# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



# **IMEMR Current Contents**

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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 heath 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<sup>1</sup>.

# **Indexing Level**

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

# Organization of the IMEMR

#### 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.

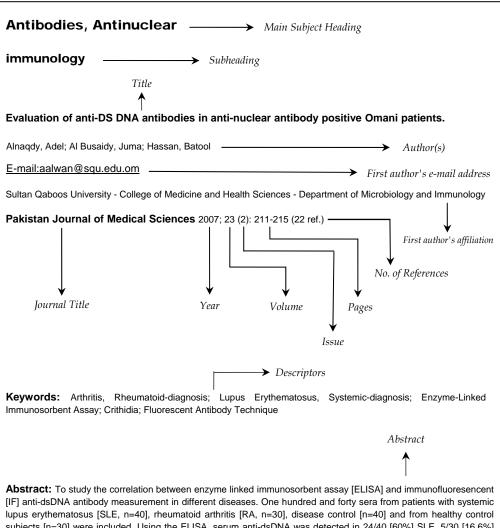
# Availability of photocopies

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 <a href="http://www.emro.who.int/HIS/VHSL/Imemr.htm">http://www.emro.who.int/HIS/VHSL/Imemr.htm</a>

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



**Abstract:** To study the correlation between enzyme linked immunosorbent assay [ELISA] and immunofluoresencent [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.

Figure (1): Sample of IMEMR citation

# **Subject Index**

# **Acne Vulgaris**

# drug therapy

#### Treatment outcome of acne vulgaris with oral isotretinoin.

Bener, Abdulbari; Lestringant, Gilles G.; Ehlayel, Mohammad S.; Saarinen, Kari; Takiddin, Ahmed H.

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Hamad Medical Corporation, Hamad General Hosptial - Weill Cornell Medical College - Department of Medical Statistics and Epidemiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 49-51 (20 ref.)

**Keywords:** Isotretinoin-therapeutic use; Treatment Outcome; Administration, Oral; Cohort Studies; Cholesterol-blood; Triglycerides-blood; Cholesterol, LDL-blood; Cholesterol, HDL-blood

**Abstract:** To determine the clinical efficacy of oral isotretinoin in the treatment of severe acne and assess its effect on total serum cholesterol, triglycerides, HDL-cholesterol and Low-Density Lipoprotein-cholesterol [LDL-cholesterol]. A cohort, descriptive, hospital-based study. Al-Ain Medical District, Tawam Hospital, United Arab Emirates, from 1994 to 2002. A total of 198 patients seen at Tawam Hospital, referred with acne vulgaris for a minimum of 6 weeks, were treated by isotretinoin for the first time, were included in the study. Variables studied were as per objectives apart from demographics and distribution. The study included 63 [32%] males and 135 [68%] females of mean age [+/- SD] of 21.3 +/- 5.6 years. Majority [81%] of patients was under 25 years. Of them, 26 patients had family history of acne. The most common site of acne was on face [66.7%], followed by trunk [26.2%] and neck [9.1%]. Of 198 patients treated, 32.8% were cured, 19.1% markedly improved, 11.1% moderately improved and 24.2% of patients were advised for further treatment. There was no marked change in total and LDL-cholesterol, while LDL and triglycerides changed markedly. In acne patients, isotretinoin is effective in producing remission. In addition, it was safe and its effect on serum lipids was transient, especially in healthy and young patients with normal liver functions.

# **Acquired Immunodeficiency Syndrome**

Rafsanjan AIDS clinic 1996-2005: problems faced and solutions found.

Shekholeslami, N.Z.; Rezaeian, M.

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Rafsanjan Medical School - Department of Infectious Diseases

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1036-1039 (3 ref.)

Keywords: Ambulatory Care Facilities; Age Distribution

**Abstract:** In response to the growing number of the HIV-positive patients in the Islamic Republic of Iran, the Iranian Ministry of Health and Education established several special clinics in all Iranian provinces to provide treatment and care to HIV-positive patients. The Rafsanjan AIDS Clinic is one such clinic that was set up in 1996. Running such a clinic is not without difficulties, given the nature of the infection and the stigmas associated with it. In this brief report we discuss some of the problems faced at our clinic and the solutions found to overcome them.

# **Acute Coronary Syndrome**

# chemically induced

#### Gemcitabine-induced acute coronary syndrome: a case report.

Ozturk, Banu; Tacoy, Gulten; Coskun, Ugur; Yaman, Emel; Sahin, Giray; Buyukberber, Suleyman; Yildiz, Ramazan; Kaya, Ali O.; Topal, Salih; Ozdemir, Murat; Benekli, Mustafa

Gazi University Medical School - Department of Medical Oncology

Medical Principles and Practice 2009; 18 (1): 76-80 (12 ref.)

**Keywords:** Deoxycytidine-analogs and derivatives; Bundle-Branch Block; Chest Pain; Leiomyosarcoma; Deoxycytidine-adverse effects; Electrocardiography

**Abstract:** To report a case of metastatic leiomyosarcoma, in which a patient developed chest pain accompanied by acute left bundle-branch block [LBBB] after gemcitabine infusion. Clinical Presentation and Intervention: A 59-year-old woman admitted with bilateral pulmonary nodules had classic risk factors for coronary heart disease and coronary stenosis as demonstrated by previous coronary angiography. She was treated with gemcitabine infusion, and 30 min later she experienced severe chest pain accompanied by acute LBBB confirmed by ECG. We suspected gemcitabine-induced coronary vasospasm exacerbated by the preexisting coronary artery disease as the cause of the acute coronary syndrome. The patient was subsequently treated with antianginal therapy and percutaneous coronary intervention. Her chest pain resolved and LBBB disappeared. She was discharged 2 days later without any further cardiac events. No additional cancer therapy was given and she died 5 months later, due to disease progression. This case showed that chemotherapeutic agents must be administered with intensive cardiac monitoring especially in patients with cardiac disease and well-known risk factors to prevent the development of cardiac complications, despite an agent not being known to be 'cardiotoxic'.

# **AIDS-Related Opportunistic Infections**

# diagnosis

Gastrointestinal opportunistic infections in human immunodeficiency virus disease.

Al Anazi, Awadh R.

E-mail:ara2328@gmail.com

King Saud University - King Khalid University Hospital College of Medicine - Department of Medicine [38]

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 95-99 (67 ref.)

Keywords: AIDS-Related Opportunistic Infections-pathology; HIV Infections-physiopathology; Gastrointestinal Diseases-etiology; Gastrointestinal Diseases-pathology; Antiretroviral Therapy, Highly Active-adverse effects; Candidiasis, Oral; Pancreatitis; Biliary Tract Diseases; Rectal Diseases; Esophageal Diseases; Peritonitis; Appendicitis Abstract: Gastrointestinal [GI] opportunistic infections [OIs] are commonly encountered at various stages of human immunodeficiency virus [HIV] disease. In view of the suppressive nature of the virus and the direct contact with the environment, the GI tract is readily accessible and is a common site for clinical expression of HIV. The subject is presented based on information obtained by electronic searches of peer-reviewed articles in medical journals, Cochrane reviews and PubMed sources. The spectrum of GI OIs ranges from oral lesions of Candidiasis, various lesions of viral infections, hepatobiliary lesions, pancreatitis and anorectal lesions. The manifestations of the disease depend on the level of immunosuppression, as determined by the CD4 counts. The advent of highly active antiretroviral therapy has altered the pattern of presentation, resorting mainly to features of antimicrobial-associated colitis and side effects of antiretroviral drugs. The diagnosis of GI OIs in HIV/ acquired immunodeficiency syndrome patients is usually straightforward. However, subtle presentations require that the physicians should have a high index of suspicion when given the setting of HIV infection.

# **Alkaline Phosphatase**

Changes of human placental alkaline phosphatase and acid phosphatase in prolonged pregnancy.

Al Allaf, Luma I.K.; Jarjees, Mohamed T.T.; Al Nuaimy, Wahda M.T.

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University of Mousl - Histology and Embryology - Department of Anatomy

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 13-18 (21 ref.)

Keywords: Acid Phosphatase; Placenta-abnormalities; Pregnancy, Prolonged; Gestational Age; Pregnancy

Abstract: The current study aims to investigate the pattern of distribution of alkaline and acid phosphatases in the placentas of prolonged pregnancies compared to that in those delivered at term. In addition, it also aims to determine whether the studied enzyme changes of prolonged pregnancy placentas represent a continuum that may begin before 42 week's gestation. This study examined placentas obtained from 220 non-hypertensive, non-diabetic, non-smoker, Rh[+] singleton pregnant women who delivered at Al-Batool Maternity Teaching hospital in Mosul city in over a period of two months extending from August 1[st] to September 30[th] 2005. These women were classified according to their accurately assigned gestational age into three groups: Group 1; includes women who delivered between 38-41 weeks of gestation [n = 100]. Group 2; includes women who delivered between 41-42 weeks of gestation [n = 60], and Group 3; includes those who delivered beyond 42 weeks [n = 60]. All placental sections of the three study groups were stained using alkaline phosphatase stain [Gomons method-cobalt] and acid phosphatase stain [Gomons method-lead]. The placentas of group 1 showed a moderate to marked reaction to alkaline phosphatase stain in the syncytiotrophoblasts with a very weak reaction in the villous stroma, and a moderate reaction in the maternal decidua; however, they showed a very weak reaction to acid phosphatase stain in both syncytiotrophoblasts and the villous stroma. Placentas in group 2 and 3 showed a marked reaction to alkaline stain in the syncytiotrophoblasts, while the villous stroma and the maternal decidua showed a moderate reaction with further decrease in the activity of acid phosphatase in both syncytiotrophoblasts and the villous stroma. Negative reaction to acid phosphatase stain was noticed in the maternal decidua in all groups. Prolonged pregnancy placentas showed increased alkaline phosphatase activity and reduction in acid phosphatase activity. In addition, the studied placental enzyme changes of prolonged pregnancies [including alkaline phosphatase and acid phosphatase] represent a continuum that may begin before 42 weeks gestation as most of these enzymatic changes are associated with pregnancies extended between 41-42 weeks

# alpha-Thalassemia

# epidemiology

Hemoglobin H disease in Muscat, Oman - a 5 year study.

Venugopal, Suresh; Dhuri, Suchata; Al Jabal, Khalid Bait; Shaju, Alphonsa

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Al Nahdha Hospital - Department of Laboratory

Oman Medical Journal 2008; 23 (2): 82-85 (16 ref.)

Keywords: alpha-Thalassemia-blood; Hemoglobin H; Blood Cell Count; Chromatography, High Pressure Liquid;

Glucosephosphate Dehydrogenase; Anemia; Ferritins

Abstract: Published data indicate that Alpha thalassemia trait is prevalent in 45% of population of Sultanate of Oman. Recent unpublished data suggest that this prevalence is higher than 45%. Yet clinical suspicion or investigations into alpha-thalassemias are lacking. Moreover, Hemoglobin H disease is considered rare in Oman. We decided, therefore to look for Hemoglobin H disease and characterize the clinico-hematopathological features of the disease. Patient demographics, clinical details and detailed hematology parametry of Hemoglobin H disease cases, diagnosed by Department of Laboratory over a period of 5 years between February 2002 and January 2007 in patients presenting at Al-Nahdha Hospital and Genetic counseling unit in Muscat were compiled from hospital and laboratory records and analyzed. Twenty cases of Hemoglobin H disease in Omanis were diagnosed mainly during the second decade. 60% belonged to Al-Balushi tribe. 40% of cases presented with body pains. 35% presented with nonspecific symptoms, 50% of cases were erroneously labeled as Iron deficiency anemia. Microcytic erythrocytosis, high Red Cell Distribution Width, numerous misshapen Red Blood Cells, pseudothrombocytosis, low A2 and normal Ferritin were important diagnostic clues. Hemoglobin H inclusions in special reticulocyte smears and Hemoglobin H on HPLC or Electrophoresis were diagnostic. Hemoglobin H disease is common in Oman. The need to do HPLC, G6PD activity and Ferritin studies in all cases of anemia in Oman to avoid missing diagnosis of Hemoglobin H disease is stressed. This study is intended to create awareness about Hemoglobin H disease in order to diagnose early, treat rightly, counsel correctly and pave the path for prevention of alpha-thalassemia disease in Oman.

#### Amiodarone

# toxicity

# Amiodarone induced morphological changes in rabbit pneumocytes.

Mehraein, Fereshteh; Shams, Alireza

E-mail:femehra@yahoo.com

Iran University of Medical Sciences - Medical School - Histology Department

Yakhteh Medical Journal 2009; 11 (1): 13-16 (24 ref.)

Keywords: Amiodarone-therapeutic use; Arrhythmias, Cardiac-drug therapy; Electton Microscope Tomography; Pulmonary Alveoli-ultrastructure; Microscopy, Polarization; Rabbits

Abstract: Amiodarone as an iodinated benzofuran derivative is a potent antiarrhythmic agent currently used for the treatment of ventricular arrhythmias. Pulmonary toxicity is one of the complications of Amiodarone therapy. The aim of this study was to determine the toxicity of Amiodarone for pneumocytes. 14 male white New Zealand rabbits were divided in a control group and an experimental group. The experimental group was subjected to intra peritoneal injection with a single daily dose of 80 mg/kg Amiodarone for two weeks. The control group received only normal saline. At the end of the injection period, the two groups were anesthetized and perfused with Karnovsky fixative. The lung tissue was removed and fixed, then prepared for light and electron microscope studies. Morphometric studies were made on sections to find nucleus profile dimensions. Light microscope observation showed acute changes in the alveolus including congestion of alveolar capillaries and infiltration of red blood cells [RBCs] into the lumen of the alveoli. Electron microscope study of lung tissue revealed abnormal inclusion bodies within type II and I pneumocytes. The micrographs also showed the presence of vacuoles in 5% of the type II pneumocytes. Morphometric studies showed that the nucleus of the cells in the experimental group were smaller than in the control group [p < 0.01].

