and advanced procedures requires more attention in the educational programs as well as continuing medical education. Improving these competencies can result in a better care delivery by general practitioners in the community.

Sepsis

drug therapy

Effectiveness of drotrecogin alpha [activated] in the treatment of patients with severe sepsis admitted to the intensive care unit at tripoli medical center: one year experience.
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Keywords: Recombinant Proteins-therapeutic use; Anti-Infective Agents; Intensive Care Units; Protein C
Abstract: This study aims to evaluate the effectiveness and safety of Drotrecogin alpha [activated] in the treatment of patients with severe sepsis. Twenty two patients admitted to Medical Intensive Care Unit [MICU] of Tripoli Medical Centre due to of severe sepsis during one year period [from December 2006 to December 2007] were found eligible to receive Drotrecogin-alpha. A continuous 96-hour intravenous infusion of Drotrecogin-alpha [activated] [Xigris] at a dose of 24 micro g/kg body weight per hour was given. Twenty eight day mortality and drug safety were evaluated. Thirteen patients [59.1%] were males, median age was 49 years. The median number of organ dysfunction was 4 organs. Drotrecogin-alpha [activated] was started within 48 hours from admission to MICU in 16 patients. Adverse effects were noted in 3 patients [13.6%]; two of them [9%] had a significant bleeding and one [4.5%] died of a non-bleeding cause. Six [27.3%] recovered from the sepsis. The 28 day hospital mortality was [68.2%]. Drotrecogin alpha [activated] did not improve the mortality rates in our study. The outcome was better for those who received treatment within 48 hours of admission to MICU. Severe side effects were double the rate reported in literature. No deaths were due to bleeding. Further studies on the role of Drotrecogin alpha in the treatment of patients with high risk of death due to sepsis are needed.
**Shock, Hemorrhagic**

**drug therapy**

Hypertonic saline 5% vs. lactated ringer for resuscitating patients in hemorrhagic shock.

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*Middle East Journal of Anesthesiology* 2008; 19 (6): 1337-1347 (20 ref.)

**Keywords:** Saline Solution, Hypertonic-therapeutic use; Isotonic Solutions; Resuscitation; Hemodynamics; Double-Blind Method; Gastrointestinal Hemorrhage; Blood Pressure; Heart Rate; Central Venous Pressure; Treatment Outcome

**Abstract:** Through hypertonic and isotonic crystalloids are used nowadays in resuscitating patients in hemorrhagic shock, yet there is no sufficient data in support of either. The aim of this study was to compare the hemodynamic effects of hypertonic saline 5% and lactated ringer solutions when used for the resuscitation of patients in hemorrhagic shock. In a double-blinded randomized clinical trial, sixty adult patients in hemorrhagic shock admitted to the Emergency Department of a teaching Hospital between September 2005 and September 2006, were enrolled in this study. Patients were divided into two groups, The first group received lactated ringer 20 ml/kg, and the second group received 4 ml/kg of 5% hypertonic saline infused intravenously within 10 to 15 minutes followed by lactated ringer 10 ml/kg/hr. Hemodynamic parameters were measured at hospital admission as well as every 15 minutes for an hour and the results were compared between the two groups. Gastrointestinal bleeding was the most common cause of shock. There was a significant difference between the baseline and final hemodynamic parameters [MAP, HR, CVP] in each group; however, data of the two groups did not differ significantly. The PaO[2] was higher in the lactated ringer group and there was no difference in PaCO[2] neither in each group nor between the two groups. Both hyper and isotonic crystalloid solutions can improve hemodynamic status and the blood gas measurements, similarly; however, lactated ringer is a more potent solution in improving tissue oxygenation.

**Sinusitis**

**microbiology**

Allergic fungal sinusitis.

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Dubai Hospital - Dubai Health Authority - Department of Otolaryngology Head and Neck Surgery

*Emirates Medical Journal* 2008; 26 (2): 121-123 (8 ref.)

**Keywords:** Sinusitis-immunology; Hypersensitivity; Mycoses; NAS of Polyps; Enophthalmos-etiology; Tomography, X-Ray Computed; Endoscopy; Amphotericin B-therapeutic use; Prednisolone-therapeutic use

**Abstract:** Allergic fungal sinusitis is the commonest form of fungal sinusitis which is analogous to allergic bronchopulmonary aspergillosis in many aspects. Once looked upon as a rare disease which now seems to be increasing in incidence either due to better diagnostic criteria or due to genuine increase in the number of cases. We report a case presented as allergic fungal sinusitis with infratemporal extension and expansion with bone resorption into intracranial region in an asthmatic teenager who was treated successfully with a combination of surgery and medical interventions.

**Skull**

**growth and development**

[Effect of sexual hormone elimination on the changes of craniofacial dimensions in rats]

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Shahid Beheshti University of Medical Sciences - Dental School - Department of Orthodontics


**Keywords:** Facial Bones-growth and development; Gonadal Steroid Hormones-deficiency; Rats, Wistar; Testosterone-blood; Progesterone-blood; Estradiol-blood; Enzyme-Linked Immunosorbent Assay

**Abstract:** It is well - known that sex hormones regulate bone metabolism. Sex steroids increase osteoblasts activities and affect growth, remodeling and bone homeostasis. The aim of this study was to examine the effects of sex hormones deficiency on craniofacial growth in rats. Fifty, thirty-day-old Wistar rats comprised the sample in this experimental study. 25 male rats were divided into 2 groups: Experimental group, ORX, [n=15] and control group, sham-operation, [n=10]
and 25 female rats were divided in the same way: Experimental group, OVX, \([n=15]\) and control group, sham-operation, \([n=10]\). Body length and weight were registered monthly. The rats were sacrificed 6 months after the surgery. Direct millimetric measurements of the skeletalental variables and the tibial length were obtained by using electronic caliper. Serum testosterone, progesterone and estradiol levels were measured by ELISA. One Way ANOVA, Tukey and Student \(t\) tests were used to analyze the data. Serum testosterone level significantly decreased in the ORX group as compared with the male sham-operated group. In the ORX group, body length and weight, coronoid height, mandibular length, mandibular arch length, midfacial height, midfacial length, maxillary arch width, premaxillary length, nasal bone height, facial width, basiethmoid bone length and tibia bone length were significantly smaller than in the male control group. Structures showing cartilaginous growth were influenced more than structures showing sutural growth. Estradiol level did not change in OVX group, but despite the significant decrease in progesterone level, no significant differences except weight were found between the OVX group and female control group. In conclusion, it is strongly suggested that the suppression of sex hormones secretion in the growth phase might inhibit craniofacial growth and results in poor craniofacial development and developing malocclusion.

**Sleep Apnea, Obstructive**

**Abstract:** Screening of patients with snoring and obstructive sleep apnoea using heart rate variability indices.

Al Rawas, Omar; Al Riyami, Bazdawi; Goddard, Christopher; Hassan, Mohammed O.
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 21-25 (22 ref.)

**Keywords:** Snoring; Mass Screening; Heart Rate-analysis; Electrocardiography, Ambulatory; Cost-Benefit Analysis

**Abstract:** Snoring and obstructive sleep apnea [OSA] are common disorders. Snoring associated with excessive daytime sleepiness is the most prevalent symptoms of OSA. Heart rate variability [HRV] is altered in patients with OSA and the degree of alteration may be linked to the severity of OSA. Alterations in HRV in 24 hour tachograms have recently been used in screening OSA patients. Autonomic components causing HRV can be reliably studied using spectral analysis techniques involving fast Fourier transformation [FFT]. Twenty-three subjects, 13 with severe OSA and 10 controls matched for age and body mass index, were selected from patients who had undergone polysomnography [PSG] for snoring at Sultan Qaboos University Hospital, Oman. A 24-hour electrocardiogram [ECG] Holter recording was done at home, starting at 10am. Spectral analysis of ECG from sleep Holter and PSG recordings was analysed using fast Fourier transformation [FFT]. The ECG RR intervals of snorers with OSA were significantly shorter than in snorers without OSA \([p < 0.01]\). The low frequency [LF] spectral densities of HRV from polysomnography and Holter were significantly higher in OSA patients than in snorers, \([p < 0.0001]\). The power spectral density of the high frequency bands was similar in the two groups. The overnight ECG Holter accurately identified all 13 snorers with severe OSA. The spectral power of the LF band obtained using FFT of sleep HRV from Holter tachograms may be a useful and cost effective test in identifying snorers with severe OSA.

**Smoking epidemiology**

**Abstract:** Prevalence and determinants of waterpipe tobacco use among adolescents in Oman.

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Ministry of Health - Department of Non-Communicable Diseases
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 37-43 (29 ref.)

**Keywords:** Prevalence; Cross-Sectional Studies; Questionnaires; Perception; Smoking-prevention and control

**Abstract:** To assess the prevalence and determinants of waterpipe use among school-going adolescents in Oman. A cross-sectional, school-based study was conducted in 2003 involving 9 regions of Oman, as part of the Global Youth Tobacco Survey. Participants were requested to complete an anonymous questionnaire containing demographic characteristics, current and previous use of waterpipe tobacco, attitudes towards cigarette smoking, parents' and friends' cigarette smoking habits. Proportions were used to calculate prevalence rates and logistic regression analysis to obtain odds ratio [OR] and 95% confidence interval [CI]. 1,962 students participated of whom 1,005 [51.2%] were males. Eighty-eight percent were between 13 and 16 years of age. Five hundred and twenty-two [26.6%] reported ever smoking waterpipe tobacco while 189 [9.6%] were current users. Among males, 155 [15.5%] were current users while among females only 24 [2.6%] smoked currently. Study participants were more likely to use waterpipe if they had a parent or friend who smoked cigarettes. Adolescents were, however, less likely to use waterpipe tobacco if they believed that cigarette smoking was harmful to health. Students who were receiving 500 Baisas [US$ 1.3] or more per day pocket money were more likely to use waterpipe tobacco compared to those receiving less [OR 3.3, 95% CI 2.3 to 4.6]. In multivariate analysis, the OR for males being a smoker of waterpipe tobacco compared to females was 4.46 [95% CI, 2.38 to 8.35]; while the OR for most or all friends smoking cigarettes compared to non-smoking was OR 5.65 [95% CI 2.87 to 11.13]. Study participants who perceived smoking as harmful to health were less likely to use waterpipe tobacco compared to those who did not believe smoking was harmful [OR 0.31, 95% CI 0.29 to 0.92] and those receiving 500
Snails

parasitology

Distibution of freshwater snails with special reference to schistosomiasis intermediate host in El-Genaid sugar cane farm, central sudan.