These results indicate that Amiodarone administration can cause damage to pnuemocytes and the alveolus of rabbit lung, so the effectiveness of Amiodarone in long term treatment of heart failure patients is limited because of the development of lung toxicity.

#### **Anemia**

#### diagnosis

#### Anemia in Kassala area Eastern Sudan.

Karoum, A.O.; Mohamed, B.A.; Siddig, M.F.; Bari, E.G.

Kassala University - Department of Pathology

Sudan Journal of Medical Sciences 2009; 4 (1): 31-35 (16 ref.)

Keywords: Anemia-etiology; Blood Cell Count; Splenomegaly; Malaria

Abstract: The objective of this study was to determine the types and the ways of diagnosis of anemia at Kassala region, Sudan. In this study we examined and investigate 210 patients with anemia. Full blood cell count including peripheral picture, blood film for malaria, urine analysis and stool examination were done for every patient. Bone marrow aspiration was done for patients with splenomegaly with or without pancytopenia and or presence of immature cells in the peripheral blood. Serum iron and serum ferritin, for confirmation of iron deficiency were measured in some patients. Out of all patients, 45[21%] had chronic illness, 42[20%] had history of repeated attacks of malaria and 3[18%] patients had nutritional anemia. Sixty three [30%] patients presented with severe anemia, 32[15%] with mild anemia and 115[55%] with moderate anemia. Eighty patients presented with enlarge spleen. 26 [33%] out of the latter group had features of hypersplenism. Common causes of anemia in this area were chronic illness, followed by nutritional and repeated malaria infection. Splenomegaly and hypersplenism are common. We recommended that full blood count, peripheral blood picture and estimation of serum iron and serum ferritin should be performed for every anaemic patient. Blood film for malaria should be done for every anaemic patient and negative films should be repeated by immunochromatography test for plasmodium falciparum and vivax.

# Anemia, Iron-Deficiency

The changes induced in the electrical and magnetic properties of hemoglobin in patients suffered from iron deficiency anemia.

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Medical Journal of Cairo University [The] 2009; 77 (1): 135-139 (19 ref.)

**Keywords:** Hemoglobins; Trace Elements; Ferritins-blood; Transferrin; Adenosine Triphosphate; Superoxide Dismutase; Electric Conductivity; Magnetics

Abstract: The present study was conducted to sixty children [38 male and 22 female] with an average age eight years. Hemoglobin [Hb] was used to assess anemia. Iron deficiency anemic children were determined in a convenience sample of children aged 12-36 month from low-income families who were attending the out-patient clinic of Kasr Al-Aini hospital with iron deficiency anemia [IDA]. Twenty normal children were chosen as a control group. This study aimed to evaluate the changes induced in the electrical and magnetic properties of Hb in IDA. Oscillator strength, magnetic susceptibility, electrical conductivity, concentrations of some trace elements [Zn, Cu, Fe, Pb and Ph], serum ferritin, transferrin and adcnosine triphosphate [ATP] as well as superoxide dismutase [SOD] activity were measured. Results showed increase in hemoglobin electrical conductivity, serum ferritin either in male or female and concentrations of cupper and phosphorus. An increase in the molar magnetic susceptibility of Hb of the IDA patients was observed, when compared to control subjects. ATP, serum transferrin and iron concentrations were decreased in IDA patients. It was concluded that iron deficiency anemia affect the spin state of heme iron and the tertiary structure of hemoglobin and altering the hydrophobic/hydrophilic ratio on the hemoglobin molecule surface.

#### Anesthesia, Caudal

Comparison of the effect of caudal ropivacaine, ropivacaine-clonidine and ropivacaine-magnesium on postoperative analgesia and stress response in children.

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Medical Journal of Cairo University [The] 2009; 77 (1): 11-18 (34 ref.)

**Keywords:** Pain, Postoperative; Bupivacaine; Clonidine; Magnesium Sulfate; Drug Combinations; Child; Pain Measurement; Amides; Analgesia; Prospective Studies

Abstract: Caudal analgesia is widely used for various surgical procedures in children. In order to decrease intra and postoperative analgesic requirements after caudal blockade, various additives can be added with local anesthetics. The aim of this study was to compare the efficacy of pre-emptive caudal blockade using ropivacaine 0.25% alone or combined with clonidine, or magnesium sulfate-on stress response and postoperative pain relief in children. We performed a prospective, randomized study on 60 children, aged 4-10 years, undergoing hypospadius surgery. Patients were randomly assigned into three groups to receive either caudal ropivacaine alone [group R], caudal ropivacaine + clonidine [group RC] or caudal ropivacaine + magnesium sulfate [group RM] prior to a standardized sevoflurane anesthetic. Postoperative pain and analgesic requirements, postoperative sedation, catecholamines plasma levels, as well as hemodynamic parameters were compared among the three groups. Group RC had significantly lower objective pain scale [OPS] scores than group R and group RM in the first six postoperative hours. Fewer patients in group RC required postoperative analgesics than in groups R and RM. The time to 1[st] analgesic dose and number of analgesic doses in each group were significantly less in group RC than in groups R and RM. The sedation score was significantly higher only during the first 2 postoperative hours in group RC than groups R and RM. There was a significant decrease in the mean values of plasma epinephrine [E] and norepinephrine [NE] at the end of surgery and 1 hour after recovery compared to pre-block values in all groups. The addition of clonidine to ropivacaine 0.25% significantly increases the duration of caudal analgesia and decreases postoperative analgesic requirements in children. The addition of magnesium to ropivacaine is comparable to the effect of ropivacaine alone. Caudal analgesia resulted in a significant reduction in catecholamine levels.

# Anesthesia, Epidural

Comparison between epidural anesthesia [bupivacaine and fentanyl] mixture and continuous intravenous morphine for pain control in the treatment of major abdominal vascular surgery at Queen Alia Hospital.

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Journal of the Royal Medical Services 2009; 16 (1): 34-37 (13 ref.)

**Keywords:** Bupivacaine; Fentanyl; Morphine-adverse effects; Vascular Surgical Procedures; Analgesia, Patient-Controlled-methods; Treatment Outcome

**Abstract:** To compare the use of continuous epidural analgesia [Bupivaccine and Fentanyl] mixture and continuous intravenous Morphine in regard to efficacy and side effects for the relief of postoperative pain in the treatment of abdominal vascular surgery [upper and lower abdominal surgery]. This study was conducted at Queen Alia Hospital between January 2003 and December 2005. Age range of the study participants was between 45-80 years, 85 were males and 21 were females. The patients signed a consent form for surgical and anesthesia intervention. A total of 106 patients who had coronary artery disease, diabetes mellitus, chronic obstructive pulmonary disease, chronic renal failure or more than one of these diseases [American Society of Anesthesiologists III and IV class] were divided into

two treatment modalities. Group A [60 patients] received continuous epidural analgesia [Bupivacain and Fentanyl] mixture while group B [46 patients] received continuous intravenous morphine for the relief of postoperative pain in the treatment of major abdominal vascular surgery. Pain was assessed postoperatively using pain relief score. The different side effects reported included nausea and vomiting, motor block, respiratory depression and sedation. Simple descriptive statistics and the Chi-Square test were used to analyze the data. P value of < 0.05 was considered statically significant. Pain relief was better among patients in group A than those in group B [P < 0.001]. Similarly, there was a lower statistically significant difference regarding side effects among patients in group A. Patients who received continuous epidural Bupivacaine and Fentanyl experienced better pain relief and fewer complications than those in the Morphine group. Results indicate that the use of epidural anesthesia [Fentanyl and Bupivacaine] is a safe procedure and is more efficient than the continuous intravenous morphine for pain relief in the treatment of major abdominal vascular surgery.

# Anesthesia, General

# Comparative study of the laryngeal tube versus endotracheal tube in mechanically ventilated anesthetized patients.

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Medical Journal of Cairo University [The] 2009; 77 (1): 173-180 (33 ref.)

Keywords: Respiration, Artificial; Laryngeal Masks; Intubation, Intratracheal; Double-Blind Method

Abstract: Randomized double-blind clinical trial designed for comparing the tracheal tube [TT] versus the laryngeal tube [LT] in mechanically ventilated anesthetized adult patients undergoing different non-emergency surgical procedure. The comparison included evaluating the ease and success of insertion, adequacy of ventilation, airway sealing, hemodynamic responses and local complications. Ninety two adult patients [ASA I/II] were included in the study and randomly allocated into two equal groups. The two groups of patients were found to be matched as regards age, sex, height, weight and baseline hemodynamic status. As regards ease, and success of insertion, LT was successfully inserted in all attempted cases [100%], with success rate of 91.3% after the first attempt with a mean duration of insertion 18.13 +/- 3.4 seconds [range 12-24 seconds] with no statistically significant difference with those of TT [p > 0.05]. Adequacy of oxygenation and ventilation of LT was found similar to that of TT [p > 0.05]. Oxygen saturation has never fallen below 95% and ETCO[2] tension has never exceeded 40 mmHg in any case of both groups. The peak airway pressure in the LT group were within an acceptable range [12-25cmH[2] O] and when compared to TT no statistically significant difference was found at any of the measurement times [p > 0.05]. Air leak or gastric insulffation didn't occur at any case of LT group at any given time during controlled ventilation by adequate tidal volume and appropriate respiratory rate. The LT was found to provide an airtight seal as the highest airway pressure without leak [leak pressure] was found to be ranging between 25-40cmH[2]O with a mean value of 34.84 +/-3.97cmH[2]O. Concerning hemodynamic responses to both airway devices, our study revealed that TT induced more rapid [starting at intubation], more intense and prolonged [lasting for at least 10 minutes] increase in heart rate, arterial blood pressure, while the response to LT insertion was significantly in magnitude less and shorter in duration. Local complications at the time of extubation were significantly less in LT group occurring only in 3 patients [6.52%] [cough was the most frequent], while in TT group, these complications occurred in 5 patients out of 46 [10.86%] [cough and blood staining were the most frequent]. Occurrence of local complications during the first 24 postoperative hours, were found to be significantly lower in LT group ETCO[2]: End-tidal CO[2] tension. Mct: Hematrocrit. NIBP: Non-invasive blood pressure. GA: General anesthesia. HR: Heart rate. SpO[2]: Pulse oximetry. Hb: Hemoglobin. LT: Laryngeal tube. TT: Tracheal tube .

# **Anti-Bacterial Agents**

Assessment of self-medication of antibiotics in a Jordanian population.

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Medical Principles and Practice 2009; 18 (1): 21-25 (18 ref.)

Keywords: Self Medication

**Abstract:** To assess the extent of self-medication with antibiotics [SMA] in a Jordanian population, and to evaluate the sociodemographic factors affecting this behaviour. Subjects and Methods: Face-to-face interviews were conducted with 477 patients aged 16-65 years attending the Department of Dentistry, University of Jordan Hospital. Sociodemographic data were collected and interviewees were asked about their SMA behaviour during the last 6 months, the reasons and motives for this behaviour, and the source and dose of the antibiotics were noted. The prevalence rate of SMA in the sample during the 6 months preceding the interview was 40.7% [194/477]. Patients aged 36-55 years and those in the middle-class income group were most likely to perform SMA. SMA was mainly for sore throats, common colds and dental infections, and community pharmacies were the major source [104, 53.6% cases]. Amoxicillin was the most commonly used antibiotic, and only 73 [37.6%] patients followed the correct dosage guidelines. Previous experience with similar illness and saving time were the most common reasons for SMA. Ninety-four [19.7%] patients admitted that they consulted another physician to obtain antibiotics when their first physician did not prescribe any. The findings showed that SMA was a frequent practice among Jordanians, signifying the need for an educational campaign on the proper use of antibiotics in this population.

# Antigens, Tumor-Associated, Carbohydrate

# analysis

# Evaluation of preoperative predictive values of serum CA15-3 and CEA within Sudanese women with breast cancer.

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Sudan Journal of Medical Sciences 2009; 4 (1): 71-77 (28 ref.)

**Keywords:** Carcinoembryonic Antigen-analysis; Breast Neoplasms-diagnosis; Case-Control Studies; Tumor Markers, Biological; Predictive Value of Tests; Sensitivity and Specificity

**Abstract:** Early detection of cancer comprises early diagnosis in symptomatic and screening of asymptomatic individuals. Our aim was to evaluate the significant values of carbohydrate antigen 15-3 [CA15-3] and/or Carcinoembryonic antigen [CEA] in women with breast cancer. This case control study was conducted in Khartoum Teaching Hospital, Khartoum, Sudan. Application of such measurement may be helpful within screening and early detection efforts in such a country like Sudan with poor resources. We examined by serological radioimmuno-assay methods, significant elevation of CA15-3 and CEA serum samples obtained from 100 women of whom 40% and 35% were patients with histopathologically confirmed breast cancer and benign breast lumps respectively and the remaining 25% were apparently healthy controls. Statistical analysis: Data were analyzed by using a computer SPSS program. Among the 75 patients with breast lumps, 33 [44%] and 31[37.3%] showed high CA15-3 and CEA levels respectively. Of the 40 carcinomas, high expressions of CA15-3 and CEA were found among 28[70%] and 24[60%] respectively. Notably, only 2[8%] of the controls showed lightly elevated CEA. The obtained Specificity of 85.7%, 80% and sensitivity of 70%, 60% for CA15-3 and CEA correspondingly, support the combined application of both markers in screening for breast cancer.

# **Antiphospholipid Syndrome**

#### diagnosis

#### Antiphospholipid thrombosis syndrome with massive pulmonary embolism.

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Journal of the Royal Medical Services 2009; 16 (1): 65-68 (20 ref.)

Keywords: Pulmonary Embolism; Antibodies, Anticardiolipin-diagnostic use

**Abstract:** The antiphospholipid thrombosis syndrome is a thrombotic disorder, which can occur in a primary form or more classically in systemic lupus erythromatosus. We describe for the first time in Jordan a young patient with a complete thrombosis of the right pulmonary artery, a raised serum IgG anticardiolipin antibody and a positive lupus anticoagulant. An invasive approach of management will be discussed. The importance of screening for the APL antibodies in patients with thrombotic episode is discussed.

# Anus, Imperforate

#### diagnosis

# Wind sock deformity in rectal atresia.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 133-134 (7 ref.)

**Keywords:** Anus, Imperforate-complications; Anus, Imperforate-surgery; Constipation-etiology; Colostomy; Digital Rectal Examination; Megacolon-radiography

**Abstract:** Rectal atresia is a rare anorectal deformity. It usually presents with neonatal obstruction and it is often a complete membrane or severe stenosis. Windsock deformity has not been reported in rectal atresia especially, having been missed for 2 years. A 2-year-old girl reported only a severe constipation despite having a 1.5-cm anal canal in rectal examination with scanty discharge. She underwent loop colostomy and loopogram, which showed a wind sock deformity of rectum with mega colon. The patient underwent abdominoperineal pull-through with good result and follow-up. This is the first case of the wind sock deformity in rectal atresia being reported after 2 years of age.

# Aorta, Thoracic

#### abnormalities

Endovascular treatment of true aneurysms in the thoracic aorta.

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Endovascular Journal 2009; 2 (1): 41-43

**Keywords:** Aorta, Thoracic-surgery; Aortic Aneurysm, Thoracic-diagnosis; Angioplasty; Aortic Aneurysm, Abdominal; Aortic Aneurysm, Thoracic-epidemiology; Aortic Aneurysm, Thoracic-surgery; Comorbidity; Marfan Syndrome; Tomography, Spiral Computed; Magnetic Resonance Imaging

# Aortic Aneurysm, Abdominal

# surgery

Abdominal aortic endografting-technical considerations in challenging cases.

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University of Texas Southwestern Medical Center **Endovascular Journal** 2009; 2 (1): 5-9 (14 ref.)

**Keywords:** Surgical Procedures, Minimally Invasive; Angioplasty; Anatomy; Aorta, Abdominal-abnormalities; Aorta, Abdominal-anatomy and histology; Iliac Aneurysm; Kidney Failure; Contrast Media-adverse effects

**Abstract:** Favorable clinical results combined with increased patient demand for minimally invasive surgery has resulted in an increased application of endovascular aortic aneurysm repair [EVAR], and this treatment modality is now being extended to younger, healthier patients. While it seems that EVAR is becoming a desirable option for many patients, it is essential to realize that the feasibility of the procedure may be limited at times by patient anatomy and technical difficulties. Specific anatomical difficulties can be imposed by difficult access, short tortuous and calcified aortic and iliac landing zones, and presence of coincident complex iliac aneurysms. Renal failure has also presented a concern for patients being considered for treatment with EVAR, as the contrast loads required for the procedure, as well as for continued postoperative surveillance, may place the patient at risk. We will discuss technical maneuvers and considerations when encountering difficult anatomy and challenging surgical procedures.

#### **Aortic Diseases**

# diagnosis

Acute cardiovascular emergency: missed killer in the emergency room.

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Oman Medical Journal 2008; 23 (2): 112-115 (20 ref.)

**Keywords:** Chest Pain; Hypertension; Aorta-pathology; Radiography, Thoracic; Tomography, X-Ray Computed; Angiography; Dissection; Emergencies; Acute Disease; Cardiovascular Diseases

**Abstract:** Acute chest pain in hypertensive patients presenting to the emergency room constitute a wide spectrum of life threatening conditions including an acute aortic dissection. Acute Aortic syndromes constitute uncommon but lethal identities, with high morbidity and mortality requiring a high index of suspicion, appropriate diagnostic tools and urgent line of management. The authors are reporting a case of an elderly hypertensive lady, presenting with acute chest pain secondary to type B aortic dissection, which was missed on the initial presentation. The authors reviewed the current practice of diagnosing and managing acute aortic dissection.

# **Appendicitis**

#### diagnosis

Alvarado score; a real guide for management of right iliac fossa pain in children.

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Medical Forum Monthly 2009; 20 (2): 26-32 (29 ref.)

**Keywords:** Appendicitis-complications; Abdominal Pain-etiology; Abdominal Pain-therapy; Prospective Studies; Child: Disease Management

**Abstract:** Morbidity in children treated with right iliac fossa pain results either from late diagnosis or negative appendectomy. Diagnosis in equivocal cases is difficult. A prospective analysis of the Alvarado score for early diagnosis of appendicitis and to avoid unnecessary admissions for all patients with right iliac fossa pain was conducted. 255 patients with right iliac fossa pain from age 3 to 12 were enrolled in this prospective study in a period of 2 years. Patients were categorized into three groups according to the Alvarado score. Group 1 patients [63] with the

Alvarado score 1 to 4 were discharged but reviewed in OPD, group 2 [139] with the Alvarado score 5 to 6 were kept under observation and group 3 [53] with Alvarado score 7 to 9 were operated. Of the discharged patients 9 were admitted due to worsening of symptoms. 3/9 were operated. 2/3 were diagnosed as appendicitis. Patients under observation, 12/139 [8.6%] underwent appendectomy, 10/12 were found to have appendicitis. All of group 3 patients were operated. 49/53 [92.4%] were found to have acute appendicitis. As a whole only 68/255 [26.6%] patients were operated, 61/68 were diagnosed as appendicitis on histopathology. Negative appendectomy rate fell on 10.2%. Sensitivity of score >/= 7 to diagnose appendicitis was 92.4%. The Alvarado score is simple, easy and reliable to decide whether to discharge, observe or operate the patients who visit emergency department with right iliac fossa pain.

# The sensitivity and specificity of the conventional symptoms and signs in making a diagnosis of acute appendicitis.

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Sudan Journal of Medical Sciences 2009; 4 (1): 55-61 (35 ref.)

**Keywords:** Appendicitis-ultrasonography; Appendicitis-surgery; Physical Examination; Sensitivity and Specificity; Signs and Symptoms

**Abstract:** Simple appendicitis can progress to perforation, which is associated with a much higher morbidity and mortality. So, surgeons have therefore been inclined to operate when the diagnosis is probable rather than wait until it is certain. This study is designed to evaluate the sensitivity and specificity of clinical examination in the diagnosis of acute appendicitis. The study included 866 patients of acute appendicits who had undergone appendicectomy with preoperative diagnosis of acute appendicitis. They were analyzed retrospectively. The parameters evaluated were age/gender, clinical presentation [signs and symptoms] and total white blood cell counts. The operative findings were recorded and the inflammation of the appendix was graded into normal, acutely inflamed and gangrenous. Clinical diagnosis was made correctly in 807 [93.2%] of the patients. White blood cells count ranged from 3.70 to 45.30 /mm[3] [mean 17.5353 /mm[3]]. It was < 10.000/mm[3] in 133 [15.4%] patients. Clinical assessment is the best criterion to reach a confident diagnosis. Investigations may supplement the diagnosis but are never a substitute for it.

# Total leucocyte count, C-reactive protein and neutrophil count: diagnostic aid in acute appendicitis.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 117-120 (19 ref.)

**Keywords:** Appendicitis-complications; Leukocyte Count; C-Reactive Protein; Sensitivity and Specificity; Acute Disease; Neutrophils

**Abstract:** Acute appendicitis is one of the most common acute intraabdominal affections seen in surgical departments, which can be treated easily if an accurate diagnosis is made in time. Otherwise, delay in diagnosis and treatment can lead to diffuse peritonitis. A study was conducted on 110 patients who were operated for acute appendicitis to determine the role and predictive value of the total leucocyte count [TLC], C-reactive protein [CRP] and percentage of neutrophil count in the diagnosis of acute appendicitis. Preoperative TLC, CRP and percentage of neutrophil count were determined and were compared with the results of the histopathology of the removed appendix. Of all the patients studied, 92 had histopathologically positive appendicitis. The TLC was found to be significantly high in 90 patients who proved to have acute appendicitis, whereas CRP was high in only 88 patients and neutrophil percentage was raised in 91; four had a normal CRP level. Thus, TLC had a sensitivity, specificity and positive predictive value of 97.82%, 55.55% and 91.8%, respectively. CRP had a sensitivity, specificity and positive predictive value of 98.6%, 77.77% and 95.6% respectively. Percentage of neutrophil count had a sensitivity, specificity and positive predictive value of 98.9%, 38.88% and 89.21%, respectively. When used in combination, there was a marked improvement in the specificity and the positive predictive value to 88.04% and 98.7%, respectively. The inflammatory markers, i.e., TLC, CRP and neutrophil count can be helpful in the diagnosis when measured together as this increases their specificity and positive predictive value.

#### Arteriovenous Fistula

## therapy

#### Endovascular treatment of spinal dural arteriovenous fistulas.

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Endovascular Journal 2009; 2 (1): 22-27 (20 ref.)

**Keywords:** Arteriovenous Fistula-complications; Central Nervous System Vascular Malformations; Angioplasty; Retrospective Studies; Embolization, Therapeutic; Spine; Dura Mater; Treatment Outcome; Microsurgery

**Abstract:** The aim of this study was to evaluate the efficacy of endo vascular therapy as a primary treatment for spinal dural arteriovenous fistula [DAVF]. The authors reviewed 18 patients with spinal DAVFs for whom endovascular therapy was considered as an initial treatment at a single institute between 1993 and 2006. Embolization was

considered the primary treatment of choice, with surgery reserved for patients in whom endovascular treatment failed. Surgery was performed as the primary treatment in one patient. Embolization was used as the primary treatment modality in 17 patients, with an initial success rate of 82.4%. Two patients with incomplete embolization had to undergo surgery. One patient underwent multiple embolizations, which relieved the patient's symptoms. Spinal DAVF recurred in two patients. The overall clinical status improved in 15 patients [83.3%] during the follow-up period. We concluded that endovascular therapy can be successfully used as a primary treatment for the majority of patients with spinal DAVFs

# Arthritis, Rheumatoid

#### genetics

Decreased level of soluble receptors of advanced glycated end products [sRAGE] and Glycine 82 Serine [G82S] polymorphism in patients with RA.

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Medical Journal of Cairo University [The] 2009; 77 (1): 47-56 (29 ref.)

Keywords: Polysaccharides; Receptors, Glycine; Disease Progression; Genotype; Serine; Polymorphism, Genetic

Abstract: The receptor for advanced glycated end products [RAGE] is a multi-ligand receptor expressed as a cell surface molecule, interacting with diverse ligands. Since soluble RAGE [sRAGE] acts as a competitive receptor for cellular RAGE, the balance between these two types of receptors might be of importance in the pathogenesis of RA. To evaluate the levels of sRAGE in patients with RA compared with healthy controls and to assess the relationship between sRAGE levels and disease characteristics. Also, we assessed the association between the gene variants and the sRAGE level and disease activity. The study included 33 patients with RA and 16 healthy normal controls. All patients and controls are subjected to full clinical assessment, joint examination including tender joint count [TJC], swollen joint count [STC] and estimation of DAS 28 and laboratory investigations including CBC, ESR, urine analysis, kidney function tests, liver function tests, RF and C-reactive protein [CRP]. Soluble RAGE was determined by enzymatic immunoassay and molecular study was done for single nucleotide polymorphisms [SNP] in the glycine 82 serine [G82S] of the RAGE gene. RF was positive in 72.7% of patients and was negative in all controls. CRP was significantly higher in RA patients as compared with controls [p < 0.01]. Serum levels of sRAGE were significantly lower in RA patients than controls. RA: Rheumatoid arthritis. AGEs: Advanced glycation endproducts. sRAGE: Soluble receptor for advanced glycation end products. NF-KB: Nuclear factor-kappaB. DAS28: Disease activity score. MS: Morning stiffness. TJC: Tender joint count. SJC: Swollen joint count. CRP: C-reactive protein. SNP: Single nucleotide polymorphisms. G82S: Glycine 82 serine gene polymorphism. HMGB1: High mobility group box I or amphoterin. MMPs: Matrix metalloproteinases. [840.11 +/- 230.32 versus 1111.59 +/- 143.20, p < 0.05]. Genotyping of the RAGE gene showed G82S in 22 out of 33 RA patients, 5 of them were homozygous for the RAGE serine 82 allele, while genotyping in the control subjects showed polymorphisms in the G82S in 5 out of 16, only one of them was homozygous for the RAGE G82S allele, indicating significantly increased G82S allele in RA patients as compared with controls [p < 0.05]. The G82S allele was related to the MS. CRP and sRAGE in RA patients. The sRAGE levels were significantly lower in RA patients with more disease activity as indicated by MS, TJC and CRP. The sRAGE levels were significantly lower in RA patients with cardiac disease than those without cardiac disease. Linear regression analysis detected CRP and gene polymorphism as significant predictors for sRAGE. The levels of sRAGE were significantly lower in patients with RA and this reduction was correlated with the disease activity and glycine 82 serine gene polymorphism. Thus, the sRAGE may be an important marker of disease activity and can be used as a therapeutic target in these conditions.

#### Study of CCR5 Gene polymorphism in rheumatoid arthritis.

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Medical Journal of Cairo University [The] 2009; 77 (1): 107-112 (15 ref.)

Keywords: Chemokines, CC; Polymorphism, Genetic; Disease Progression; Genotype; Polymerase Chain Reaction;

Receptors, CCR5-genetics

Abstract: Chemokines are critical for the inflammatory process in autoimmune diseases such as rheumatoid arthritis [RA]. The chemokine receptor-5 [CCR5] mediates chemotaxis by CC chemokines and is expressed by lymphocytes with the phenotype and monocyte/macrophages. A 32bp deletion in the CCR5 [CCR5-delta 32 allele] abolishes receptor expression in homozygotes, while CCR5-delta 32 carriers express less receptor level than wild type homozygotes. This polymorphism is related to resistance to HIV-1 infection and progression to AIDS. It is hypothesized that CCR5-delta 32 allele may modulate the inflammatory response involved in rheumatoid arthritis and therefore may affect disease severity, susceptibility or both. In the present study 70 rheumatoid arthritis patients and 40 healthy individuals were genotyped. The frequency of CCR5-delta 32 allele was significantly higher in healthy individuals compared to rheumatoid arthritis patients [45% Vs 17%] respectively [p.value 0.033]. Homozygous delta 32 mutation was not detected in patients or controls No significant difference was found between CCR5-delta 32 carriers and wild type homozygotes regarding clinical or laboratory findings except for the tender joint count and rheumatoid factor positivity which was higher in wild type homozygotes [p.value 0.046 and 0.007 respectively]. Our data suggest that CCR5-dlta 32 carriers may partially protected against rheumatoid arthritis, and suggest CCR5 receptor as a candidate for targeted therapy in rheumatoid arthritis.