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university of gezira - institute of nuclear medicine molecular biology and oncology


keywords: schistosomiasis-transmission; schistosomiasis-parasitology

abstract: Several sugar cane factories for production of sugar in the Sudan. To each of these factories, a sugar cane farm was attached. Snail distribution, and specially distribution of the intermediate host snails of schistosomiasis, in the cane farms, in the Sudan, was never studied. The study was carried out from February 1995 to May 1996. The objectives is to study on the distribution of fresh water snails in a sugar cane farm in the Sudan. To determine the distribution of the different species seasonally in the canalization system of the sugar cane farm, with special reference to schistosomiasis intermediate host snails. Twenty scoops were taken at each sampling site during the monthly visits. Snails were identified to the species level intermediate host snails were screened for patent infection. The canalization system farm is a suitable habitat for fresh water snails. Seven species of snails are found in the canals. The prosobranchs snails, Cleopatra and Melanoides, dominate all other species. Snail species show marked variation between the canals and in the monthly distribution. The density of all snail species drops during the rainy season. Environmental factors; such as water flow, water level and density of vegetation; do no effect the distribution of the fresh water snails in the canalization system. The reproduction of B. pfeifferi snails in Algenaid farm has been affected by unknown factors which need further investigation to determine the reasons. There is the possibility of shift from S. mansoni to S. haematobium.

software

[The analysis of qualitative study data using software]

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IJME - Iranian Journal of Medical Education 2008; 7 (2): 423-436 (17 ref.)

keywords: Qualitative Research

abstract: The use of softwares for analyzing research data is increasing everyday. Making use of softwares specified for the analysis of qualitative data has begun since 20 years ago, and has been exposed to so many changes so far. Researchers have used the existing softwares such as word processors to facilitate the analysis practice, even before using specific softwares. Different softwares have several capabilities from encoding the text and searching through the text for repetitions of the codes to proposing hypothesis. Furthermore, other fe Autres such as determining the codes occurring simultaneously or at the same place, finding the associations between the codes, attaching notes to the codes, searching the notes to find common instances, and displaying data in different modes are some other potentialities of these softwares. Making use of these fe Autres leads to saving time, managing large volume of information, enhancing the accuracy and validity of the data, and possibility of performing more complicated analysis. Beside these benefits, there are some limitations in using these softwares such as uniformity of the approaches used to analyze qualitative data, emphasizing too much on coding the data, separating the researcher from data, and the trading aspects of the softwares. Presence of such benefits and limitations brings up the question that whether or not to use these softwares for analyzing qualitative data. Although there is no clear answer to this question, it is the researcher's job to decide for this issue, considering different aspects of his own study. There are so many points to consider in choosing the type of software which will be mentioned in this article. In general, the available softwares are just to facilitate the analysis process, not to analyze the data by themselves. In other words, the analysis and interpretation of the qualitative data is always the researcher's main responsibility.
Spinal Dysraphism

Diagnosis

Diagnostic value of spinal ultrasound: a comparative study with magnetic resonance imaging in infants with spinal dysraphism.
Zakaria, Yasser Mazloum; Hegab, Sherif El Sayed; El Fawal, Sara Kamal; Orz, Yasser Ismail
Alexandria University - Faculty of Medicine - Department of Radiodiagnosis
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 47-61 (33 ref.)
Keywords: Infant, Newborn; Ultrasonography; Magnetic Resonance Imaging; Lumbosacral Region
Abstract: Spinal dysraphism refers to abnormalities with imperfect fusion of midline neural and bony structures of the spine. It is the most common congenital central nervous system abnormality, with myelomeningoceles occurring in up to 2 per 1000 live births. Aim of the work: this study aimed to assess the diagnostic value of spinal ultrasonography in pediatric patients with spinal dysraphism. This study was carried out on 30 infants with clinically diagnosed or suspected spinal dysraphism who were referred by the Neurosurgery Department or outpatient clinic to the Radiology Department at Alexandria University Hospital over the period from May 2004 to April 2005. Ultrasonography findings were correlated with those of MRL. The degree of agreement between both modalities was determined and rated as full, partial, or no consensus. Total consensus was achieved in 24 of 30 examinations. Partial consensus was achieved in six examinations with US showing main spinal anomaly but not additional details depicted by MRL. There was no significant difference between US and MRI results in diagnosing of the main spinal anomalies. So we concluded that ultrasound is a valuable tool for the diagnosis of congenital malformations in infancy especially in patients younger than six months of age.

Spondylitis

Diagnosis

Tuberculous spondylitis and vertebral pyogenic infection: how far can MRI differentiate?
Zakaria, Yasser Mazloum; Mahgoub, Gamal Mohamed
Alexandria University - Faculty of Medicine - Departments of Radiology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 167-176 (39 ref.)
Keywords: Tuberculosis, Spinal-diagnosis; Magnetic Resonance Imaging; Spine-pathology; Infection
Abstract: Evaluation of the vertebral osteomyelitis and tuberculous spondylitis need an accurate and specific imaging modality to guide invasive procedures for a definitive microbiological diagnosis and to spare patients with other disorders that might mimic these entities a percutaneous or open biopsy. The aim of this study is to assess the validity of Magnetic Resonance Imaging [MRI] in diagnosis and characterization of the spinal infection, either pyogenic or granulomatous, and specifically the tuberculous spondylitis. Twenty patients who were clinically and radiographically suspected of having vertebral osteomyelitis, or Tuberculous spondylitis. They were evaluated with MRI after performing conventional x-ray of the involved spinal region, with analysis of the imaging findings by two experienced radiologists to set the imaging diagnosis. MRI findings showed good correlation with the clinical signs and symptoms in 19 patients out of the 20 included in this study, also these imaging findings revealed high predictive ratio for the spinal infection category in 19 out of 20 patients, with excellent accuracy and specificity ratios, ten patients were proved either radiologically or microbiologically to have spinal osteomyelitis, and the other ten to have Tuberculous spondylitis. MRI is an accurate and sensitive modality in diagnosis of spinal infection, and have a high specificity rate in characterization of the type of infection, it is also capable to give excellent anatomical details regarding the extra-vertebral extension of the encountered pathological process.

Staphylococcus aureus

Isolation and purification

Molecular characterization [Pcr-Based Methods] of Staphylococcus aureus isolated on dogs and cats.
Arabi, Omer H.; Mutalib, Abdul Rahim; Abdul Aziz, Safiya; Sheikh Omer, Abdul Rahman; Radu, Son
University Putra Malaysia - Faculty of Veterinary Medicine
Gezira Journal of Health Sciences 2008; 4 (1): 103-126 (18 ref.)
Keywords: Polymerase Chain Reaction; Dogs; Cats; Random Amplified Polymorphic DNA
Abstract: A total of 36 isolates of Staphylococcus aureus from hospitalised and outpatient dogs and cats were typed by RAPD-PCR, and 36 isolates were selected for further typing by ERIC-PCR and Coagulase gene-PCR and Coagulase gene RFLP, indicating a low degree of polymorphism in the coagulase genes. In this study, it is noticeable that RAPD-PCR displayed desirable typing quality by its ability to group the apparently related isolates from outpatient and hospitalised cats and dogs, whereas ERIC-PCR has the tendency to group the isolates into a single major cluster.

SDS page of whole cell protein, immunoblotting and protein A assay for typing of staphylococcus aureus isolated on dogs and cats.
Arabi, Omer H.; Mutalib, Abdul Rahim; Abdul Aziz, Saliha; Sheikh Omer, Abdul Rahman; Radu, Son
University Putra Malaysia - Faculty of Veterinary Medicine
Keywords: Bacterial Typing Techniques; Dogs; Cats; Electrophoresis, Polyacrylamide Gel; Immunoblotting; Staphylococcal Protein A; Blotting, Western; Enzyme-Linked Immunosorbent Assay
Abstract: A total of 36 isolates of Staphylococcus aureus from hospitalised and outpatient dogs and cats were typed using SDS PAGE of whole cell protein, immunoblotting and protein A assayment by ELISA test. 15/24 and 14/24 profiles were recognised using SDS PAGE and immunoblotting respectively. It is concluded that SDS PAGE of whole cell protein and immunoblotting could be used as a typing methods for the characterisation of S. aureus strains. Protein A assayment could be used for the detection of S. aureus strains in samples but could not be used to differentiate between different strains.

Stomach Ulcer

physiopathology

Role of H2 receptors in the regulation of vascular endothelial growth factor level in experimental peptic ulcer in rats.
Deif, Maha M.; Korish, Aida A.; Nounou, Howaida A.
Physiology Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 219-224 (39 ref.)
Keywords: Models, Animal; Rats; Endothelial Growth Factors; Endothelium, Vascular; Receptors, Histamine H2; Tumor Necrosis Factors; Interleukin-10
Abstract: Peptic ulcer is one of the most common clinical diseases. The incidence rate of peptic ulcer has been on the rise over the last two decades. The repair of gastric ulcer requires the reconstitution of epithelial structures and underlying connective tissue, including vessels and muscle layers. This complicated sequence of events requires a high degree of coordination among different cell types, which is regulated by several factors, the most important and best recognized has been vascular endothelial growth factor [VEGF], also some major proinflammatory cytokines namely tumor necrosis factor alpha [TNF-alpha]and interleukin-10 [IL-10]. This study was carried out to study the role of H2 receptors on the expression of VEGF and proinflammatory cytokines in experimental peptic ulcer using the H2 receptor stimulant histamine and H2 receptor blocker [ranitidine]. This study was conducted on 40 adult male albino rats weighing from 200-250 grams each. Animals were divided into 4 groups each of 10 rats namely: group 1; normal healthy rats used as control, group 2; rats with experimental peptic ulcer without treatment, group 3; rats with experimental peptic ulcer treated with H2 receptor stimulant histamine, and group 4; rats with experimental peptic ulcer treated with H2 receptor antagonist ranitidine. Rats from all groups were sacrificed on the fourth day after the induction of peptic ulcer. Histamine significantly increased serum VEGF levels in group 3 rats as compared to all other studied groups. Histamine also significantly increased serum IL-10 levels while it decreased serum TNF-alpha in experimental peptic ulcer rats. Ranitidine significantly decreased serum VEGF levels in group 4 rats as compared to histamine treated group 3 rats but showed no significant difference in serum VEGF levels as compared to either to normal control or in untreated peptic ulcer rats. However, ranitidine increased the levels of both serum IL-10 and TNF-alpha as compared to group 2, although it reversed the actions of histamine on both cytokines decreasing IL-10 and increasing TNF-alpha serum levels. It can be concluded that histamine may exhibit protective effect against gastric ulcer through increasing VEGF levels and enhancing angiogenesis. This gastroprotection could be related to stimulation of H2 receptors. Ranitidine could provide gastroprotection through other mechanisms such as the powerful and selective inhibition of gastric acid secretion. However, its effect on VEGF production should be considered. Ranitidine, in combination with histamine, should be extensively studied because it may reduce ulcer area by reducing inflammatory cytokine levels while increasing gastric mucosal blood flow.
Stress, Psychological

epidemiology

Perceived stress among male medical students in Egypt and Saudi Arabia: a cross-culture comparison.
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Mansoura University - College of Medicine - Community Medicine Department
Egyptian Journal of Community Medicine 2008; 26 (1): 71-80 (38 ref.)
Keywords: Students, Medical; Psychometrics; Anxiety; Depression; Mental Health Services
Abstract: In recent years there has been a growing appreciation of the issues of stresses among medical students as this may affect their learning and academic performance. However, such studies are scarce in Arab countries, to determine if there is a difference in the perceived stress levels of male medical students in Mansoura University, Egypt and King Faisal University, Saudi Arabia. The sample consisted of 304 and 284 male medical students in Egypt and Saudi Arabia, respectively. Study tool is a self-reported questionnaire covering sociodemographics and four categories, including 15 items, of sources of stress [stressors]. Perceived stress scale [PSS] and Hospital anxiety and depression [HAD] scale were used to measure stress, anxiety and depression there is no significant difference between the two groups regarding number of stressors. However, Egyptian students were more likely to cite relationship, academic and environmental problems than Saudis. Prevalence of high stress level was nearly equal in both groups. However, anxiety and depression are significantly higher among Egyptian than Saudi students. Logistic regression analysis of independent predictors of severe degree of stress among both groups combined revealed that satisfactory family income and highly educated father are independent protective factors. The independent risky predictors are anxiety and number of stressors. stress, anxiety and depression are frequent among medical students, especially the Egyptian. Counseling and preventive mental health services should be an integral part of the routine clinical services caring for medical students.