#### **Ascariasis**

# epidemiology

#### Biliary ascariasis in the indian subcontinent: a study of 42 cases.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 121-124 (16 ref.)

**Keywords:** Ascariasis-diagnosis; Ascariasis-complications; Biliary Tract Diseases-therapy; Biliary Tract Diseases-ultrasonography; Abdominal Pain; Jaundice, Obstructive; Cholangitis; Pancreatitis; Liver Abscess; Cholecystectomy

Abstract: History of ascariasis is known to stretch back many centuries. One quarter of the world's population is known to be infected by ascariasis. It is endemic in various parts of the Indian subcontinent and the gangetic plain of West Bengal is one of them. We aimed to study the various types of clinical presentations, complications and different diagnostic tools and to assess various options for the management of biliary ascariasis. Forty-two cases of hepatobiliary ascariasis were studied over a period of 3 years. All the patients were adults aged between 20 and 50 years and all but two were admitted with acute upper abdominal pain. In this study, biliary ascariasis was found to be more common in females, 73.8% [31 patients]. The most common presentation was upper abdominal pain in 95.2% of the patients [40 patients]. Complications observed were obstructive jaundice in 28.56% [12 patients], cholangitis in 6.7% [seven patients] acute pancreatitis in 2.4% [one patient] and hepatic abscess in 2.4% [one patient]. History of worm emesis was present in 38.1% [16 patients]. History of previous cholecystectomy was present in 16.7% [seven patients] and endoscopic sphincterotomy in 4.8% [two patients]. Ultrasound was the diagnostic tool of choice with 100% results. Conservative management was successful in 83.3% [35 patients]. During follow-up, worm reinvasion of the biliary system occurred in 7.1% [three patients]. In endemic countries, ascariasis should be suspected in patients with biliary disease, especially if a cholecystectomy or sphincterotomy has been performed in the past. Most of the patients respond to conservative management.

#### **Asthma**

# epidemiology

#### Asthma knowledge among asthmatic school students.

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Ministry of Health

Oman Medical Journal 2008; 23 (2): 90-95 (10 ref.)

Keywords: Students; Schools; Knowledge; Cross-Sectional Studies; Questionnaires; Health Education

Abstract: Bronchial asthma is a common and life threatening problem affecting school children and adolescents. The flare-up of asthma may lead to impaired daily function and absence from school. These complications of bronchial asthma could be influenced by poor knowledge, poor use of inhaler technique, non-compliance and negative attitude toward the illness and drugs. The study is designed to assess the asthma knowledge of school students suffering form asthma and identify the resources of the knowledge. All diagnosed asthma students [131 cases] selected from school health register grade 7-12 was included in this study. The self administrated questionnaire was distributed among them. It was designed to collect information of the students about epidemiology of asthma, source of their information and effect of the disease on their school attendance. Special knowledge score was constructed to measure the level of the students' knowledge. The study showed that from 131 diagnosed asthma cases 90% [118] aware about their diagnosis. Medical and paramedical personnel were found to be the source of knowledge for 49.4% [65] of the students, while teachers were mentioned by only 9.2% [12] of the students as their source of information. Regarding the effect of asthma on school absenteeism, 66% [87] of school students may miss their school due asthma attack. Health education about bronchial asthma is a need for school students. This require inter-disciplinary approach from various organization particularly the schools. It is vital that school teachers' knowledge be improved and continuously updated that it can reflect in students' knowledge and attitudes too.

# **Astigmatism**

## therapy

#### Management of astigmatism post penetrating keratoplasty.

Hallak, Joelle A.; Taneri, Suphi; Alharbi, Abdulmunim F.; Azar, Dimitri T.

University Of Illinois - Illinois Eye Ear Infirmary - Department of Ophthalmology and Visual Sciences

Saudi Journal of Ophthalmology 2009; 23 (1): 17-24 (42 ref.)

**Keywords:** Keratoplasty, Penetrating-adverse effects; Astigmatism-prevention and control; Reconstructive Surgical Procedures-methods; Keratomileusis, Laser In Situ; Lenses, Intraocular; Disease Management; Lens Implantation, Intraocular

**Abstract:** Despite improvements in outcomes of penetrating keratoplasty, postoperative astigmatism remains a challenge. This review describes the various techniques used to minimize postoperative penetrating keratoplasty

astigmatism. The advent of descemet stripping endothelial keratoplasty for corneal disorders involving the endothelium has decreased the incidence of postoperative astigmatism. Spectacles, contact lenses, and refractive surgical techniques are used in various situations to manage high postoperative astigmatism and improve functional vision. Refractive surgical procedures discussed in this review include excimer laser photorefractive keratectomy and laser in situ keratomileusis, mechanical and femtosecond laser incisional keratotomy, wedge resection, and intraocular lens implantation.

# **Atrial Fibrillation**

# complications

#### Measurement of apelin in patients with lone AF.

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Shahid Beheshti University, MC - Taleghani Hospital - Cardiovascular Department

Endovascular Journal 2009; 2 (1): 10-12 (18 ref.)

**Keywords:** Atrial Fibrillation-therapy; Prognosis; Carrier Proteins-physiology; Carrier Proteins-classification; Risk Factors; Stroke; Heart Failure; Arrhythmias, Cardiac; Age Factors; Sex Factors; Enzyme-Linked Immunosorbent Assay **Abstract:** Atrial fibrillation is one of the most common arrhythmias and it is a risk factor for stroke, heart failure, morbidity and mortality. Apelin is a protein with multiple effects on cardiovascular system such as, endothelium-dependent vasodilation, positive inotropy, declining ventricular preload and afterload and increases cardiac contractility. Plasma level of apelin which is a good guiding for evaluation of the severity and treatment of heart failure can be a good prognostic factor in lone AF. In this case-control study, 26 patients with lone AF without any other important disease and 27, age and gender matched controls from 30 to 70 years old were evaluated. Measurement of apelin in serum was performed by ELISA method. There were 26 patients aged 30 to 70 years from both genders and 27 controls. The level of apelin in patients group under 60 years old was 1.88+1.07 ng/ml and in controls group was 1.29+ 0.50 ng/ml and for older than 60 years old, 1.007+ 0.56 ng/ml and 1.41+ 0.93 ng/ml, respectively. Data of this study showed no reduction of apelin in lone AF group under 60 years old, but there is significant reduction in patients older than 60 years old. There is no relationship between sex and apelin level.

#### **Bacillus**

## genetics

# Genetic fingerprints of some bacillus spp. isolates gathered from different locations at Saudi Arabia.

Abed, Kawther; Hassan, Hussam Z.

Riyadh University of Girls - Faculty of Education - Botany Department

Arab Journal of Biotechnology 2009; 12 (1): 109-119 (21 ref.)

Keywords: DNA Fingerprinting; Polymerase Chain Reaction; Electrophoresis; Bacillus-isolation and purification

**Abstract:** Twelve Bacillus spp. isolates gathered from different locations at Saudi Arabia were fingerprinted by random amplified polymorphic DNA [RAPD] markers. The results revealed high levels of polymorphism among the studied isolates. Of many 10-mer random primers screened, five gave distinct and reproducible polymorphic DNA amplification patterns. The primers are A3, B6, B10, B11 and C12. The number of the generated bands was primer and genotype dependent. A total of 36 amplified polymorphic DNA bands were generated across the studied isolates with 9 bands being unique. All primers gave a number of unique bands that used for discrimination of some isolates. No primer was able to generate a unique banding pattern for all the studied isolates. However, combinations of all data derived from the RAPD profiles generated by the five utilized primers produced a unique fingerprint for each isolate. Similarity coefficients among the studied isolates were estimated after pooling all the gained data. The levels of similarity between the studied isolates showed low values. It reached the highest value of 0.938 between the two isolates N2 and M2, while the minimum value was 0.118 recorded between the two isolates M1 and W1. The generated dendrogram clustered the three isolates E1, N2 and M2 together and located W1 in a separate cluster.

#### **Bacteriocins**

# biosynthesis

## Bacteriocin production by indigenous marine catfish associated vibrio Spp.

Zai, Arsalan Saeed; Ahmad, Samia; Rasool, Sheikh Ajaz

University of Karachi - Department of Microbiology

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 162-167 (18 ref.)

Keywords: Bacteriocins-chemistry; Vibrio-isolation and purification; Escherichia coli; Catfishes

**Abstract:** Fifty strains of genus Vibrio were isolated [identified] from healthy and diseased marine catflsh[es]. The isolates were screened for bacteriocin [vibriocin] production. About 32% isolates were found bacteriocin producers. The best producer was identified as Vibrio anguillarum AVP10. The maximum production of vibilocin AVP10 was

manifested at 29°C at pH 7, after 18-20h of incubation. Vibriocin activity was enhanced in the presence of citrate-phosphate buffer. The vibriocin AVP10 withstands autoclaving temperature and showed activity even after prolonged chloroform treatment. Proteolytic enzymes inhibited its activity, while lipolytic enzyme had no effect, It was found bioactive only against intrageneric bacterial strains. Mode of action of vibriocin AVP10 varies with the indicator [sensitive] culture used i.e. bactericidal effects was exerted against V. anguillarum AVS9 while bacteriostatic effect was shown against entero-toxigenic E. coil.

## **BCG Vaccine**

#### chemistry

Separation of phenolic glycolipids in mycobacterium govis BCG by reversed-phase high performance liquid chromatography.

Salimi, Mona; Pourabdi, Ladan; Zakeri, Maryam; Abdipour, Nazanin Pasteur Institute of Iran - Research and Development Department

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 145-149 (18 ref.)

**Keywords:** Mycobacterium bovis-isolation and purification; Glycolipids-isolation and purification; Mycobacterium leprae; Chromatography, High Pressure Liquid; Antigens, Bacterial

**Abstract:** A crude phenolic glycolipid extract from Mycobacterium bovis BCG was fractionated by column chromatography. A reversed-phase high performance liquid chromatography [HPLC] method with UV detection at 275nm was developed for simultaneous detection and separation of phenolic glycolipids [PGLs] in Mycobacterium bovis BCG. This analysis provides a good resolution. Different solvent systems and columns for HPLC were compared. A system composed of acetonitrile-water in the ratio of 0.80% at a flow rate of 0.8 mL/min and C8 analytical column were found to be optimum for HPLC of the phenolic glycolipids. This simple method is therefore appropriate to purify these compounds present in M. bovis extract.

#### beta-Lactamases

## drug effects

Antibiotic combination as empirical therapy for extended spectrum beta-lactamase.

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

Oman Medical Journal 2008; 23 (2): 78-81 (18 ref.)

**Keywords:** Carbapenems-pharmacology; Penicillanic Acid-analogs and derivatives; Piperacillin-pharmacology; Ciprofloxacin-pharmacology; Aminoglycosides; Escherichia coli; Klebsiella pneumoniae; Drug Therapy, Combination; Gentamicins; Amikacin

Abstract: extended spectrum beta-lactamase [ESBL] producing gram negative bacilli are becoming a growing problem worldwide with difficulties in designing a national formulary for empirical treatment of gram negative sepsis. In this study, we investigated the in vitro activity of Carbapenems, Pipracillin-Tazobactam, Ciprofloxacin alone or in combination with aminoglycosides against ESBL-producing strains isolated from clinical samples. Three hundred and one ESBL-producing Escherichia coli and K. pneumoniae strains isolated from clinical samples were investigated. Isolates were screened initially for ESBL production using an automated system. All ESBL isolates were further confirmed using the double-disk diffusion method. The overall Piperacillin-Tazobactam susceptibility was 57.9 [64.4% E. coli and 43.6% Klebsiella pneumoniae]. Only 29.6% of ESBLs [24.9% E. coli and 39.6% Klebsiella pneumoniae] were ciprofloxacin susceptible. 98.1% E. coli and 93.1% of Klebsiella pneumoniae were susceptible to Piperacillin-Tazobactam plus Amikacin combination. 73.7% E. coli and 61.4% of Klebsiella pneumoniae were susceptible to Piperacillin-Tazobactam plus Gentamicin combination. 96.7% E. coli and 91.1% of Klebsiella pneumoniae were susceptible to Ciprofloxacin plus Amikacin combination. 41.2% E. coli and 51.5% of Klebsiella pneumoniae were susceptible to Ciprofloxacin plus Gentamicin combination. ESBLs have high resistance profile against Piperacillin/Tazobactam and Ciprofloxacin. The ESBLs from Oman have similar resistantce pattern as those reported from UK and USA. This resistance decreases when these drugs are combined with Amikacin. All ESBLs are susceptible to Carbapenems. However, carbepenam overuse can lead to emergence of carbapenems resistant gram negative bacilli and ESBLs. Combination of Amikacin plus Piperacillin/Tazobactam is a feasible empirical therapy for ESBLs.

#### beta-Thalassemia

# complications

Osteoporosis in beta-thalassemia major patients: role of COLIA1 gene G-T polymorphism.

Sheba, Hala F.; Hussein, Ibtessam M.R.; Abdel Gawad, Mona F.; El Beshlawy, Amal; Zaki, Moshera E.; Hamdy, Mona; Rizk, Amal; Mousa, Somaia M.

Cairo University - Faculty of Medicine - Department of Clinical Pathology

Medical Journal of Cairo University [The] 2009; 77 (1): 193-199 (36 ref.)

Keywords: Osteopetrosis-physiopathology; Polymorphism, Genetic; Collagen Type I; Polymerase Chain Reaction

Abstract: Growth impairment and osteoporosis are serious causes of morbidity in patients with beta-thalassemia major [beta-TM]. Desferoxamine [DFO] toxicity and iron overload have been proposed as the main underlying reasons. G-T polymorphism in regulatory region of COLIA1 gene has recently been associated with reduced bone mass and osteoporotic fractures in postmenopausal women. To detect the possible implication of COLIA1 gene polymorphism in pathogenesis of osteoporosis in beta-TM. Twenty five patients with beta-TM and 20 healthy controls were investigated for the G-T polymorphism of COLIA1 gene using restriction enzyme analysis. Bone mineral density [BMD], growth parameters, serum ferritin level and duration of chelation therapy were also assessed. We detected a heterozygous polymorphism of COLIA1 gene in 12% of beta-TM patients and 25% of the control group. Thalassemic patients had significant lower BMD than normal controls [p < 0.01]. Significant correlation was observed between low BMD and both duration of DFO intake and high ferritin level. Within the control group: Subjects with G/T genotype had significantly lower femoral and lumber BMD than those with G/G genotype. In thalassemic patients: No significant difference was found in BMD between the two COLIA 1 genotypes. We cannot detect evident role for COLIA1 gene polymorphism in the pathogenesis of osteoporosis in this group of beta-TM patients although this role has been detected in the control group. Further studies that include higher number of patients and more than one genetic polymorphism are needed in order to evaluate the role of genetic factors in the pathogenesis of osteoporosis in thalassemic patients.

#### **Biomedical Research**

#### methods

Understanding clinical research results.

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Center of Psychiatry

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 73-77 (5 ref.)

Keywords: Statistics as Topic; Research Design; Randomized Controlled Trials as Topic; Confidence Intervals

**Abstract:** Most physicians are phobic of statistics and numbers and usually skip reading the "methods" and "results" sections of published papers. Moreover, a main difficulty faced by clinicians conducting research project is data analysis. Epidemiologists have developed clinically meaningful, easy to apply and to understand, methods for clinical research data analysis. These methods are briefly described in this paper which also contains a summary description of different research methods. However, this paper is not a complete reference for designing research projects. Potential researchers are referred to other resources for information about designing studies, writing study protocols and avoiding potential biases and confounders.

# **Biomphlaria**

# analysis

Potential relation ibetween the appearance of biomphalaria alexandrina- biomphalaria glabrata hybrid in the irrigation system and the evolution of resistance to praziquntel lyeatment in Egypt.

Ramzy, Fatem; William, Samia; Maher, Menerva

Theodor Bilhatz Research Institute - Parasitology and Malacology Departments

New Egyptian Journal of Medicine [The] 2009; 40 (1): 40-45 (24 ref.)

**Keywords:** Biomphlaria-parasitology; Irrigation; Snails; Praziquantel-adverse effects; Drug Resistance; Mice; Schistosomiasis-complications; Schistosomiasis-drug therapy; Schistosomiasis-parasitology; Schistosomiasis-transmission; Schistosoma mansoni-drug effects

**Abstract:** In the last decade, partial resistance to Praziquantel [PZQ] in treatment of schistosomiasis appeared in some villages in Egypt. This happened following the invasion of the irrigation system by hybrid snails of the indigenous, vector snail Biomphalaria alexandrina and the introduced Biomphalaria glabrata. The objective of this study was to investigate if the distribution of the hybrid snails in the irrigation system represents a factor, between others, which is related to the appearance of [PZQ] resistance. Therefore, three groups of mice were infected with Schistosoma mansoni cercariae obtained from infected B. alexandrina, B.glabrata and hybrid snails. Six weeks later, the animals were treated with the usual curative dose of PZQ [500mg/kg body weight for two consecutive days] and sacrificed two weeks post-treatment. The results showed that worms reduction in the group infected with cercariae from hybrid snails was significantly less than that in the other two groups 86.1% versus 95.1% and 92.8%, respectively. The number of dead ova in the same group was also less, being 81.5% versus 97.5%, and 95.1% respectively. The numbers of ova/g liver was 56.6%, in the same group while 64.2 and 70.9 in the other two groups. The reduction in numbers of ova/g intestine was 81.9% in this group versus 86.1% and 88.4% in the other two groups. The present results give indication that the appearance of PZQ resistance against schistosomiasis in Egypt may return at least partially to the wide distribution of the hybrid Biomphalaria snails in this country.

#### **Blindness**

#### etiology

Causes of severe visual impairment and blindness among children in visually handicapped schools in Jordan.

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King Hussein Medical Center - Department of Ophthalmology

Journal of the Royal Medical Services 2009; 16 (1): 10-15 (27 ref.)

Keywords: Disabled Children; Vision, Low-etiology; Blindness-prevention and control; Retrospective Studies

**Abstract:** To identify the major causes of severe visual impairment and blindness among children in visually handicapped schools in Amman-Jordan with a view to determine potentially preventable and treatable causes. This study was conducted in two schools for visually handicapped children in Amman. The medical records of 160 students were reviewed during the period between August and October 2005. A total of one hundred and sixty students [85 males and 75 females, aged 6-18 years] were enrolled in the study Twenty -eight children [17.5%] had severe visual impairment and 132 [82.5%] were blind. Retinal abnormalities were the most common pathology [41.9%]. Glaucoma, primary optic nerve pathology and cataract constituted 18.8%, 13.1% and 11.3% respectively. According to timing of insult, the major cause of visual impairment was hereditary diseases [50%], followed by abnormalities of unknown timing of insult [30%]. It was estimated that 71 children [44.4%] suffer from visual impairment caused by potentially preventable or treatable conditions. The major causes of severe visual impairment and blindness among children in visually handicapped schools were glaucoma, primary optic nerve pathology and cataract.

# Blindness, Cortical

# chemically induced

Carbon monoxide induced cortical visual loss: treatment with hyperbaric oxygen four years later.

Senol, Mehmet G.; Yildiz, Senol; Ersanli, Dilaver; Uzun, Gunalp; Gumus, Tuna; Narin, Yavuz; Ozkan, Sezai; Ayata, Ali Gulhane Military Medical Academy - Haydarpasa Teaching Hospital - Departments of Neurology

Medical Principles and Practice 2009; 18 (1): 67-69 (12 ref.)

**Keywords:** Carbon Monoxide Poisoning; Blindness-chemically induced; Hyperbaric Oxygenation; Blindness, Cortical-therapy; Positron-Emission Tomography; Visual Acuity; Seizures

Abstract: We present a patient who developed visual loss after carbon monoxide [CO] poisoning and was treated with hyperbaric oxygen. Clinical Presentation and Intervention: A 21-year-old woman poisoned with CO [with coma lasting 4 h and carboxyhemoglobin level 46%] developed seizures and cortical blindness 3 days after poisoning. Four years later, her visual acuity was 0.2 in both eyes. An 18F-fluorodeoxyglucose positron emission tomography [PET] scan showed reduced metabolism in the bilateral posterior temporal and occipital lobes. The patient received a total of 50 hyperbaric oxygen sessions over 3 months for visual loss and the visual acuity improved to 0.5 in both eyes. In addition, increased metabolism was detected in the brain in post-treatment PET scans. PET documented brain hypoperfusion 4 years after CO poisoning and hyperbaric oxygen therapy improved visual acuity. However, we cannot endorse routine use of hyperbaric oxygen for such patients, until results of further clinical trials demonstrate efficacy of hyperbaric oxygen in CO-induced chronic brain injury.

# **Blood Group Antigens**

Study on the frequent expression of rodgers and chido, red blood cell antigens, in iranian healthy population.

Yari, Fatemeh; Sabaghi, Fatemeh; Bagheri, Nadia; Vaziri, Maryam Zaman; Sobhani, Maryam; Sharifi, Zohreh; Shooshtari, Mahmoud Mahmoudian

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Iranian Blood Transfusion Organization - Research Center

Yakhteh Medical Journal 2009; 11 (1): 61-62 (11 ref.)

Keywords: Complement C4-biosynthesis; DNA Restriction Enzymes; Polymerase Chain Reaction; Erythrocytes

**Abstract:** Rodgers [Rg] and Chido [Ch] are blood-group antigens and they determine the fourthcomponent of human complement C4. Rodgers and Chido are associated with two C4 isotypes [C4A and C4B]. In addition to genotype determination, study on expression of Rg and Chido could be useful in disease studies. DNA was extracted from the whole blood of 60 normal individuals. Then, PCR amplification of C4d gene fragment was followed by restriction digestion. This study demonstrated that the frequency of Ch and Rg in Iranian healthy population was 98.3 and 93.4 percent, respectively. Additionally, 6.6 percent of the studied population showed Chido-positive, Rodger-negative and 1.7 percent showed Rodger-positive, Chido-negative genotype. It may be concluded that upon receiving blood transfusion, 6.6 and 1.7 percent of individuals could produce anti-Rg and anti-Ch antibodies, respectively.

# **Bone Development**

#### radiation effects

Effect of radiation on growing long bones of young albino rats.

Panwhar, Abdul Latif; Naqvi, Anjum

Basic Medical Sciences Institute - Department of Anatomy

Medical Forum Monthly 2009; 20 (2): 3-7 (15 ref.)

**Keywords:** Radiotherapy-adverse effects; Growth Plate-radiation effects; Osteoblasts-radiation effects; Weight Gain-radiation effects; Rats; Bone and Bones-radiation effects

**Abstract:** The deleterious effects of radiation have been recognized for a almost century and continue to be seen today, because of improved survival in patients treated for malignancy with radiotherapy with or without other treatments. The present study was designed to evaluate the effect of radiation on the weight and growth of long bones on young Albino rat litters. Anatomy Department, Basic Medical Science Institute, Jinnah Postgraduate Medical Center Karachi. July 2008 to December 2008. 20 litters [10 days age] of Albino rats were divided in two groups. Group A [control], and Group B, was given 5Gy gamma radiation to whole body for 2.02 mm. from 60-unit cobalt chamber. These groups were further divided into 2 sub-groups, each comprising of 5 litters, for 2 weeks and 4 weeks study. Their weight was observed weekly and their CRL, fore limb and hind limb was measured at the end of study. At the end of study, the animals were sacrificed under anesthesia; their long bones were removed and measured with Digital caliper. A significance decrease in the weight of irradiated animals was noted. There was a significant decrease in the measurement of CRL, Forelimb and Hind limb and there was a significant decrease in the length and width of long bones of radiated animals. Total body irradiation causes growth retardation, before epiphyseal plate closure. Irradiation of growing bone typically results in retardation of longitudinal growth.

# **Bone Morphogenetic Proteins 4**

#### pharmacology

Effects of different doses of bone morphogenetic protein 4 on viability and proliferation rates of mouse embryonic stem cells.

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Tarbiat Modares University - Medical Sciences Faculty - Anatomical Sciences Department

Yakhteh Medical Journal 2009; 11 (1): 29-34 (56 ref.)

**Keywords:** Embryonic Stem Cells-drug effects; Cell Survival; Cell Proliferation; Octamer Transcription Factors-3; Immunochemistry; Mice

**Abstract:** In this study, we examined the effect of different doses of bone morphogenetic protein 4 [BMP4] on CCE mouse embryonic stem cells [ESCs] viability and proliferation rates in order to improve the outcome of induction processes and make a system with highest viability and proliferation rates for further studies on BMP4 roles in multiple developmental stages. Expression of Oct-4 was studied and confirmed in this cell line immunocytochemically. Also, indre to evaluate the proliferation and viability rates in BMP4-treated cells, ESCs were cultured in Dulbecco's Modified Eagle Medium [DMEM] containing different doses of BMP4 [0, 0.01, 0.1, 1, 5, 25, 50 and 100ng/ml]. The mean number of whole cells and living cells were considered as proliferation and survival rates respectively. Data analysis was done with ANOVA test. The results showed that there were significant differences between the mean percent of viability between 1ng/ml and 0 ng/ml [control] and 50 and 100 ng/ml BMP4 [p </= 0.01], as well as between 5 ng/ml and 0, 0.1, 0.1, 1, 25 and 100 ng/ml BMP4 [p </= 0.01], as well as between 50 ng/ml and 0.01 and 0.1 ng/ml BMP4 [p </= 0.001]. The results suggest that addition of 5ng/ml BMP4 had the best effects on the proliferation and viability rates of CCE mouse ESCs.

#### **Bone Substitutes**

# chemicalsynthesis

Biocompatibility study of a hydroxyapatite-aiumina and silicon carbide composite scaffold for bone tissue engineering.

Saki, Mohammad; Narbat, Mehdi Kazemzadeh; Samadikuchaksaraei, Ali; Ghafouri, Hamed Basir; Gorjipour, Fazel Iran University of Medical Sciences - Council for Gifted and Talented Students

Yakhteh Medical Journal 2009; 11 (1): 55-60 (25 ref.)

**Keywords:** Durapatite-therapeutic use; Aluminum Oxide-therapeutic use; Silicon Compounds-therapeutic use; Tissue Scaffolds; Carbon Compounds, Inorganic

**Abstract:** To date, several scaffolds have been fabricated for application in bone tissue repair. However, there remains a need for synthesis of scaffolds with better mechanical properties, which can be applied to defects in weight-bearing bones. We constructed a composite ceramic bioscaffold of hydroxyapatite-alumina and silicon carbide [HA-Al2O3- SiC] to take advantage of the mechanical properties of this combination and show that it supports osteoblast-like cell attachment and growth. Ceramic composite microporous scaffolds were synthesized using an organic template [commercial polyurethane sponge with an open, interconnected microporosity]. Osteoblast-like cells [Saos-2] were

then cultured on the scaffold and their growth pattern and viability were compared with those cultured in cell culturetreated flasks. Scanning electron microscopy [SEM] was used to assess cell attachment and migration. The fabricated scaffold shows fairly uniform pore morphologies. Cell growth and viability studies show that the scaffold is able to support osteoblast attachment and growth. However, SEM images indicated that the cells do not spread optimally on the scaffold surfaces. Our data suggest that that a ceramic hydroxyapatite-alumina and silicon carbide composite scaffold is a viable option for bone tissue repair. However, its surface properties should be optimized to maximise the attachment of osteoblasts.