Stroke

diagnosis

Clinical presentation and risk factors, plus non-contrast cerebral CT, for evaluation of patients with acute stroke in the ED.
Khalid, Muayad K.; Tawfiq, Firas A.; Al Den, Ahmed S.; Al Musleh, Abdul Wahab; Aboud, Omer; Matar, Issa; Rabea, Maamoun; Kamel, Hussein; Al Hail, Hassan; Bener, Abdulbari
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JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 24-27 (23 ref.)
Keywords: Stroke-radiography; Risk Factors; Tomography, X-Ray Computed; Emergency Service, Hospital; Retrospective Studies
Role of transcranial color doppler in cerebrovascular lesions.
Hegab, Sherif El Sayed; Fakhry, Mazen Mohamed; Desouki, Salah Eldin; Morsy, Hosam Raafat
Radiodiagnosis Department
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 177-187 (38 ref.)
Keywords: Ultrasonography, Doppler, Color; Brain Ischemia; Cerebral Hemorrhage; Intracranial Aneurysm; Arteriovenous Malformations; Tomography, X-Ray Computed; Ultrasonography, Doppler, Transcranial
Abstract: We evaluated the role of transcranial color Doppler sonography in diagnosis of cerebrovascular lesions. This study was conducted on 40 subjects, 15 were normal healthy volunteers as control and 25 were patients with clinical and radiological diagnosis of cerebrovascular lesions. All subjects underwent sonographic examination of the brain parenchyma and major intracranial cerebral arteries namely anterior, middle and posterior cerebral arteries via temporal acoustic window with a 2.8-MHz transducer. Major intracranial arteries were examined bilaterally by color flow imaging, and angle-corrected blood flow velocities were determined with integrated pulse wave [PW] Doppler. This study was conducted on 40 subjects, [22 males and 18 females], 15 were normal healthy volunteers as control and 25 were patients with clinical and radiological diagnosis of cerebrovascular lesions. There were ten cases of failed study, five from the control group and five from patients group. The remaining subjects with good acoustic temporal bone window were thirty, twenty from the patients group and ten from the control group. There were twenty patients with cerebrovascular lesions radiologically diagnosed as seven ischemic stroke, four hemorrhage stroke, one brain tumor, five intracerebral aneurysms, and three intracerebral arteriovenous malformations [AVM]. In stroke patients, four patients with intracerebral hematoma [ICH] and three with ischaemic stroke showed no changes in transcranial color coded sonography [TCCS], while four patients with ischemic stroke showed dynamic changes in the ipsilateral middle cerebral artery manifested as increased flow in one patient, increased flow in 2 patients and occluded Ml segment in one patient. The case with decreased flow, showed evidence of cross flow from the contralateral side through the anterior
communicating artery [ACoA] shown as reversal in color and direction of flow in the ipsilateral middle cerebral artery [MCA] due to complete occlusion in the ipsilateral internal carotid artery seen in carotid Doppler sonography. The case with CT diagnosis as brain tumor was diagnosed by transcranial color coded sonography [TCSS] as intracranial space occupying mass lesion, the five patients with angiographically proven as intracerebral aneurysms, transcranial color coded sonography [TCSS] revealed only three cases through the temporal bone with mean diameter more than 5 mm. two small aneurysms less than 5 mm were missed. One of the three patients with angiographically proven intracerebral AVM was missed by transcranial color coded sonography [TCSS]. Transcranial Color sonography also revealed hemodynamic changes in the feeder arteries as increased. Peak systolic [PS] and end diastolic [ED] velocities, while the resistive index [RI] and pulsatility index [PI] were decreased. Transcranial color-coded sonography [TCSS] combines non-invasive imaging of intracranial vessels and parenchymal structures at a high spatial resolution in different intracranial vascular lesions.

Teaching

[Teaching minimum learning essentials to orthopedic interns in Isfahan University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 437-442 (14 ref.)
Keywords: Internship and Residency-standards; Schools, Medical; Universities; Orthopedics; Learning; Clinical Competence; Education, Medical; Educational Technology; Program Evaluation
Abstract: The prevalence of musculoskeletal and orthopedic diseases is high in outpatient visits and emergency ward. Meanwhile, evidences show that there is no appropriate and sufficient education in this regard, in the educational programs of medical students and especially orthopedic interns. The aim of this study was to determine the accomplishment of minimum learning essentials by interns in orthopedic ward of Isfahan University of Medical Sciences. This descriptive study was conducted in educational hospitals of Isfahan Medical School in April and June 2006. A 14 item questionnaire including determined minimum learning essentials in 4 fields of surgery room, emergency, ward, and clinic was developed. Forty orthopedic interns, who at least had passed 3 months of their internship course, completed the questionnaire as self-administered. The data was analyzed by SPSS software using frequency distribution. All participants in this study performed the assessment of the “signs of the compartment syndrome” and “sutures” by themselves. Not all of the interns had received the needed education for casting and splint, doing different kinds of bandages, suturing open wounds and doing intra-articular injections. Interns could not achieve minimum learning essentials in orthopedic ward which was in accordance with previous studies. Therefore, it is necessary to implement a complete revision in educational programs of orthopedic interns such as extending the course duration, determining the task descriptions, and providing externship course.

standards

[Comparing the factors related to the effective clinical teaching from faculty members' and students' points of view]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 249-256 (28 ref.)
Keywords: Students, Medical; Education, Medical-standards; Program Evaluation; Cross-Sectional Studies
Abstract: Teaching and learning are interdependent in educational process. Teaching effectiveness, therefore, is to be investigated both from teachers’ and learners’ viewpoints in order to achieve a better education. This study was conducted to determine and compare the factors related to effective clinical education from teachers’ and students’ viewpoints in School Of Nursing and Midwifery in Isfahan University of Medical Sciences. In this descriptive cross-sectional study, the population under the study was 53 faculty members and 118 senior students selected through purposeful sampling. The research environment consisted of teachers' offices, hospitals, and clinical centers affiliated to Isfahan University of Medical Sciences. The data gathering tool was a researcher made questionnaire consisted of two parts of demographic feAutres and factors related to clinical education which contained 5 general areas of individual feAutres of the learner, clinical teacher, clinical environment, educational planning, and clinical evaluation. Questions related to each of these areas were scored based on a five point Scale. The questionnaires were distributed anonymously and gathered after one week. The data was analyzed by SPSS software. Mean of the scores in areas of factors related to the individual feAutres of the learner, clinical teacher, clinical environment, and educational planning were above 4 and only in the area of clinical evaluation it was 3.95 +/- 0.81 out of the total score 5. T-test results for four before mentioned areas were 0.46, 0.45, 0.53, and, 1.39, respectively and it was 0.38 for evaluation area which revealed no significant difference. Regarding the agreement of faculty members and students on the importance of these factors in clinical education, it is recommended to apply all these factors in order to promote the quality of clinical education.
[Comparison of self and students' evaluation of faculty members in school of health of Hormozgan University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 191-199 (17 ref.)
Keywords: Self-Evaluation Programs; Health Care Evaluation Mechanisms; Education, Medical-standards; Evaluation Studies as Topic; Students, Medical; Schools, Medical; Universities; Cross-Sectional Studies
Abstract: Comparing the results of students' evaluation and faculty members' self-evaluation can reveal the strengths and weaknesses of faculty members in teaching. The aim of this study was to compare students' evaluation of teaching and faculty members' self-evaluation in School of Health in Bandar Abbas. The population under study in this cross-sectional survey was faculty members and students of School of Health in Bandar Abbas University of Medical Sciences. Twenty faculty members selected through census sampling method evaluated themselves. In addition to self-evaluation, each faculty member was evaluated by 20 students who were selected randomly. The data gathering tool was a questionnaire consisted of 20 questions with 5 point Likert scale. Data was analyzed by SPSS software. The mean of the faculty members' self evaluation scores was 89.7 +/- 6.3 and the mean of this evaluation by students was 85.1 +/- 6.5 which demonstrated a significant difference. The correlation coefficient between the scores of self-evaluation and evaluation by students was 0.26. The scores of self-evaluation for most faculty members [75 percents], was higher than the scores of evaluation by students. The results of faculty members' self-evaluation are exploitable for improving the quality of teaching. It is recommended that faculty members take students' evaluation of teaching into consideration more seriously.

trends

[Ten year trends in faculty members' evaluation results in Jondi Shapour University of Medical Sciences]
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IJME - Iranian Journal of Medical Education 2008; 7 (2): 309-316 (21 ref.)
Keywords: Evaluation Studies as Topic; Teaching-standards; Cross-Sectional Studies; Schools, Medical; Education, Medical; Universities
Abstract: A comprehensive and valid evaluation system with continuous performance is required in order to assess faculty members' educational practice correctly, and plan for quality improvement. This study was done to determine the ten year trends in faculty members’ evaluation results in Jondi Shapour University of Medical Sciences. In a cross-sectional study, evaluation scores of 84 non-clinical faculty members of Jondi Shapour University of Medical Sciences, from 1996 till 2005 were investigated. Faculty members' evaluation scores were taken from the archive of Educational Development Center of the University and were analyzed by SPSS software using repeated measure ANOVA, Pearson correlation coefficient, and t-test. The trends in evaluation scores had minimal changes between 3.95 and 4.02. The mean of faculty members’ evaluation scores had no significant difference in different years. Also, the mean of the evaluation scores of male and female faculty members in different years showed no significant difference. Pearson correlation coefficient showed a weak to average correlation between faculty members' evaluation scores in some of the years. [0.22 at minimum and 0.65 at maximum]. Faculty members' evaluation by students was invariable in 10 years, despite the fact that students population performing the evaluation, had changed during the period. It is necessary to revise the method of educating teaching skills to faculty members in order to improve their evaluation scores.