#### **Brain Ischemia**

# pathology

# Ultrastructural study of neuronal death in rat hippocampus after transient and permanent focal cerebral ischemia.

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Kerman Neuroscience Research Center [KNRC] - Electron Microscopy Department

Yakhteh Medical Journal 2009; 11 (1): 23-28 (33 ref.)

**Keywords:** Hippocampus; Neurons-ultrastructure; Electton Microscope Tomography; Cell Death; Apoptosis; Necrosis; Rats; Ischemic Attack, Transient-pathology

Abstract: Morphological changes of CA1 neurons in rat hippocampus after transient and permanent focal cerebral ischemia were studied to clarify the nature of postischemic cell death in the subfield. Male adult rats were divided into 3 groups: Control [Shamoperated], transient ischemic group [30 minutes of MCAO followed by 48 hours of reperfusion], and permanent ischemic group [48 hours of MCAO]. After the mentioned times, deep anesthesia was induced in the rats and their brains were removed and processed for transmission electron microscopy [TEM] and evaluation. Electron-microscopic examination on day 2 showed key morphological signs of apoptosis in the permanent ischemic group, while morphological signs of necrosis were observed in the transient ischemic group. These results suggest necrosis [as dominant mechanism of neuronal death after transient ischemia] and apoptosis [after permanent ischemia] to be involved in neuronal death.

#### **Breast**

#### abnormalities

# Simultaneous duct ectasia of accessory and normally located breast.

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University of Health Sciences - Unit V, Civil Hospital - Department of Surgery

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 57-58 (10 ref.)

**Keywords:** Mammary Glands, Human-pathology; Breast Disease-diagnosis; Dilatation, Pathologic; Axilla; Mastitis; Plasma Cells

**Abstract:** Accessory breast and duct ectasia are common clinical problems in their own right. However, their coexistence is a rare entity. Duct ectasia is a dilation in one or more of the larger lactiferous duct filled with a stagnant brown or green secretion, which may or may not discharge through the nipple. This material acts as an irritant and leads to periductal mastitis. Duct ectasia may present with subareolar mass, nipple discharge, nipple retraction, non-cyclical mastalgia or mammary fistula. Surgical options are microdochectomy or cone excision of major ducts. This case report describes the presence of duct ectasia in both accessory breast situated in the axilla and ipsilateral normal breast simultaneously.

# **Breast Neoplasms**

# diagnosis

# Role of MRI in improving diagnosis of breast tumors.

Hassan, Khaled Fawzy Zaky; Gaballah, Inasse Ibrahim

Sohag University - Faculty of Medicine - Department of Radiodiagnosis

Medical Journal of Cairo University [The] 2009; 77 (1): 161-165 (17 ref.)

Keywords: Magnetic Resonance Imaging; Mammography; Sensitivity and Specificity

**Abstract:** To assess the role that can be played by MRI to minimize the number of false positive cases of breast tumors that commonly occur with mammography. This study included 200 consecutive patients aged 40 years or more, who were referred to the Department of Radiology for suspicion of a breast lump. Mammography then magnetic resonance imaging [MRI] was performed for each patient. A patient with a positive finding in any of these two modalities underwent histopathological diagnosis. Sensitivity and specificity were calculated for each imaging modality and that for MRI of mammography positive patients. Most common benign lesion were fibroadenoma [11%] and radial scars [5.9%], while the most common malignant tumors were invasive ductal carcinoma [37.3%] and ductal carcinoma in situ [21.2%]. Prevalence of breast tumors among participants increased with their age. Prevalence of breast tumors

among nulliparous participants was significantly higher than that among parous participants [88.6% Vs. 72.5%, respectively, p = 0.01]. The prevalence of breast tumors was significantly higher among those with positive family history of breast cancer [93.2%] than those with negative family history [70.6%], p = 0.003. Mammography provided a higher sensitivity than that provided by MRI [97.5% Vs. 90.7%, respectively], but a lower specificity [48.6% Vs. 94.3%, respectively], which has been fully improved by the application of MRI on cases who were positive by mammography [100%]. The application of MRI for cases with positive mammographic findings can be a cost-effective procedure that greatly limits false positives, increases specificity and spares unnecessary invasive interventions. To conduct a community-based study to assess the role and cost-effectiveness of MRI in screening for breast cancer among females aged over 40 years, applying MRI on all those with mammographic findings.

# **Brucellosis**

# complications

Brucella meningitis: first reported case in Egypt.

Mansour, A.M.; Nakhla, I.I.; Sultan, Y.A.; Frenck Jr, R.W.

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United States Naval Medical Research Unit No. 3

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1040-1044 (17 ref.)

**Keywords:** Meningitis-microbiology; Brucellosis-drug therapy; Meningitis-drug therapy; Enzyme-Linked Immunosorbent Assav: Meningitis-cerebrospinal fluid

#### **Burns**

#### therapy

#### Effects of infrared laser versus Zinc iontophoresis on burn wound healing in children.

Sarhan, Reda Sayed Mohamad

Al Azhar University - Faculty of Medicine - Departments of Physical Therapy and Rehabilitation

Medical Journal of Cairo University [The] 2009; 77 (1): 129-134 (13 ref.)

**Keywords:** Wounds and Injuries; Child; Iontophoresis; Infrared Rays; Wound Healing; Pain Measurement; Paintherapy; Zinc; Lasers

Abstract: The purpose of this study was to compare between the effect of both Infrared [IR] laser biostimulation and the effect of zinc iontophoresis on the accelerating rate of healing of burn wound in children. Thirty children from both sexes [20 males and 10 Females], participated in this study were selected randomly from King Abdul-Aziz University Hospital Burns Unit, Jeddah, Saudi Arabia, having burn in their lower extremities, anterior surface of the leg and/or dorsum of feet. Their ages were ranging between 5 and 9 years. These children were randomly divided into two Study groups of equal number. Study group A [n = 15], 10 males and 5 females] and group B [n = 15] 10 males and 5 females]. Patients belonging to the group [A] received physical therapy program, comprising positioning, stretching and remedial exercises in addition to IR laser for the burnt area. On the other hand, patients belonging to the group [B] were subjected the same physical therapy program in addition to zinc iontophoresis for the burnt area. Treatment continued for both groups of patients for one hour/session, three times/week, for twelve successive weeks. The wound surface area was assessed before and after the suggested period of treatment, using the metric graph paper method. The wound area was calculated from the product of cross-diameters of the wound sites. The curative effect was expressed as the percentile of wound area compared with that on day 0 [100%]. The passive range of foot dorsi-flexion was assessed by using a LCD goniometry. Furthermore, the present pain intensity scores were assessed. The collected data after termination of the suggested period of treatment of both groups revealed significant improvement in the study group [A], compared to those of the study group [B]. Furthermore, a similar improvement was also noted in comparing the results of each Study group before and after treatment. Such an improvement included reduction of the wound area and pain intensity scores in addition to an increase in the foot dorsi-flexion ROM. It should be stressed that utilization of IR laser irradiation in combination with the traditional physical therapy modalities have promotive effects on burn wound healing and more effective in treating burnt areas than using zine iontophoresis.

# Carcinoma, Ehrlich Tumor

#### drug therapy

# Effect of anticancer drugs on genomic DNA and chromosomes in Ehrlich ascites tumor bearing female mice.

Hussein, Mona H.; Teleb, Zakaria A.; Mogheib, Reda A.; Ibrahim, Maged I.

Cairo University - Faculty of Agriculture - Department of Genetics

Arab Journal of Biotechnology 2009; 12 (1): 13-25 (39 ref.)

**Keywords:** Anticarcinogenic Agents; Cisplatin; Vinblastine; Mice; Lipid Peroxidation; Glutathione; Chromosome Aberrations; Oxidative Stress; Genomics; DNA

**Abstract:** The antioxidant activity, DNA damage and chromosomal aberrations were studied under the effect of cisdiaminedichloro platinum [CDDP] and vinblastine sulphate [VLB] in Ehrlich ascites tumor bearing female mice. The two doses of CDDP and VLB were found to decrease the hepatic glutahione [GSH] content and total protein. Lipid

peroxidation [MDA] increased significantly in the first and second weeks of administration compared to the control. Also, losses in body and liver weights were observed. Genomic DNA concentration was decreased by CDDP and VLB to 15.0%, 32.0%, 22.0% and 43.5%, respectively, DNA banding pattern of liver tissue on agarose gel [1.3%] electrophoresis was found compared to control. Serum protein banding pattern under the effect of the two drugs SDS-PAGE was observed clearly after 2 weeks of administration, but not after the first week. The percentage of total chromosomal numerical aberrations of bone marrow cells were significantly increased for CDDP and VLB to 304.8%, 457.1%, 238.1% and 290.5%, respectively. Also the percentages of total chromosomal structural aberrations of bone marrow cells were significantly increased to 372.7%, 581.8%, 101.0% and 150.0%, respectively in the second week. The effect of these drugs was dose-dependant. It is concluded that these anticancer drugs are harmful and precaution should be considered when administrated in human.

#### Cardiovascular Diseases

#### diagnosis

Guidelines: The role of endomyocardial biopsy in the management of cardiovascular disease.

Cooper, Leslie T.; Baughman, Kenneth L.; Feldman, Arthur M.; Frustaci, Andrea; Jessup, Mariell; Kuhl, Uwe; Levin, Glenn N.; Narula, Jagat; Starling, Randal C.; Towbin, Jeffrey; Virmani, Renu

Endovascular Journal 2009; 2 (1): 36-40 (31 ref.)

**Keywords:** Cardiovascular Diseases-therapy; Biopsy; Adult; Child; Cardiomyopathies; Heart Failure; Myocarditis; Transplantation; Arrhythmias, Cardiac; Heart Neoplasms

#### Caseins

# The clinical applications of tooth mousse[TM] and other CPP-ACP products in caries prevention: evidence-based recommendations.

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Smile Dental Journal 2009; 4 (1): 8-12 (26 ref.)

**Keywords:** Dental Caries-prevention and control; Tooth Remineralization; Evidence-Based Dentistry; Milk; Diet, Cariogenic; Dairy Products

**Abstract:** Casein phosphor-peptides-amorphous calcium phosphate [CPP-ACP] products have been widely used in the field of preventive dentistry. CPP exerts its main effect through binding and stabilizing calcium and phosphate ions [ACP] in an amorphous, non-crystalline state where they can enter enamel and enhance remineralization. The following article presents a background on these products, in addition to the scientific rationale behind their anticariogenic mechanisms and a great deal of useful evidence-based clinical applications.

#### Cataract

#### therapy

#### Approaches to a posterior polar cataract inside-out delineation and strategies for emulsification.

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Raghudeep Eye Clinic - Iladevi Cataract and IOL Research Center

Saudi Journal of Ophthalmology 2009; 23 (1): 25-29 (17 ref.)

**Keywords:** Phacoemulsification-methods; Surgical Procedures, Operative-methods

Abstract: Management of a posterior polar cataract poses a special challenge to the cataract surgeon because of its predisposition to posterior capsule dehiscence during surgery. The following principles help guide the surgeon during the procedure. Preoperatively the patient has to be counseled thoroughly regarding the possibility of drop nucleus. A thorough preoperative evaluation is mandatory to look for an associated posterior capsule defect. The surgical technique should include the following steps: Maintain a closed chamber at all times, perform an adequate-sized anterior capsulorhexis, avoid hydrodissection - instead perform Inside-Out Hydrodelinearion, during nucleus emulsification use low fluid parameters and follow the principles of slow motion technique and step down technique. Inject OVD before removing any instrument from the eye. In case of a posterior capsule dehiscence, try to convert the dehiscence into a posterior capsulorhexis. Inject Viscoat over the area of dehiscence and perform adequate 2-port automated anterior vitrectomy. In case of a posterior capsule dehiscence implant IOL in the bag only if a complete posterior capsulorhexis is achieved.

#### Catha

#### adverse effects

Effect of chewing khat in changing circadian rhythm for acute myocardial infarction patients in Sana'a city and it's role as a risk factor for acute myocardiac infarction in Yemen.

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Sana'a University - Department of Medicine

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 28-33 (18 ref.)

**Keywords:** Myocardial Infarction-etiology; Myocardial Infarction-diagnosis; Hypertension-complications; Obesity-complications; Hyperlipidemias-complications; Diabetes Mellitus; Body Mass Index; Smoking-adverse effects; Circadian Rhythm-drug effects; Prospective Studies; Cross-Sectional Studies; Risk Factors

Abstract: Although the risk factors for acute MI were studied thoroughly in different countries worldwide, few studies in our country had been done, and cover only limited aspects of acute myocardial infarction [MI], for this reason we start this study to determine the general characters and risk factors of Yemeni patients presented with acute [MI]; and to highlight on the possible role of Khat chewing as potential risk factor for [MI] in our country in addition to its possible effect in changing its circadian rhythm. The study was prospective; hospital based descriptive study including all patients admitted with the diagnosis of acute MI to the 3 main general hospitals in Sana'a city in the period from 1 October 2005 to 30 September 2006. Name, age, gender, residence, habits, time of onset of chest pain and previous history or family history of ischemic heart disease [IHD] was taken. Body mass index [BMI] and blood pressure were recorded, fasting lipid profile and blood sugar were measured. The data was collected and then analyzed using SPSS system. During the study period, 264 patients were admitted with a mean age of 50 years, all of them were married with predominant male gender 84%. Risk factors observed in our study were Khat chewing in 90.15%, smoking in 72%, hypertension in 21%, obesity in 15.96%, hyperlipidemia in 27%, diabetes mellitus [DM] in 24% and past history of ischemic heart disease was found in 13%. We notice that the onset of chest pain in most of our patients was in the afternoon 34% and early night hours 24%, which is opposite to the usual circadian rhythm of acute MI in other parts of the world which is predominant in the early morning. Yemeni patients sustained acute MI are younger than western people or even other Arab countries. Common risk factors as hypertension, DM and hyperlipidemia were noticed only in minority of our patients. Smoking is a common risk factor after Khat chewing habit which was proposed as new risk factor. Circadian rhythm of acute MI in Yemen is differing from other part of the world.