Teratoma

diagnosis

Placental teratoma or fetus acaidius amorphous?
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Hematology, Oncology and Stem Cell Therapy 2008; 1 (1): 57-61 (10 ref.)
Keywords: Placenta-pathology; Pregnancy; Fetus-abnormalities
Testis

abnormalities

Polyorchidism: case report and literature review.
Elmadani, Ahmed E.; Elmahi, Ibrahim A.; Hamdoun, Anas; Taha, Taha O.; Ibrahim, Mohamed E.; Elamir, Farouk; Taha, Osman
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University of Gezira - Molecular Biology and Oncology [INMO]
Keywords: Cryptorchidism; Spermatic Cord Torsion; Hernia, Inguinal
Abstract: Polyorchidism is a rare congenital anomaly frequently associated with maldescent testis, hernia, and torsion. Reports in the literature show an increased risk of testicular malignancy in the presence of polyorchidism. This entity has characteristic sonographic features and the diagnosis is often made on the basis of sonography. A conservative approach is the treatment of choice in uncomplicated cases. We report a male of 26-years old with 2 testicles in right side diagnosed by ultrasound. A brief history and review of the literature is also presented.

Thrombophilia

etiology

Oral contraceptive pills and inherited thrombophilia in a young woman with deep venous thrombosis.
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American University of Beirut Medical Centre - Department of Pathology and Laboratory Medicine
Keywords: Thrombophilia-complications; Thrombophilia-congenital; Contraceptives, Oral-adverse effects; Venous Thromboembolism-etiology; Awareness; Risk Assessment; Factor V-genetics; Factor V-analysis

Thymectomy

methods

Anesthesia for thymectomy in myasthenia gravis - A report of 115 cases.
El Dawlatly, Abdelazeem; Turkistani, Ahmed; Alkattan, Khalid; Hajjar, Waseem; DelVi, Mohamed Bilal; Alshaer, Ahmed; Alotaibi, Wadha; Damas, Fatma
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Middle East Journal of Anesthesiology 2008; 19 (6): 1379-1386 (11 ref.)
Keywords: Anesthesia; Myasthenia Gravis-surgery

Two lung ventilation through single lumen tracheal tube in thoracoscopic thymectomy: a randomized clinical trial of efficacy and safety.
Javed, Mihan J.; Toolabi, Karamollah; Aminian, Ali
University of Tehran - Medical Sciences and School of Medicine - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1361-1368 (20 ref.)
Keywords: Respiration, Artificial; Myasthenia Gravis-surgery; Thoracic Surgery, Video-Assisted; Thoracoscopy; Trachea; Intubation, Intratracheal-methods; Lung; Prospective Studies; Hemodynamics; Hemoglobins; Treatment Outcome
Abstract: Video assisted thoracoscopic surgery [VATS] has been successfully used for thymectomy in myasthenia gravis [MG]. Thoracoscopic thymectomy [TT] is usually done under general anesthesia with double lumen tubes [DLT]. The aim of this study is evaluation of two lung ventilation through single lumen tubes [SLT] during TT. In this prospective randomized study, TT was done in 30 patients with MG from January 2004 to December 2007. Patients were randomly intubated with either a DLT or SLT, 15 patients in each group. All patients were evaluated for hemodynamic stability, oxygen saturation of hemoglobin [Spo2], end-tidal Pco2 [ETPco2], times required for intubation and surgery, satisfaction of surgeon about exposure and postoperative complications. in the SLT group, all patients had stable
hemodynamic, Spo[2] and ETPco[2]. In the DLT group, hemodynamic instability occurred in one, decrease in Spo[2] in one and increase in ETPco[2] in another patient. One patient in DLT group developed vocal cord granuloma two months later. Time required for surgery and surgeon's opinion about exposure were similar in the two groups. SLT is safe in TT. It provides good surgical exposure and decreases the cost, time and undesirable complications of DLT.

**Thyroid Diseases**

**epidemiology**

Biochemical and clinical assessment of thyroid status in patients with thyroid disorders referred to El-Obied Regional Health Laboratory.

Eltayeb, Majdolin Mohammed; Daoud, Omer Hassan; Ajabeldour, Ahmed Abdalla; Khalid, Khalid Eltahir; Ali, Khalid Eltom

Kordofan University - Faculty of Medicine - Department of Biochemistry

*Gezira Journal of Health Sciences* 2008; 4 (1): 159-168 (20 ref.)

**Keywords:** Thyroid Function Tests; Thyroid Diseases-diagnosis; Goiter-epidemiology; Cross-Sectional Studies; Prospective Studies

**Abstract:** This study aimed at assessing the thyroid status in Kordofan region [western Sudan] where the prevalence of goitre was not clearly defined. A cross-sectional, prospective study was conducted in El-Obied regional health laboratory on 150 thyroid patients [136 female, 14 male] referred during the period between May-November 2003, their ages ranged between 6 to 65 years. A matching control group of 50 subjects [39 female, 11 male] without symptoms or signs of thyroid disease, were included for comparison. After clinical evaluation and data collection through a questionnaire, serum concentrations of TSH, total triiodothyronine [TT3], and total thyroxine [TT4] were measured by radioimmunoassay. The frequency of thyroid disorders was higher in females [90.7%] than in males [9.3%], among the age group between 25-34 years. The percentage of patients with euthyroid was significantly higher [62%] compared with 28.3% of hyper and 9.3% of hypothyroidism. 69.3% of the thyroid patients had stage II goitre. TT4, TT3 and TSH showed significant differences [P < 0.001] in hyper and hypothyroidism compared with the euthyroid patients and the control group. Serum TT[4] values correlated negatively with TSH [r = 0.272, P = 0.001], and positively with TT[3] [r = 0.693, P = 0.000]. The prevalence of thyroid diseases was found higher in this area, with strong association with the food intake and genetic background, a problem needing to be considered seriously.

**Thyroid Neoplasms**

**epidemiology**

Thyroid carcinoma in the United Arab Emirates: perspective and experience of a tertiary care hospital.

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*Hematology, Oncology and Stem Cell Therapy* 2008; 1 (1): 14-21 (47 ref.)

**Keywords:** Thyroid Neoplasms-pathology; Thyroid Neoplasms-diagnosis; Sex Factors; Risk Factors; Age Factors

**Abstract:** Although the distribution of thyroid carcinoma in the Arab Gulf States has been described, no previous study has examined the characteristic clinicopathologic features of thyroid carcinoma cases in the United Arab Emirates. The medical records of 135 patients with thyroid carcinoma diagnosed over a 15-year period [1991-2005] at Tawam Hospital, the national referral oncology center in the UAE, were retrospectively studied and the cases classified according to the histologic classification of the World Health Organization [WHO]. Seventy-eight patients [58%] were diagnosed before the age of 45 years with an overall peak incidence in the fourth and fifth decades. The female to male ratio was 2.4:1. Eighty-four percent had papillary thyroid carcinoma [PTC], while follicular thyroid carcinoma [FTC], anaplastic thyroid carcinoma and medullary carcinoma comprised 14%, 1.4% and 0.6%, respectively. The conventional classical variant of papillary carcinoma was the most common type. Three-quarters of the papillary carcinomas presented as multinodular goiter, while one-fifth presented as a solitary thyroid nodule. Minimal invasive follicular carcinoma was the most common variant of follicular carcinoma. Thyroid carcinoma in the United Arab Emirates seems to be more common among females and female gender may be a risk factor. Age <45 years can be considered an important prognostic factor as well as a possible risk factor. PTC predominates the histologic pattern of thyroid carcinoma, which is usually associated with an iodide-sufficient area.
**pathology**

**Synchronous occurrence of macroscopic papillary and medullary thyroid carcinomas.**  
Lopez, Jose I.; Ruiz, Almudena; Ugarte, Estibaliz; Paja, Miguel; Ereno, Cosme; Gaafar, Ayman  
E-mail:joseignacio.lopez@sakidetza.net  
Hospital de Basurto - Department of Anatomic Pathology  
**Hematology, Oncology and Stem Cell Therapy** 2008; 1 (3): 193-196 (15 ref.)  
**Keywords:** Carcinoma, Papillary-pathology; Carcinoma, Medullary-pathology; Biopsy, Fine-Needle; Thyroidectomy; Mutation; Prognosis; Tumor Markers, Biological; Calcitonin; Neoplasms, Multiple Primary

**Tinidazole**

**administration and dosage**

**Development of time and pH dependent controlled release colon specific delivery of tinidazole.**  
Sonali, R. Naikwade; Pratibha, P. Kulkarni; Shripad, R. Jathar; Amrita, N. Bajaj  
S.N.D.T. Women's University - C.U. Shah College of Pharmacy  
**DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences** 2008; 16 (3): 119-127 (24 ref.)  
**Keywords:** Tinidazole-adverse effects; Tinidazole-Pharmacokinetics; Dosage Forms; Amebiasis-drug therapy; Patient Compliance; Methylcellulose-analogs and derivatives; Acrylic Resins; Tablets, Enteric-Coated-administration and dosage; Biological Availability; Drug Delivery Systems; Colon; Hydrogen-Ion Concentration  
**Abstract:** Tinidazole is used in treatment of amoebiasis and other protozoal infections in doses of 2.0 g/ day [60 mg/kg] for three days. In the present paper, controlled release formulation of tinidazole was developed with an objective to achieve colon specific drug delivery with reduced frequency of dosing, to minimize gastric side effects and thus to increase patient compliance. Matrix systems of tinidazole [500 mg] were prepared by using swellable and pH dependent polymers like hydroxypropyl methylcellulose [HPMC K4M and K15M] and eudragit [eudragit L-100 and S-100]. Prepared tablets were enteric coated in order to overcome variability in gastric emptying time and delay in the release, to reduce gastric side effects and to provide prolonged localized action in colon. Process of manufacture was optimized during the scale up studies. Bioavailability study [using parallel group design] was carried of on conventional marketed, developed uncoated and enteric coated tablets in healthy human volunteers. Bioavailability study showed that greater portion of tinidazole was released in the large intestine and drug level in plasma was above 4 micro g/mL in blood for 24 hours. From the results of this study it appears that, the proposed single enteric coated tinidazole [500 mg] tablet per day could be used in place of 3-4 doses of 500 mg tinidazole conventional tablet with better control of drug release for targeted drug delivery. In addition developed colon-specific drug delivery system [CDDS] was relatively inexpensive and easy to manufacture using conventional pharmaceutical coating technique.

**Titanium**

**chemistry**

**Experimental study of viscoplastic behavior of pure titanium Ti40 at different strain rate sand temperatures.**  
Jarkas, Marwan; ElKhatab, Hamed; Haje Chehade, Rafic; Bousaleh, Ghazi  
E-mail:jarkasma@hotmail.com  
**Lebanese Science Journal** 2008; 9 (1): 123-129 (9 ref.)  
**Keywords:** Temperature; Stress, Mechanical  
**Abstract:** This paper provides some prospect comprehension of pure alpha titanium's behavior under quasi-static loading. The stress - strain relations paths at several strain rates [7.10[-5][s][-1]; 8.10[-4][s][-1]; 1. 4.10[-2][s][-1], 8.10[-2][s][-1]et 14 [s][-1]] and temperature [243 K, 298 K et 473 K] were measured experimentally. The present work is considered as the starting point of our research project concerning the modeling of the viscoplastic behavior of pure titanium Ti40 at high strain rate.
Tobacco Smoke Pollution

adverse effects

Infant exposure to environmental tobacco smoke: Jordan University hospital-based study. Badran, E.; Salhab, A.S.; Al Jaghib, M. University of Jordan - Faculty of Medicine - Department of Paediatrics EMHJ - Eastern Mediterranean Health Journal 2009; 15 (1): 39-46 (23 ref.) Keywords: Environmental Exposure; Mothers; Questionnaires; Cotinine-analysis; Cotinine-urine; Tobacco Smoke Pollution-prevention and control; Hospitals, University; Awareness; Parents; Behavior Abstract: To study exposure to environmental tobacco smoke during the first year of life, 220 infants attending the outpatient paediatric clinic of the University of Jordan for routine visits with their mothers were recruited to the study. Mothers completed a questionnaire about smoking habits of household members, and urine samples were obtained from infants for analysis of cotinine levels. A total of 60.0% of infants were reported to be exposed to passive smoking at home and 36.4% had detectable levels of urine cotinine [mean 7.1 ng/mL, range 0.27-41 ng/mL]. Detectable saliva cotinine levels in 8/20 mothers of neonates [1-2 days old] suggested in utero exposure. Recommendations are made to protect this vulnerable population from tobacco smoke exposure.

Tongue Diseases

epidemiology

[Prevalence of tongue tie in 12-14 year old students of Tehran, 2003] Shafiee, H.A.; Negahdari, R. Shahid Beheshti University of Medical Sciences - Dental School - Department of Orthodontics Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 373-378, 5 (20 ref.) Keywords: Tongue-pathology; Students; Prevalence; Malocclusion; Gingival Recession; Diastema; Speech Disorders Abstract: Due to different complications of tongue tie, this study aimed at determining the prevalence of tongue tie in 12-14 year olds students of Tehran city in 2003. This descriptive study was done on 4900 students randomly selected and studied by questionnaire and clinical examinations. The examinations were done by dental mirror under daylight. The individuals who were unable to point the tongue tip or touch the palate with the tip of the tongue when the mouth was semi opened, were considered to be tongue tied. The data were analyzed by SPSS 11.0, descriptive statistics and chi-square test. Tongue tie prevalence was determined as 2.33% [114 cases]. 57[50%] of them were male and 57 ones [50%] were females. 67.6% of the patients showed crowding of upper anterior teeth, 30.7% crowding of lower anterior teeth, anterior and posterior crossbite was observed in 38.7% and 27% respectively, 6.3% and 17.1% presented anterior and posterior open bite, 17.1% with gingival recession in lower anterior teeth, 19.8% with diastema among lower central teeth. 41.4% had complaint from stiffness at shoulders, 20.7% from speaking disorders, 1.8% from breathing disorders and 28% of food impactions. 46.8%, 15.3% and 37.9% presented C1I, C1II and C1III respectively with no normal occlusion being found. The prevalence of tongue tie among Tehran students was higher compared to some studies. As different meanings are mentioned for tongue tie, this difference can be justified.

Tooth Injuries

classification

Traumatic dental injuries: review of hard tissue fractures treatment guidelines. Al Mannai, Aisha Ahmed A. E-mail: aalmannai1@hmc.org.qa Hamad Medical Corporation - Department of Dentistry JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 7-12 (24 ref.) Keywords: Tooth Injuries-diagnosis; Tooth Injuries-therapy; Guidelines as Topic; Wounds and Injuries; Tooth Fractures-therapy Abstract: Dental injury is a distressing event, often causing psychological as well as physical problems, since it normally involves the highly visible front teeth. In addition, the treatment of such injuries involves economic costs in both the short and the long term. These injuries range from minor fractures of the enamel to more major damage involving the displacement or avulsion of teeth. In most dental trauma a rapid and appropriate treatment can lessen its impact from
both an oral health and an aesthetic standpoint. In this review of traumatic injuries [Dental Hard Tissue Fractures] in the permanent dentition, we will describe the classification of, assessment of and treatment strategies for managing such injuries; As well as methods of minimizing complications and preventive strategies.

**Tooth, Unerupted**

[Prediction of the mesiodistal size of unerupted canines and premolars in an Iranian population in Shiraz in comparison to Moyers' table]

Fattahi, H.R.
Shiraz University of Medical Sciences - Dental School - Department of Orthodontics
Dental Journal - Shaheed Beheshti University of Medical Sciences 2008; 25 (4): 401-408, 9 (35 ref.)

**Keywords:** Cuspid; Bicuspid; Linear Models; Mandible; Maxilla

**Abstract:** The determination of the tooth size-arch size relationship [space analysis] is an important factor for diagnosis and treatment planning in the mixed dentition. It is essential to use this analysis before eruption of the canines, first and second premolars. This study produced linear regression equations for an Iranian population. Study models of 276 subjects [138 males and 138 females] were selected from pretreatment patients' records of Orthodontic Department of Dental School and private offices in Shiraz. The greatest mesiodistal diameters of all teeth on each model were obtained except the second and third molar by digital caliper with 0.01mm accuracy. Finally, regression equations \(Y=a+bx\) were formulated to be used clinically for the estimation of mesiodistal width of permanent unerupted canines and premolars. SPSS software and Wilcoxon Signed Ranks test were used to analyze the data. The coefficients of determination \(r^2\) of the regressions ranged between 0.17 and 0.47 and were higher for females than males, and also mandible than maxilla. It found significant difference between the prediction of this study and Moyers' prediction. The equations derived in this study were \(Y=11.71+0.43x\) and \(Y=8.22+0.57x\) for maxilla and mandible respectively. At the other hand, the 85% level was a more accurate determination than the commonly used 75% confidence level likewise. Moyers' prediction tables were found to under-estimate tooth size summation compared with the present investigation.

**Toxoplasmosis**

**diagnosis**

Validity of IgG avidity enzyme linked immunosorbent assay and polymerase chain reaction for the determination of toxoplasma infections during pregnancy.

Awadalla, Helen N.; El Temsahy, Mona M.; Sharaki, Ola A.; El Zawawy, Lobna A.
Alexandria University - Faculty of Medicine - Parasitology Department

**Keywords:** Immunoglobulin G; Enzyme-Linked Immunosorbent Assay; Polymerase Chain Reaction; Pregnancy; Pregnancy Complications, Infectious

**Abstract:** Accurate diagnosis of maternal toxoplasmosis can enhance the success of medical treatment and prevent congenital transmission. The current diagnostic methods have significant limits and they poorly differentiate between acute and chronic infections. The present study was conducted to diagnose acquired Toxoplasma infection in pregnant women by detecting both the low avidity-IgG using enzyme linked immunosorbent assay [ELISA] and the specific DNA by polymerase chain reaction technique [PCR]. The study was performed on 104 pregnant women at different gestational ages. The serum sample from each case was primarily screened for IgG by ELISA, and then positive samples were examined for IgM and estimation of IgG avidity ELISA. The PCR technique was performed on blood samples from twenty selected cases, ten of whom were positive for both IgG and IgM antibodies and the other ten were positive for IgG only. Out of 104 pregnant females screened by IgG ELISA 48 cases were positive. Twenty seven of these cases were positive for IgG only and 21 had both IgG and IgM antibodies. Of the 27 IgG positive cases 24 showed high IgG avidity while the remaining three showed inconclusive avidity. Of the 21 cases positive for both IgG and IgM antibodies 16 patients showed low avidity while five cases only showed high avidity. PCR was done for ten cases positive for both IgG and IgM antibodies and ten positive for IgG only. It proved positive in only four often cases who were positive for both IgG and IgM and had low IgG avidity. This study highlights the value of IgG avidity ELISA as a single serum sample test indicating the presence of infection and differentiating between acute and chronic infections. It is recommended as a routine test for every pregnant woman. A positive PCR can act as an excellent indicator of recent infection, but its disadvantage lies in the fact that negative results cannot exclude acute infection. In addition it is an expensive technique. Thus IgG avidity ELISA can be considered as a more appropriate technique.
Trabeculectomy

methods

Efficacy and safety of selective laser trabeculoplasty as a primary procedure for controlling intraocular pressure in primary open angle glaucoma and ocular hypertensive patients.
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SQUUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 53-58 (11 ref.)

Keywords: Laser Therapy; Glaucoma, Open-Angle-surgery; Treatment Outcome; Prospective Studies; Ocular Hypertension; Intraocular Pressure; Safety

Abstract: Assessment of the potential efficacy and safety of selective laser trabeculoplasty [SLT] as a primary therapeutic modality for lowering the intraocular pressure [IOP] in high tension open angle glaucoma [OAG] and ocular hypertensive patients [OHT]. Twenty five patients [35 eyes] were enrolled in this prospective interventional longitudinal clinical study, undertaken during the period January 2005 to October 2006. All the laser procedures were done in the Oyoon Eye Center in Cairo, Egypt. Informed consent was taken from the patients after explanation of the procedure. Eighteen patients [25 eyes] had mild to moderate high tension open angle glaucoma, and there were 7 ocular hypertensive patients [10 eyes]. Participants underwent selective laser trabeculoplasty [SLT] 180 degrees and followed up over a period of 12 months to assess the intraocular pressure lowering effect after SLT. Possible complications of the procedure were reported. The intraocular pressure [mean +/- standard deviation [StDev]] decreased from baseline pre-operative value of 26.78 +/- 3.13 mm Hg to 19.34 +/- 1.89 mm Hg 12 months after SLT [p <0.001]. The average reduction in intraocular pressure [IOP] was 7.44 mm Hg [95% confidence interval 6.45 - 8.41 mm Hg]. By the end of the follow up period [12 months], 62.9% of cases [22 eyes] showed IOP decrease by > /= 30% from the baseline value, and 77.1% of cases [27 eyes] showed IOP decrease by > /= 25% of baseline IOP. Selective laser trabeculoplasty is an effective IOP lowering modality. It can be used as a primary treatment for open angle glaucoma and ocular hypertensive patients. If the minimal side effects reported are considered, it can be concluded that SLT has a potential safety to be used as primary alternative treatment for open angle glaucoma and ocular hypertensive patients.