#### Ceftriaxone

#### analysis

Quality of ceftriaxone in pakistan: reality and resonance.

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University of Karachi - Faculty of Pharmacy - Department of Pharmaceutical Chemistry

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 220-229 (39 ref.)

**Keywords:** Ceftriaxone-chemical synthesis; Quality Assurance, Health Care-organization and administration; Quality Assurance, Health Care-trends

**Abstract:** The quality of pharmaceuticals is a global concern, counterfeit/ poor quality/ substandard medicines can cause harms in various ways: In a number of developing countries including Pakistan there is reportedly a high incidence of the availability of substandard drugs. The majority of these reports do not contain quantitative data to support these claims, nor do they describe the methodology employed for the quality assessment. Quality of drugs available in Pakistan are being questioned and topic of discussion in local news paper, TV channels in general public including journalist and physicians due to disparity of price among same generics, lack of knowledge for such science and unknown reasons. Since, quality of drugs can neither be assessed by naked eye or by every one therefore, randomly selected, 96 samples of different strength of Injection Ceftriaxone Sodium and its generic, a widely used third generation cephalosporin in Pakistan since 1982 and 1994 till date respectively included in the said study to know the reality. 15.62% of Ceftriaxone Injection was found to be Out of Specification, however, not a single sample was found fake [spurious] out of 96 tested samples. Nevertheless, quality is a wide ranging concept covering all matters that individually or collectively influence the excellence of a product hence price and other related issues are also analyzed in the study.

# **Cerebellar Cortex**

# anatomy and histology

Effect of chronic immobilization stress on vermal cerebellar cortex of young male rats.

Junjua, Bashir Ahmad; Khan, Muhammad Younas; Minhas, Brig Lipat Ali Anatomy Department

Medical Forum Monthly 2009; 20 (2): 14-18 (16 ref.)

**Keywords:** Restraint, Physical; Purkinje Cells; Microscopy, Polarization; Cell Count; Immobilization; Rats, Sprague-Dawley; Chronic Disease

Abstract: The objective of this study was to observe the morphological changes in vermal cerebellar cortex of young male rats with special reference to Purkinje cell after exposure to chronic immobilization stress. An experimental study. Department of Anatomy CPSP Regional Centre, Islamabad, from August 2006 to July 2007. Sixty young male Sprague Dawley rats were taken and divided equally in two groups [n = 30 in each]. Group A = control. Group B = experimental. 'Experimental' group was kept in restrainer for 2 hours continuously, for 14 days, one rat per restrainer separately. At the end of the experiment, all the animals of both groups A and B were anesthetized and sacrificed for the removal of cerebellum. It was fixed in 10% formalin. To record data for histological evaluation, the vermal cerebellar cortex of a specified area was selected. It was processed and 5 um-thick sections were cut. Hematoxylin and Eosin stained sections were examined under light microscope. Data was analyzed by SPSS version 10. Significant decrease in total cell count and cell size was found in experimental group as compared with controls. Number of dark cells was found more in stressed animals. Increase in thickness of vernal cerebellar cortex and molecular layer was observed in stressed animals as compared with controls. Chronic immobilization stress can affect the outcome of the cerebellar functions causing damage to the Purkinje cells as a result of cellular metabolic changes by an imbalance between the oxidant and anti oxidant status inside the brain.

#### Cesarean Section

#### statistics and numerical data

Caesarean delivery rates, determinants and indications in Makassed Hospital, Jerusalem 1993 and 2002.

Mikki, N.; Abu Rmeileh, N.M.E.; Wick, L.; Abu Asab, N.; Hassan Bitar, S.

Birzeit University - Institute of Community and Public Health

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 868-879 (28 ref.)

Keywords: Cesarean Section, Repeat; Fetal Distress; Breech Presentation

**Abstract:** This study investigated the rising rate of caesarean section [CS] deliveries between 1993 and 2002 [9.4% to 14.4%] and associated factors, including indications for CS and sociodemographic and clinical characteristics based on the register of a major Palestinian teaching hospital. Instrumental deliveries declined from 12.6% to 4.4%. Fetal distress decreased as an indication for CS, while previous CS and breech presentations contributed to the increase. Decision-making for CS needs to frame the benefits and risks of the intervention within the context of women's entire reproductive life-cycle and existing standards of care, avoiding unnecessary and costly CS deliveries to reduce latrogenic complications and conserve resources.

# Chickenpox

# epidemiology

Pattern of varicella and associated complications in children in United Arab Emirates: 5-year descriptive study.

Uduman, S.A.; Sheek Hussein, M.; Bakir, M.; Trad, O.; Al Hussani, M.; Uduman, J.; Sheikh, F.

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United Arab Emirates University - Faculty of Medicine and Health Sciences - Department of Paediatrics

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 800-806 (22 ref.)

Keywords: Chickenpox-complications; Incidence; Age Distribution

**Abstract:** The objective of this study was to characterize the epidemiology of varicella and varicella associated complications in Al-Ain, United Arab Emirates [UAE] during 2000-04. The annual number of reported cases varied from 373 to 790 per 100 000 population. Most [89%] occurred in children < 15 years old. Of 187 children requiring hospital admission, 50.3% had febrile illness due to secondary bacterial infection and 17.6% had neurological complications. The overall mortality rate among hospitalized children was 1.1%, all due to invasive group A Streptococcus. Varicella and associated complications in previously healthy children is becoming an important clinical and public health problem in the LIAE

#### Chickens

#### genetics

A genome scan inference to the genetic evaluation of selected and randombred chicken populations.

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Cairo University - Faculty of Agriculture - Department of Animal Production

Arab Journal of Biotechnology 2009; 12 (1): 1-12 (43 ref.)

**Keywords:** Genome; Genotype; Genetic Screening; Polymerase Chain Reaction; Polymorphism, Genetic; Alleles **Abstract:** The genome scans were obtained for three lines of chickens: genotyping for homozygous nakednecks [line N], homozygous normal feathering [line F] and their randombred population [line C]. Lines N and F have undergone

massive selection for two generations for increased 6-week body weight. The objective of the study was to evaluate the genetic changes associated with selection or random breeding. Six pooled DNA samples within line and generation were scanned by five decamer RAPD-PCR primers. The averages of allelic bands were 11, 10.6, and 9.6 bands for lines N, F and C, respectively. Bands with polymorphic nature were detected and averaged 71.5, 66.7 and 59.3% of the total allelic bands in the respective lines. The monomorphic alleles averaged 3.3, 8.2 and 8.6%, and line-specific bands were also observed and averaged 9.7, 10.8, and 6.2%. The line-specific bands were mainly attributed to selection and poorly to the random genetic drift. The recognition of monomorphic and line-specific allelic bands revealed the reliable contribution of genome scanning in recognition of line specificity. The change in allele frequency over two selected generations in lines N and F demonstrated allelic bands with downward trend and others with upward trend, concluding that genomic alleles may be employed to monitor the changes in allele frequency over subsequent generations. Allelic coalescence points were estimated and the copies descended from ancestral alleles to the second generation were estimated to be 29.56, 28.20 and 37.56% of the total allelic bands scored in lines N, F and C. Number of gene trees were formed due to the accumulation of transmitted ancestral alleles and totaled 22, 12, and 15 in the respective lines. The estimation of rate of coalescence points and tracing ancestral alleles is of significance for small-sized selected and inbred populations. The results of genomic variability reported in lines N and F indicated that a further selection progress is anticipated in each. The genetic distance between lines N and F after two generations of selection was 1.03, and both were genetically distant from line C by 1.15 and 0.81. The results denote to the significance of genome scanning in the evaluation of breeding programs.

# Cholecystectomy, Laparoscopic

Male gender and laparoscopic cholecystectomy.

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Govt. Medical College - Srinagar, Kashmir, India

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 137 (1 ref.)

Keywords: Pneumoperitoneum, Artificial-methods; Pneumoperitoneum, Artificial-adverse effects; Ultrasonography

#### adverse effects

# Abdominal wall sinus as a result of spilled gallstone post laparoscopic cholecystectomy: A case report.

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King Hussein Medical Centre - Department of General Surgery

Journal of the Royal Medical Services 2009; 16 (1): 58-61 (16 ref.)

Keywords: Abdomunal Abscess; Gallstones

**Abstract:** This is a case report of a 73 year old male patient who presented with a chronic discharging sinus from the right side of his abdominal wall almost three years after he underwent laparoscopic cholecystectomy CAT scan showed a sinus tract leading to a radio-opaque foreign body located in a cavity just lateral to the right edge of the right lobe of the liver, highly suggestive of a gallstone being slipped during cholecystectomy. The patient underwent surgery where the sinus tract was excised and a gallstone was removed from a cavity sinus in the peritoneum just lateral to the right edge of the right lobe of the liver. Both the laparotomy wound and sinus tract wound were completely healed three weeks post operatively. Gallstone abscess and sinus formation post laparoscopic cholecystectomy are becoming more common than expected due to the underestimation of many surgeons of the hazards that may result from gallbladder perforation and stone spillage intraperitonially during the procedure. This a rare and new complication post laparoscopic cholecystectomy and can be prevented by several simple precautions and manoeuvres. Increase of awareness about this type of complication will facilitate it prevention.

#### Chromium

# toxicity

# Chromium induced cytotoxicity in blackgram [vigna mungo L.].

Chidambaram, A.; Sundaramoorthy, P.; Murugan, A.; Ganesh, K. Sankar; Baskaran, L. Annamalai University - Division of Environmental Biology - Department of Botany

Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 17-22 (29 ref.)

Keywords: Cytotoxins; Seeds; Chromosome Aberrations; Germination; Mutation

**Abstract:** Chromium is known to be highly toxic to biological systems. This study was designed to determine the mutagenic effects of different concentrations [0, 10, 25, 50, 100 and 200 mg/L] of hexavalent chromium on root tip cells of blackgram [Vigna mungo L. Hepper]. The blackgram seeds were equi-spacially arranged in sterilized petriplates lined with filter paper and they were treated with different concentrations of chromium solution. In germination studies, the morphological growth parameters such as germination percentage, root length, shoot length fresh weight and dry weight of blackgram seedlings were decreased with increasing dose of chromium concentrations. No germination of blackgram seeds was recorded at 300mg/l chromium concentration. Chromosome aberration assay was used to determine the mitotic indices and rate of chromosome aberration in blackgram root tip cells due to chromium treatment. The results showed that the mitotic indices were complicated due to different concentrations of chromium. However,

the increase in chromium concentration has led to a gradual increase in the percentage of chromosomal aberration and mitotic index. The chromosome length, absolute chromosome length and average chromosome lengths were gradually found to decrease. There was no considerable change in 2n number of chromosome with the increase in chromium concentrations. It is concluded that the hexavalent chromium has significant mutagenic effect on the root tip cells of blackgram.

#### Climate

The effect of green spaces on urban climate and pollution.

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University of Chief - Civil Engineering Department

Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 35-40 (19 ref.)

Keywords: Air Pollutants; Cities; Urban Population; Temperature; Humidity; Wind

Abstract: The climate of a conurbation is of great importance, in particular for public health and to provide good environment. Town planning should take into account how it can influence microclimate, especially in view of pollutant emissions by internal combustion engines. The objective of this study was to know the role and behaviour of green spaces in major cities on climate and air pollution. This article provides case studies of the effect of urban parklands on temperature, humidity and pollution, based on a series of formal measurements. Analysis of climatic data has found that gardens and parklands are responsible for significant precipitation. In this study, the present examples, which represent the most frequent cases found during the campaign measures, conform to this pattern. The influence of different types of gardens on temperature, humidity, wind, precipitation and the distribution of air pollution are presented. The results clearly showed the important role of parklands in urban areas. The parklands decreasing temperatures promote the reduction of urban heat island. Such green spaces, gardens and even squares are the least polluted places in a town. Breezes generated by the parklands repel and disperse pollutants, generally issue from traffic cars. Green spaces and gardens contribute significantly to improving the microclimate and reducing the rate of pollution in the city. Therefore, the parklands are the lungs of the city. The parkland should be the most important developments in the city of tomorrow.

# **Colorectal Neoplasms**

Colorectal cancer: case-control study of sociodemographic, lifestyle and anthropometric parameters in Riyadh.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 817-826 (36 ref.)

**Keywords:** Case-Control Studies; Life Style; Anthropometry; Risk Factors; Exercise; Dietary Fiber; Health Education; Awareness; Questionnaires

**Abstract:** This case-control study compared sociodemographic variables, lifestyle and certain anthropometric parameters of 50 patients hospitalized with colorectal cancer with those of 50 ageand sex-matched controls at a referral hospital in Riyadh. Among cases, females were generally more affected by gastrointestinal symptoms and 4% of male patients had a family history of colorectal cancer. Unlike weight and height, body mass index did not differ between cases and controls, but poor knowledge of high-fibre diets was a significant factor. Regression analysis showed low education level, unemployment and not taking exercise regularly were significant risk factors for colorectal cancer. Better education and awareness of colorectal cancer screening is recommended.

# **Coloring Agents**

Effect of dye concentration on sequencing batch reactor performance.

Vaigan, A.A.; Moghaddam, M.R. Alavi; Hashemi, H.

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 11-16 (20 ref.)

Keywords: Textile Industry; Waste Disposal, Fluid; Sewage

**Abstract:** Reactive dyes have been identified as problematic compounds in textile industries wastewater as they are water soluble and cannot be easily removed by conventional aerobic biological treatment systems. The treatability of a reactive dye [Brill Blue KN-R] by sequencing batch reactor and the influence of the dye concentration on system performance were investigated in this study. Brill Blue KN-R is one of the main dyes that are used in textile industries in Iran. Four cylindrical Plexiglas reactors were run for 36 days [5 days for acclimatization of sludge and 31 days for normal operation] at different initial dye concentrations. The dye concentrations were adjusted to be 20, 25, 30 and 40 mg/L in the reactors R1, R2, R3 and R4, respectively. In all reactors, effective volume, influent wastewater flowrate and sludge retention time were 5.5 L, 3.0 L/d and 10 d, respectively. According to the obtained data, average dye removal efficiencies of R1, R2, R3 and R4 were 57% +/- 2, 50.18% +/- 3, 44.97% +/- 3 and 30.98% +/- 3, respectively. The average COD removal efficiencies of all reactors were 97% +/- 1, 97.12% +/- 1, 96.93% +/- 1 and 97.22% +/- 1, respectively. The dye removal efficiency was decreased by increasing the dye concentration with the correlation coefficient of 0.997.