Tracheoesophageal Fistula

therapy

Anesthetic considerations for the neonate with tracheoesophageal fistula.
Gayle, Julie A.; Gomez, Santiago L.; Baluch, Amir; Fox, Charles; Lock, Shmuel; Kaye, Alan
Tulane Medical Center - Department of Anesthesiology
Middle East Journal of Anesthesiology 2008; 19 (6): 1241-1254 (14 ref.)

Keywords: Tracheoesophageal Fistula-epidemiology; Anesthesia; Infant, Newborn; Anesthetics; Tracheoesophageal Fistula-embryology; Tracheoesophageal Fistula-physiopathology; Tracheoesophageal Fistula-diagnosis; Prognosis

Abstract: Trachenesophageal fistula [TEF] and associated esophageal atresia [LA] in the neonate, presents during the First week of life. This congenital defect can be complicated by aspiration, respiratory distress, and other congenital anomalies. The knowledge and ability of the anesthesiologist to anticipate the challenges in managing neonates presenting for repair, plays an important role in their treatment and survival. Also, it is not uncommon for anesthesiologist to care for a patient later in life following repair of TEF. A familiarity with the immediate complications and long term outcome and sequelae after TEE repair is important to ensure the best patient outcome.

Trachoma

epidemiology

Epidemiology of trachoma in a sample village of Sohag Governorate.
Aboel Fetoh, Nagah Mohamed; Esmail, Ali Mahmood; Eltorky, Mohammed Ali
Sohag University - Faculty of medicine - Community Medicine department

Keywords: Rural Population; Prevalence; Social Class; Sanitation; Questionnaires

Abstract: Trachoma, the leading cause of preventable blindness worldwide, differentially affects the poorest communities, which may have the least access to health resources [Sheila, 2003][1] the aim of this study is to estimate the magnitude of trachoma problem among a sample of rural population in Sohag Governorate and to analyze some of
the environmental and behavioral risk factors in relation to the prevalence and intensity of the disease in that population. The present study is a cross sectional study. Elzewak Elsharkia village was chosen from El-Monshaa District from Sohag Governorate. A systematic random sample was used from the families of the core village. The total number of the studied families was 130 families comprise 488 persons. Data on age, sex, socioeconomic status, sanitary conditions and hygiene practices of the households were collected through a specially designed questionnaire sheet. In addition full ophthalmic examination was conducted. of the 844 examined persons 204 were cases of active and healed trachoma representing a percentage of 24.1% of the whole sample. The highest percentage of active and healed trachoma was observed in children below the age of 10 years [48.5%]. Percentages of trachoma were significantly higher among males than females [58.8% Vs. 41.2%]. Environmental conditions of the household appear to influence the disease prevalence and intensity where the percentage of trachoma was significantly higher among families used outdoor supply of water [47.0%], those who had no available latrine in their houses [44.1%], those who collected garbage irregularly [73.5%] and in families having animal dwelling site inside their houses [47.0%]. Hygiene practices were significant risk factors as the percentage of trachoma was high among those who didn’t care for face washing [55.9%] and those who share towels with other family members [63.2%]. Trachomatous trichiasis [TT] and Corneal opacity [CO] were present in 24 cases [2.8%] of the whole sample representing [11.76%] of trachoma cases, of them 15 cases were suffering from trachomatous trichiasis, 3 cases from total corneal opacity and 6 cases from partial corneal opacity. Decrease in the prevalence and severity of the disease would result from the improvement of environmental risk factors and hygiene practices.

history

Trachoma in Libya.
Ben Amer, Mansour I.
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AI Arab Medical University - Department of Ophthalmology
Keywords: Trachoma-prevention and control; Trachoma-epidemiology; Trachoma-complications; Chlamydia trachomatis; Eye Diseases; Prevalence
Abstract: Trachoma in Libya is reviewed for the period 1920 to 2007. During this period the prevalence dropped from 80% to zero% in the coast cities and 3% [in a very mild form] in Kufra in the deep desert. A great improvement in the control of active disease is noted but few of the complications of the disease are still prevalent in the older population, again no more than 2.27%. This improvement is mainly due to the changes in socio-economic status of the population and also due to development of health care system in Libya.

Tympanic Membrane Perforation

The effect of area and site of tympanic membrane perforations on hearing threshold among sudanese patients.
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University of Gezira - Department of surgery
Keywords: Auditory Threshold; Prospective Studies; Myringoplasty; Otitis Media-complications
Abstract: Chronic otitis media is one of the commonest otological problems among Sudanese children and adults. The disease presents with perforations of the eardrum, discharging ears and varying degrees of hearing loss. The objective of this work is to study the effect of the area and the site of the tympanic membrane perforation on hearing threshold among Sudanese patients. This is a prospective hospital-based study conducted at Ibn Sina and Khartoum Teaching Hospitals-Otolaryngology Departments [E.N.T], in the period from 1 April - to the 30 of July 2002. Information from both the control and study subjects was taken, using protested questionnaire. Twenty-five normal subjects [50 ears] were taken as a control group selected randomly from the healthy population; their hearing thresholds were tested in order to find a reference level. Seventy-one consecutive patients with uni - or bilateral chronic suppurative otitis media [100 perforated ears] were taken as a study group. The hearing threshold of the control Sudanese subjects was 17dB. This was obtained by computing the mean for the human speech frequencies [500, 1000, 2000Hz]. The lower frequencies were affected regardless of side, site and area of the perforation. Conductive hearing loss was the commonest type [79%]. The commonest site of the perforations was the central site [90%] followed by postero inferior 3%. The commonest area of tympanic membrane perforations was the subtotal area [54%], followed by large central perforations [26%]. The greatest hearing loss was found to be in the postero inferior and antero-superior perforation of the drum compartment. From this study, we can conclude that regardless of the area, the site of tympanic membrane perforation is the most important factor affecting hearing threshold. The posterior central perforation having the greater effect for this reason, any patients with the postero inferior and antero-superior perforations should have repair of tympanic membrane [myringoplaity].
Upper Extremity

injuries

Washing machine injuries of the upper extremity: case reports with a review of the literature.
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Ibri Regional Referral Hospital - Department of Orthopaedics
SQUMJ - Sultan Qaboos University Medical Journal 2008; 8 (1): 89-92 (10 ref.)
Keywords: Fractures, Bone; Parents; Safety
Abstract: Washing machines are part of every household and there are various reports of upper extremity injuries due to inadequate safety precautions while operating the machine. Most of the injuries occur when an attempt is made to remove the clothes from the machine and the hand gets caught in the spinning machine. The presentation can vary from minor soft tissue injuries to a mangled upper extremity. The chance of neurovascular damage resulting in compartment syndrome is very high. The author reports three cases of washing machine injuries to draw attention to this not so uncommon injury. The relevant literature is also considered.

Urinary Tract Infections

etiology

Hygiene practices and sexual activity associated with urinary tract infection in pregnant women.
Amiri, F.N.; Rooshan, M.H.; Ahmady, M.H.; Soliamani, M.J.
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Babol University of Medical Sciences - Department of Midwifery
Keywords: Urinary Tract Infections-microbiology; Hygiene; Female Urogenital Diseases and Pregnancy Complications; Sexual Behavior; Case-Control Studies; Risk Factors
Abstract: A case-control study determined the association of urinary tract infection [UTI] with genital hygiene practices and sexual activity in pregnant women attending prenatal clinics in Babol, Islamic Republic of Iran. A sample of 100 pregnant women with positive urine cultures [cases] were compared with 150 healthy pregnant women matched for age, social, economic and education status and parity [controls]. Escherichia coli was the infecting organism in 83% of cases. Factors associated with UTI included sexual intercourse \( \geq 3 \) times per week \( [OR = 5.62] \), recent UTI \( [OR = 3.27] \), not washing genitals precoitus \( [OR = 2.16] \), not washing genitals postcoitus \( [OR = 2.89] \), not voiding urine postcoitus \( [OR = 8.62] \) and washing genitals from back to front \( [OR = 2.96] \).

Urticaria

immunology

Role of helicobacter pylori infection and autoimmunity in chronic idiopathic urticaria.
Afifi, Mohamed Tamer; Embaby, Mohamed Hami; Hamza, Ashraf Mahmoud; El Gendy, Wessam Mohamed; Husain, Reham Yossef
Internal Medicine and Gastroenterology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 111-119 (43 ref.)
Keywords: Chronic Disease; Urticaria-microbiology; Helicobacter Infections; Helicobacter pylori; Antibodies; Skin Tests; Urticaria-etiolog
Abstract: Urticaria is a vascular reaction characterized by transient erythematous or pale swellings of skin and/or mucous membrane representing localized edema caused by dilatation and increased permeability of capillaries and venules result in leakage of plasma into the surrounding connective tissue, marked by development of wheals. If edematous process extends through the dermis into subcutaneous or sub mucous tissue it results in angioedema. Wheats and angioedema often coexist in the same patient but may occur separately. During the last few years some authors reported their experience about cases of CIU related to presence of Helicobacter pylori [Hp] infection. Hp is a micro aerophilic gram positive bacterium, periodic infection with which is associated with reduced gastric acidity secretion where as chronic infection with Hp is associated with increased secretion of acid and pepsin. However recent study found that no relation between Hp infection autoantibody productions in CIU could be proved using direct measures of serum antibodies. Was to evaluate the role of autoimmunity and Helicobacter pylori infection in cases of chronic idiopathic urticaria. Forty patients with chronic urticaria [recurrent hives lasting 4 to 36 hours occurring at least
four times/ week for six weeks] were enrolled for this study. All patients were subjected to the following: history taking; included, general examination, skin examination, routine laboratory tests and specific tests included: Autologous Serum Skin Test [ASST], Antithrocoal peroxidase autoantibody test [TPO] and Helicobacter pylori IgG antibody test. Forty patients with age ranged between 17 and 58 years, the highest frequency was encountered in age group of 21- 30 years. The control subjects were age matched ranged between 18 and 50 years. Routine laboratory investigations showed no significant findings in CBC, SGPT, serum creatinine, urinalysis and stool analysis. Only ESR was significantly higher in cases of CIU than in control subjects in both first and second hour. Moreover, ESR was significantly higher in patients with positive ASST than those with negative ASST in both hours. The ASST was positive in 4 patients [10%] all of them were females, and negative in 36 patients [90%]. Serum level of TPO was significantly higher in patients with positive ASST than those with negative ASST. Hp IgG level in the sera of patients with CIU did not reveal a significant difference with that of the control subjects. The gastroscopic examination revealed that 55% of patients with CIU had Hp gastritis [only 25 out of 40 patients underwent gastroscopy]. In most patients with chronic idiopathic urticaria, no underlying disorders or cause can be discerned. Diagnostic studies should be directed by the findings elicited by the history and physical examination. There is no recommended standard diagnostic laboratory evaluation for CIU, and routine laboratory tests seems to be of limited value.

**Venous Insufficiency**

**surgery**

**Extra-fascial ligation of incompetent perforators via mini-incisions, under local anaesthesia.**

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Alexandria University - Faculty of medicine - Vascular surgery

*Bulletin of Alexandria Faculty of Medicine* 2007; 43 (1): 13-18 (14 ref.)

**Keywords:** Anesthesia, Local; Leg; Ligation; Postoperative Complications; Follow-Up Studies

**Abstract:** Reflux of the venous blood outwards through incompetent perforators may be primary or secondary [post-thrombotic], with resultant liposclerosis, eczematization, pigmentation, edema and ulceration. The main objective of managing these cases is preventing the transmission of deep venous pressure to affected skin areas by perforator interruption. Initially this was achieved by long incisions whether medial lateral or posterior and direct perforator ligation subfascially. Pre-operative color duplex localization and skin marking of the incompetent perforators, followed by assessment of the efficacy, convenience and wound complications of a simplified method to ligate them extrafascially through mini incisions under local anaesthesia. Eight hundred incompetent perforators in 184 limbs in 102 patients with chronic venous insufficiency with ulceration. Inclusion criteria was the presence of non liposclerotic skin at the skin mark or within 2 cm of it. Local infiltration of the chosen skin site with Xylocaine 2%, 2-2.5 cm incision is made in the skin. Using small retractors with gentle dissection to find the perforator, aided by gentle finger dissection. Following the perforator down to the fascia to make sure it has no other branches. Ligation and division of the perforator. A compression bandage is applied from toes up to knee level. Follow up of the patient for 12 month post operative for ulcer healing and for wound complications. It was observed that the site of incompetent perforators in 22.3% of limbs did not match the location of ulcer in the same compartment. Such a phenomenon may result from its connection with another muscular vein branch [a deep communicator] with a remote surface emergence in another compartment. Early procedure complications were incision wound break down [5.38%], and sepsis [7, 88%]. It was observed that there is an individual variability in patient's tolerance to venous congestion sequelae, also edema, after ligation of all incompetent perforators, may be responsible for incomplete ulcer healing without any new perforator incompetence. Extra-fascial ligation of incompetent perforators under local anaesthesia has the advantage of: patient satisfaction is high, post operative ambulation is fast and most of them could resume daily activity within 3-4 days. It is also economic and a large number of cases can be done within a short time.

**Vesicovaginal Fistula**

**surgery**

**Comparison of transvesical repair of vesico-vaginal fistula and use of free bladder mucosal graft.**

Nasir, Jan M.; Qayyum, Arif; Hidayat, Ullah

Quetta, Services Hospital - Bolan Medical College - Department of Urology

*Biomedicala* 2008; 24 (Jan.-Jun.): 23-25 (19 ref.)

**Keywords:** Surgical Procedures, Operative; Recurrence; Transplants; Urinary Bladder-surgery; Treatment Outcome; Postoperative Complications; Mucous Membrane

**Abstract:** This study was designed to compare the efficacy and complications of the conventional transvesical repair of vesicovaginal fistula versus new technique using free bladder mucosal graft for repair. It was carried out on 16 patients aged 16-45 years in the Departments of Urology, Services Hospital and Jinnah Hospital, Lahore from 1999 to 2001. Patients were randomly divided into two groups A and B. In group A, 8 patients who underwent conventional transvesical repair of vesicovaginal fistula whereas in group B, 8 patients who underwent repair using free bladder mucosal graft. Out
of 16 patients, the recurrence was observed in 3 patients [37.5%] in group A and 1 patient in group B, [12.5%]. There was statistically no significant difference P > 0.05. The transvesical free bladder mucosal graft repair provides good result with minimum complications. This method is recommended for routine repair of vesicovaginal fistulae without extensive dissection of the diseased area.

**Vocal Cords**

**pathology**

Young female with frequent acute uncontrolled asthmatic attacks?
Al Marri, M.R.H.A.; Al Mohammed, A.; Hamaza, A.; Almarri, N.D.
Hamad Medical Corporation
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 63-65 (10 ref.)

**Keywords:** Asthma-drug therapy; Anti-Asthmatic Agents; Acute Disease; Laryngoscopy

**Water Deprivation**

Relation between apelin-36 and arginine vasopressin in male rats subjected to water deprivation and volume expansion.
El Ghotny, Samar S.; Ibrahim, Hala S.; Shaat, Eman A.
Alexandria University - Faculty of Medicine - Departments of Physiology
Bulletin of Alexandria Faculty of Medicine 2007; 43 (1): 211-218 (33 ref.)

**Keywords:** Argipressin; Sodium; Potassium; Hemostasis; Rats; Neuropeptides; Carrier Proteins

**Abstract:** The closed anatomical localization in supraoptic and paraventricular nuclei and tissue distribution of apelin-36 and arginine vasopressin [AVP] suggest a role for the peptide apelin-36 in body fluid homeostasis and regulation of AVP release. However, conflicting reports make the precise role of apelin-36 remains to be clarified. To investigate the effect of water deprivation and acute volume expansion on plasma and brain tissue levels of apelin-36 and AVP in an attempt to clarify the interaction between the two peptides in control of body fluid homeostasis. The study was conducted on 40 male albino rats divided into 4 groups. Group I: 10 control rats, group II: 10 rats subjected to 24h-water deprivation [WD], group III: 10 rats subjected to 48h-WD and group IV: 10 rats subjected to acute volume expansion 10% of body weight by infusion of isotonic saline over 40 minutes. The following parameters were measured in all rats: plasma and brain tissue apelin-36 and AVP, plasma Na⁺ and K⁺ concentrations, urinary excretion rates of Na⁺ and K⁺ and urine flow rate per minute. Hematocrite value and plasma protein concentrations were measured to investigate the state of dehydration and hydration. Water deprivation induced significant decrease in plasma apelin-36 level associated with an increase in its brain tissue contents. This was mirrored by increased plasma AVP level and decreased brain tissue content. The reverse was detected after acute volume expansion. Moreover, increased apelin-36 concentration in plasma after acute VE was associated with diuresis and natriuresis. A significant negative correlation was detected between plasma as well as brain tissue concentrations of both apelin-36 and AVP. Apelin-36 may be implicated in the control of body fluid homeostasis and exerts opposite action to AVP in this regard. Furthermore it may be an inhibitor of AVP and the two peptides may play complementary roles in maintenance of water balance.

**Water Purification**

[Qom wastewater disinfection with hydrogen peroxide-silver ion complex]
Khazaei, M.; Nabizadeh, R.; Naddafi, K.; Vaezi, F.; Yunesian, M.; Roshany, M.; Farzinnia, B.
E-mail:Khazaei_78@yahoo.com
Qom University of Medical Sciences - Science Environmental health Engineering
Qom University of Medical Sciences Journal 2008; 1 (4): 31-36, 4 (14 ref.)

**Keywords:** Disinfection; Hydrogen Peroxide; Silver; Waste Disposal, Fluid

**Abstract:** Hydrogen peroxide solution with stabilized formulation with oligodynamic amounts of silver ion [trade mark: Nanosil] recently became a popular disinfectant for fruits, vegetables, surfaces, medical instruments and so on. This study was based on determining efficiency of hydrogen peroxide-silver ion complex in six different concentrations measured through removal of total coli forms from samples taken from Qom wastewater. All six different concentrations of disinfectant were incubated separately with wastewater for one hour. Sample size was 12 and sampling was done weekly. In the concentration of 80 and 480 mg/l, logarithmic removal value of total coli forms was 1.9 and 4.5 respectively. In CT value 8600 [mg/l].min and more, the total coli forms effluent standard for surface water discharge and agriculture irrigation was achieved [Iranian environmental protection agency act]. Use of hydrogen peroxide-silver ion complex as a water and wastewater disinfectant, has some benefits such as elimination of hazardous by products, measurable residual amount and so on. However its application in wastewater effluent is more costly than other usual disinfectants so it is not economically advisable.
Wound Infection

microbiology

Bacteriology of infected wounds - a study conducted at children's hospital Lahore.
Zafar, Aizza; Anwar, Naeem; Ejaz, Hasan
University of The Punjab - Children's Hospital and Institute of Child Health - Department of Microbiology
Biomedica 2008; 24 (Jan.-Jun.): 71-74 (19 ref.)

Keywords: Culture Media-diagnostic use; Staphylococcus aureus; Pseudomonas; Cross Infection-microbiology; Surgical Wound Infection-microbiology; Hospitals, Pediatric; Incidence

Abstract: The objective of the study was to determine the commonest bacteria associated with wound infections. Descriptive study. This study was conducted at The Children's Hospital and Institute of Child Health, Lahore over a six months period from August 2005 to January 2006. A total of 100 positive culture samples from patients with mean age of 6.2 + 0.25 were analyzed. Patient history and clinical findings were collected on a pre-coded form. Pus samples or wound swabs were collected from infected wounds and were analyzed through culturing and biochemical methods for aerobic bacteria. A total of 109 bacteria were isolated from 100 samples with almost same frequency of Gram positive cocci 54 [49.54%] and Gram negative bacilli 55 [50.45%]. Most frequently isolated organism was S. aureus 45 [41.28%] followed by Pseudomonas species 20 [18.35%]. Wound infection remains an ongoing problem which cannot be completely eradicated. However by taking prompt control measures against the most commonly isolated organism and proper care of wound may lead to the minimization of wound infection Skin, the largest organ in the human body, plays a crucial role in the sustenance of life through the regulation of water and electrolyte balance, thermoregulation, and by acting as a barrier to external noxious agents including microorganisms, however, when the epithelial integrity of skin is disrupted, a wound results[1] Wound infections are one of the most common hospital acquired infections and are an important cause of morbidity and account for 70-80% mortality[2, 3] Development of such infections represent delayed healing, cause anxiety and discomfort for patient, longer stay at hospital and add to cost of healthcare services significantly[4]. The importance of wound infections, in both economic and human terms, should not be under-estimated[5]. In a study, on average, patients with a wound infection stay about 6-10 days more than if the wounds heal without infections[6]. This additional stay almost doubles the hospital cost that is equivalent to between pound 1, 168 and pound 2, 398[7]. Wound infections can be caused by different groups of microorganisms like bacteria, fungi and protozoa[8]. However, different microorganisms can exist in polymicrobial communities especially in the margins of wounds and in chronic wounds[9]. The infecting microorganism may belong to aerobic as well as anaerobic group[10]. Most commonly isolated aerobic microorganism include Staphylo-coccus aureus [31%], Coagulase-negative staphy-lococci [CoNS] [5%], Enterococci [5%], Escherichia coli [9%], Pseudomonas aeruginosa [14%], Klebsiella pneumoniae [3%], Enterobacter species [9%], Proteus mirabilis [3.5%], other streptococci [3%], Candida [1.3%] with 80% Candida albicans, Group D streptococci [2%] and Acinetobacter [2%]. Other gram-positive aerobes [2%] and anaerobes [2.7%] also cause wound infections[11].

Wounds and Injuries

epidemiology

Epidemiology of trauma injuries in the districts of Amman, Jordan: problems and suggestions.
Al Issa, Atallah
E-mail:dralissa58@yahoo.com
King Hussein Medical Center - Emergency Department
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care 2008; 8 (1): 35-37 (22 ref.)

Keywords: Accidents, Traffic-mortality; Epidemiology; Retrospective Studies

Abstract: To study the patterns of trauma injuries in order to suggest possible preventative measures. Relevant records of both the Traffic Department and the three main hospitals in the districts of Amman, Jordan were reviewed in a retrospective study in 2004, over a one year period. Data were collected in terms of age, gender, frequency, pattern and mechanism of injuries. A total of 18,409 medical records were analyzed. Of those, there were 75% males and 25% females. Road traffic collisions were the most frequent causes of injuries [95.5%], followed by falls [1.6%], burns [1.0%], missile injuries [0.9%] [including gunshots], drowning [0.3%], gas inhalation [0.3%], stab wounds [0.2%], fighting [0.2%], bites [0.06%], swallowing of foreign bodies [0.04%] and bomb and mine explosions [0.04%]. Total number of deaths was 932 [5%]. The study highlighted the incidence of different types of trauma injuries in Jordan. Road traffic collisions remain the major cause of all injuries; thus emphasising the need for serious work on injury prevention and safety promotion.
Injury epidemiology in Kermanshah: the National Trauma Project in Islamic Republic of Iran.
Karbakhsh, M.; Zandi, N.S.; Rouzrokh, M.; Zarei, M.R.
E-mail: mkarbakh@sina.tums.ac.ir
Tehran University of Medical Sciences - Sina Trauma Research Centre
Keywords: Cross-Sectional Studies; Age Distribution; Sex Distribution; Wounds and Injuries-etiology; Wounds and Injuries-mortality; Craniocerebral Trauma-mortality; Wounds and Injuries-prevention and control
Abstract: In a cross-sectional study, all trauma patients hospitalized for 24 hours or more over a 4-month period in Taleghani hospital, the only referral teaching centre in Kermanshah city, were studied [n = 779]. Mean age was 34.7 [standard deviation 19.9] years. Male, unemployed and illiterate patients predominated. Road traffic accidents, falls and interpersonal violence were the most common mechanisms of injury. Among road traffic accident victims, pedestrians were the most vulnerable group. A total of 7.8% of patients died, mostly due to head injuries [78.7%]. Our findings also showed the importance of head trauma as the main anatomical site of injury.
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Zehni, H.R. Amir
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Zentart, A.
COLORECTAL NEOPLASMS (complications)

Zerroure, A.
BETA-LACTAM RESISTANCE

Zessin, G.
PREDNISOLONE (pharmacokinetics)

Zew, Mohamed H.
PNEUMONIA, VENTILATOR-ASSOCIATED (epidemiology)

Zia, Samar
HEPATOLENTICULAR DEGENERATION

Zolfaghari, M.
MEDICAL STAFF, HOSPITAL (education)

Zorgani, Abdul Aziz
OXAZOLIDINONES (therapeutic use)
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June 2009
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- Arab Journal for Food and Nutrition 1608-8352
- Bahrain Medical Bulletin 1012-8298
- JBMS - Journal of the Bahrain Medical Society 1015-6321

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- 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 Insentive Care N/A
- Al Azhar Medical Journal 1110-0400
- Al-Azhar Journal of Dental Science * N/A
- Alexandria Dental Journal * 1110-015X
- Alexandria Journal of Food Science and Technology N/A
- Alexandria Journal of Pediatrics N/A
- Alexandria Journal of Pharmaceutical Sciences * 1110-1792
- Alexandria Journal of Veterinary Science * 1110-2047
- Alexandria Medical Journal [The] * 0516-5849
- Annals of Pediatric Surgery 1687-4137
- Arab Journal of Biotechnology 1110-6875
- Arab Journal of Laboratory Medicine [The] 1110-1822
- ASJOG - Ain Shams Journal of Obstetrics and Gynecology * 1687-2193
- ASNJ - Alexandria Scientific Nursing Journal N/A
- Assiut Medical Journal 1110-0494
- Assiut University Bulletin for Environmental Researches 1110-6107
- Benha Medical Journal * 1110-208X
- Bulletin of Alexandria Faculty of Medicine 1110-0834
- 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 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 * 1110-0982
- Childhood and Development Quarterly * 1110-8681
- Clinical Diabetes 0891-8929
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South Valley Medical Journal
Suez Canal University Medical Journal
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Tanta Medical Sciences Journal
Veterinary Medical Journal
Zagazig Journal of Forensic Medicine and Toxicology
Zagazig Journal of Pharmaceutical Sciences *
Zagazig Medical Association Journal *
Zagazig University Medical Journal *

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Almustansiriya Journal of Pharmaceutical Sciences *
Annals of the College of Medicine – Mosul *
Basrah Journal of Surgery *
Bulletin of Endemic Diseases – Baghdad *
DMJ – Dohuk Medical Journal
IMJ - Iraqi Medical Journal
IOJ - Iraqi Orthodontic Journal
IPMJ - Iraqi Postgraduate Medical Journal *
Iraqi Army Medical Journal *
Iraqi Journal of Biotechnology *
Iraqi Journal of Community Medicine *
Iraqi Journal of Medical Sciences *
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Yafteh Journal  New  1563-0773
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Arab Journal of Psychiatry [The]  1016-8923
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Jordan Medical Journal  0446-9283
Journal of the Royal Medical Services  N/A
Medical Journal of Islamic World Academy of Sciences  1016-3360
Pan Arab Medical Journal *  N/A
Population Bulletin of ESCWA *  0258-1914

KUWAIT [4]

Bulletin of the Kuwait Institute for Medical Specialization  N/A
KMJ - Kuwait Medical Journal  0023-5776
Medical Arabization  N/A
Medical Principles and Practice  1011-7571

LEBANON [9]

ACES - Actualites Cliniques et Scientifiques  1683-8068
AJU – Arab Journal of Urology  New  N/A
Arab Dental Journal *  N/A
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

LIBYAN ARAB JAMAHIRYA [5]

Garyounis Medical Journal *  0254-7198
JMJ - Jamahiriya Medical Journal  N/A
Libyan Journal of Infectious Diseases [The]  N/A
LJM - Libyan Journal of Medicine  1819-6357
Tabib Attifil Alarabi *  N/A
### MOROCCO [6]

- **Bulletin Epidemiologique** *
  - ISSN: 0851-8238
- **Journal du Practicien** *
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- **Maroc Medical**
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- **Revue Marocaine de Chirurgie Orthopedique et Traumatologique**
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- **Revue Marocaine de Medecine et de Sante**
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- **Revue Marocaine des Maladies de L'Enfant** *
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- **Oman Medical Journal**
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- **SQUMJ - Sultan Qaboos University Medical Journal**
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- **Annals of Jinnah Postgraduate Medical Centre – Karachi** *
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- **Annals of King Edward Medical College**
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- **Biomedica**
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- **Challenge - Quarterly [The]** *
  - ISSN: 0528-7944
- **Community Medicine** *
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- **Diabetes Digest**
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- **GJMS – Gomal Journal of Medical Sciences**
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- **Hamdard Medicus**
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- **Infectious Disease Journal of Pakistan**
  - ISSN: 1027-0299
- **International Journal of Pathology**
  - ISSN: 1810-0155
- **JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan**
  - ISSN: 1025-9589
- **JCPSP - Journal of the College of Physicians and Surgeons Pakistan**
  - ISSN: 1022-386X
- **JDUHS - Journal of the Dow University of Health Sciences**
  - ISSN: 1995-2198
- **JLUMHS - Journal of the Liaquat University of Medical Health Sciences**
  - ISSN: 1729-0341
- **JMS - Journal of Medical Sciences**
  - ISSN: N/A
- **JOPDAK - Journal of the Pakistan Dental Association Karachi** *
  - ISSN: N/A
- **Journal of Basic and Applied Sciences**
  - ISSN: N/A
- **Journal of Medical Sciences**
  - ISSN: 1682-4474
- **Journal of Nephrology Urology and Transplantation** *
  - ISSN: N/A
- **Journal of Surgery [The]** *
  - ISSN: 1681-4517
- **JPAD - Journal of Pakistan Association of Dermatologists**
  - ISSN: 1560-9014
- **JPDA - Journal of the Pakistan Dental Association**
  - ISSN: 1680-2292
- **JPIIMS - Journal of Pakistan Institute of Medical Sciences** *
  - ISSN: 1683-6928
- **JPMA - Journal of Pakistan Medical Association**
  - ISSN: 0030-9982
- **JPMI - Journal of Postgraduate Medical Institute**
  - ISSN: 1013-5472
- **JPPS - Journal of Pakistan Psychiatric Society**
  - ISSN: 1726-8710
- **JSP - Journal of Surgery Pakistan International**
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<td>PAFMJ - Pakistan Armed Forces Medical Journal</td>
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- Gezira Journal of Health Sciences
- JMJ - Juba Medical Journal *
- Khartoum Pharmacy Journal *
- Omdurman Journal of Pharmaceutical Sciences
- Sudan Journal of Medical Sciences
- Sudan Medical Journal *
- Sudan Medical Monitor 1585-5000
- Sudanese Journal of Dermatology
- Sudanese Journal of Public Health

SYRIAN ARAB REPUBLIC [9]
- Al-Majallah Al-Tibbiya Al-Arabiayh *
- Arab Journal of Pharmaceutical Sciences 1683-0369
- Arabic Journal of Forensic Medicine and Criminal Science
- Damascus University Journal for Health Sciences
- Journal of Clinical Laboratory [The] N/A
- Journal of the Arab Board of Medical Specializations 1561-0217
- Journal of the Arab Dentist *
- Research Journal of Aleppo University - Medical Sciences Series

TUNISIA [9]
- Archives de l'Institut Pasteur de Tunis 0020-2509
- Cahier Medicaux de Tunisie *
- IDEES - Revue de Perfectionnment Medical et Paramedical *
- Maghreb Medical 0330-258X
- Revue Maghrebine de Pedriatrie [La] 0330-7611
- Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La] *
- Revue Tunisienne d'Infectiologie N/A
- SST - Sante et Securite au Travail N/A
- Tunisie Medicale [La] 0041-4131

UNITED ARAB EMIRATES [3]
- Emirates Medical Journal 0250-6882
- International Journal of Diabetes and Metabolism *
- IRCMJ - Iranian Red Crescent Medical Journal 1561-4395
YEMEN [7]

- Journal of Tropical Nephro-Urology
- Sana'a University Medical Journal *
- University of Aden Journal of Natural and Applied Sciences 1606-8947
- Yemeni Journal for Medical Sciences [The] *
- YHMRJ - Yemeni Health and Medical Research Journal
- YJMHR-Yemeni Journal of Medical and Health Research *
- YMJ - Yemen Medical Journal *

* No issues received since 2005

Last update June 2009
Appendix IV

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* No issues received since 2005

Last update June 2009