# Compomers

Clinical evaluation of a colored compomer in primary molars.

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University of Kmkkale - Faculty of Dentistry - Department of Pediatric Dentistry

Medical Principles and Practice 2009; 18 (1): 31-34 (21 ref.)

Keywords: Color; Molar; Dental Restoration, Permanent

**Abstract:** The purpose of this study was to evaluate the clinical performance of a new colored compomer material, Twinky Star, in primary molars. Eighty class II restorations were placed in a total of 36 subjects and the clinical success of the restorations was evaluated after 12 months based on modified US Public Health Services criteria. The failure rate of the restorations was 3.9% [3 out of 77] and the clinical success of the restorations, measured by anatomic form, marginal integrity, marginal discoloration, surface texture, maintenance of interproximal contact and secondary caries, was acceptable. The clinical success of the colored compomer material, Twinky Star, indicates that it could be a good alternative to tooth colored compomers.

# **Corneal Neovascularization**

# etiology

# Hemilimbal deficiency model of corneal neovascularization: Possible invalidity of the limbal barrier concept.

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Saudi Journal of Ophthalmology 2009; 23 (1): 3-7 (26 ref.)

Keywords: Limbus Corneae; Matrix Metalloproteinase 2; Models, Animal; Mice

**Abstract:** To describe a novel model of corneal neovascularization [NV] in mouse cornea where hemilimbal deficiency is induced with or without corneal epithelial debridement. Following hemilimbal excision with or without corneal epithelial removal, mice corneas were examined and photographed prior to and following the onset of corneal NV. Slides were reviewed by visual observation for evidence of corneal NV. Corneas with complete removal of both limbus and epithelium [group I; n = 10] all developed extensive corneal NV by post-operative days [POD] 3-10. Corneas with intact epithelium and complete removal of the limbus [group II; n = 7] developed corneal NV by POD's 7 [n = 6] or 30 [n = 1]. Corneas where half of the limbus and more than half of the corneal epithelium were removed [group III; n = 9] developed vessels from the side opposite to the limbal injury by POD's 4-7. Corneas where half of the limbus removed and only the adjacent peripheral corneal epithelium were removed did not show any vessels [group IV; n = 9]. Removal of half of the limbus [hemilimbal deficiency] led to corneal NV from the opposite side of the cornea, in which the limbus was intact, raising question about the function of Limbus as a harrier to corneal NV.

# Coronary Angiography

#### methods

# Correlation between 64-slice CT angiography and conventional coronary angiography.

Ghasemi, Massoud; Fard, Leila Miralizadeh; Rahimi, Mehrzad; Karvandi, Mersedeh; Eslambolchi, Azadeh; Tabatabaie, Seyed Alireza; Shirvandehi, Noshin; Hadi, Jamaledin; Salahi, Ali

Research Center of Endovascular Intervention

Endovascular Journal 2009; 2 (1): 13-17 (31 ref.)

**Keywords:** Tomography, Spiral Computed; Coronary Disease-diagnosis; Coronary Disease-radiography; Coronary Stenosis-diagnosis; Coronary Stenosis-radiography; Exercise Test; Thallium; Echocardiography, Stress; Sensitivity and Specificity; Predictive Value of Tests

**Abstract:** 64-slice CT coronary angiography is now available as a valuable technology in evaluating patients, both with and without symptoms for the detection of coronary lesions and in making decision whether or not further invasive testing is needed. The aim of our study was to evaluate the diagnostic performance of 64-slice CT angiography for detection of significant coronary artery stenoses in comparison with conventional coronary angiography. During a period of 20 months [April 2007-November 2008] we studied 565 patients with 64-slice CT angiography of coronary arteries who fulfilled following criteria; having a positive stress test such as thallium-scan or stress echocardiography if symptomatic, sinus heart rhythm and able to hold breath for 15 seconds. We scheduled coronary angiography for 58 of these patients with mean age of 52 +/- 10.5 years [37 men and 21 women] who have one or more significant stenoses of coronary arteries. A significant lesion was assumed if the diameter reduction of vessel was = 50%. The overall sensitivity and specificity of 64-slice CT for detection of significant coronary artery stenoses in this study were 95% and 94% respectively. The positive predictive value was 85% and negative predictive value was 94%. We found that 64-slice CT correctly identified all patients with three vessel disease. This technique was reliable to classify 90% of patients [52/58] as having one, two or three vessel disease correctly. In conclusion 64-slice CT coronary angiography has a high degree of both sensitivity and specificity in detection of significant coronary artery stenoses.

# **Coronary Artery Disease**

#### drug therapy

Frequency of aspirin resistance in patients with coronory artery disease in Pakistan.

Akhtar, Naveed; Junaid, Ayesha; Khalid, Ayesha; Ahmed, Waqas; Shah, Mumtaz Ali; Habib Ur Rahman E-mail:samraakhtar@hotmail.com

Shifa International Hospital - Department of Cardiology

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 230-233 (20 ref.)

**Keywords:** Aspirin-administration and dosage; Aspirin-therapeutic use; Treatment Failure; Questionnaires; Outcome Assessment [Health Care]; Drug Resistance; Cross-Sectional Studies

Abstract: Aspirin resistance is an emerging clinical entity. However the data available on aspirin resistance in Asian population is scarce. This study was initiated to prospectively evaluate the frequency of aspirin resistance in patients with stable coronary artery disease [CAD] in Pakistan. A cross sectional prospective study was conducted in cardiology and hematology departments at Shifa International Hospital, Islamabad from January to December 2007. Two hundred and fifty patients were enrolled from cardiology out patient department having met the specific inclusion criteria. Details were entered on a pre-designed questionnaire and aspirin response assay was performed on IMPACT-R [Dia Med AG 1785 Cressier Morat, Switzerland]. Data was analyzed using SPSS V12. Aspirin resistance was observed in 12% of patients. 73.2% of study population were male and 26.8% were female, with a mean age of 57.2 years. There was no significant correlation of aspirin resistance with traditional risk factors like Diabetes Mellitus [DM], Hypertension or Dyslipidemia. 84% of Aspirin non responders were taking 75mg per day and 16% were on 150mg per day. A positive trend was noted between aspirin resistance and cigarette smoking. Aspirin resistance is a real phenomenon in Pakistani population with an estimated frequency of 12%. Large scale prospective randomized trials with long term follow up are needed to assess the impact of different doses and the clinical significance of this biochemical entity.

# **Coronary Care Units**

## organization and administration

Coronary care unit design, staffing and organization.

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Sudan Journal of Medical Sciences 2009; 4 (1): 83-87 (7 ref.)

Keywords: Personnel Staffing and Scheduling; Myocardial Infarction-mortality

# Corynebacterium

## genetics

Genetic fingerprinting and relationships of some corynebacterium isolates based on DNA polymorphism.

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Riyadh University of Girls - Faculty of Education - Botany Department

Arab Journal of Biotechnology 2009; 12 (1): 121-132 (27 ref.)

Keywords: Corynebacterium-isolation and purification; DNA Fingerprinting; Polymorphism, Genetic; Polymerase

Chain Reaction; Electrophoresis

Abstract: Genetic differences and relationships among six Corynebacterium isolates of different geographic origin from Saudi Arabia were studied based on RAPD-PCR polymorphism. In this analysis many random 10-mer primers were screened, but only five primers [A3, A11, B10, B11 and Z6] were able to generate repeatable and informative products among the DNA samples of the studied bacterial isolates. A total of 47 polymorphic bands were generated by the five primers [100% polymorphism]. Of these bands 23 were scored as unique polymorphic bands. The two primers A11 and B10 were found to be the most effective ones in generating unique bands. The former primer generated 8 unique bands in six isolates while the latter primer produced six unique bands in four isolates. In addition, the most pronounced non unique bands categorized the studied isolates into many class patterns. Combination of all data provides a considerable potentiality for discriminating each Corynebacterium isolate by one or more unique bands or a group of combined class patterns. RAPD data were combined together and used to estimate similarity coefficients and to construct a dendrogram that estimates the relationships among the studied Corynebacterium isolates. The similarity coefficient values varied from zero to 0.44% indicating considerable variability within the studied isolates Based on this dendrogram the studied isolates were separated into two main groups. Such clustering in most cases was well correlated to the geographic collection sites.

## Crohn Disease

#### epidemiology

#### Crohn's disease in a Saudi outpatient population: is it still rare?

Al Mofarreh, Mohammad A.; Al Mofleh, Ibrahim A.; Al Teimi, Ibrahim N.; Al Jebreen, Abdulrahman M. King Saud University - College of Medicine

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 111-116 (36 ref.)

**Keywords:** Crohn Disease-diagnosis; Crohn Disease-genetics; Risk Factors; Endoscopy, Gastrointestinal; Abdominal Pain; Diarrhea; Constipation; Outpatients; Retrospective Studies

**Abstract:** To determine the epidemiology of Crohn's disease [CD] in an outpatient clinic and compare it with data previously reported from different centers in the Kingdom of Saudi Arabia and outside. The medical records of all patients with CD seen in the clinic in the period from January 1993 through December 2007 were reviewed. The demographic, clinical data and methods of diagnosis were retrieved. Over a period of 15 years, we saw 133 Saudi patients with CD. They were predominantly young, with a median age of 26.2 years and male preponderance [2.3:1]. The final diagnosis was established within 1 week of presentation in 47% of the patients. The leading symptoms were abdominal pain [88%], diarrhea [70%], bloating [61%], rectal bleeding [50%], weight loss [33%], constipation [24%] and perianal disease [23%]. The diagnosis was established by endoscopy and histopathology. Ileocecal involvement was encountered in 40% of the patients. From the current study, it is obviously possible to diagnose a large proportion of patients with CD in a gastroenterology outpatient clinic. The data revealed a strikingly increased incidence of CD in a mainly young Saudi population in the past few years.

#### Cucumovirus

#### Genetics

# Evaluation of some cucumber inbred lines and their hybrids for cucumber mosaic virus [CMV] resistance.

Khereba, A.H.; Abdallah, Naglaa A.; Hassan, H.A.; Mohamed, Mahassen A.; Abdelkader, Hayam S.; Abdrabou, A.M.; Zein, H.S.

Cairo University - Faculty of Agriculture - Department of Vegetables

Arab Journal of Biotechnology 2009: 12 (1): 133-147 (23 ref.)

**Keywords:** Seeds; Genotype; Polymorphism, Genetic; Polymerase Chain Reaction; Breeding; Cucumis sativus-virology; Chimera; Enzyme-Linked Immunosorbent Assay

Abstract: The major objective of our cucumber breeding program involves breeding for CMV disease resistance to reduce losses in quality and yield. Seven half diallel cross hybrids resistant to CMV were developed at the Vegetables Breeding Dept., Hort. Res. Inst., Egypt during March, 2006. Sixteen genetically different pure inbred lines of Cucumis sativus were used to develop the hybrids obtained from different sources and selected for their CMV diseaseresistance trait. The inbred lines and one commercial [Beit alpha] cultivar as a susceptible control were examined to CMV resistance using biological, serological and molecular methods. The CMV isolate identified by Plant Path. Res. Inst. Virus and Phytoplasma Res. Dept. [ARC] was used in mechanical inoculation of all cucumber genotypes used during this study. The seeds of the genotypes were incubated and the seedlings were cultivated in foam trays with peat soil and kept under greenhouse conditions. At the cotyledon stage, i.e. before the development of the first true leaf, the seedlings were mechanically inoculated by rubbing with virus inoculum. Disease severity was assessed visually 7- 10 days [on cotyledons] and 14-25 days [on true leaves] after inoculation with CMV. The results revealed that six out of sixteen cucumber inbred lines [Cus 260/1980, 6-5-23-2 Kaha, 1-180-309- 18-105 Dokky, 5-57-22-17 Kaha, Cus 38/1991, and 25-2-1-90 Kaha] were found to be without systemic symptoms of CMV infection and proved to be resistant to CMV when tested by DAS-ELISA and RT-PCR. The promising accessions as sources of resistance have been intercrossed with leading commercial type [Beit-alpha] in half diallel system. In order to determine the genetic polymorphism and discriminate between cucumber inbred lines, RAPD-PCR analyses were conducted on the DNA isolated from each line. Dendrograms representing genetic distances were performed on the studied genotypes using the UPGMA [Unweighted Pair Group Method with Arithmetic Average]. Twenty one cucumber hybrids obtained from the half diallel crossing between the six resistant genotypes and the local commercial cultivar [Beit-alpha] were subjected to CMV artificial inoculation in a separate greenhouse and symptoms were visually monitored for two months. Only seven cucumber hybrids showed high a level of resistance to CMV were screened in the greenhouse and evaluated for CMV resistance. The resistant hybrids obtained did not develop visual symptoms of CMV infection on cotyledons and true leaves. These resistant lines could serve as potential sources of resistance in breeding programs.

# Cyclosporine

## toxicity

Protective effect of aminoguanidine against cyclosporine induced nephrotoxicity and hepatotoxicity in rats: histological and biochemical study.

Abdelaal, Khaled M.; Mubark, Heba A.E.; Abdel Hady, Randa H.; Abdel Moneim, Wafaa M.; Hussein, Abeer M.R.

Assiut University - Faculty of Medicine - Departments of Forensic Medicine and Clinical Toxicology

Medical Journal of Cairo University [The] 2009; 77 (1): 181-191 (35 ref.)

**Keywords:** Kidney-drug effects; Liver-drug effects; Rats, Wistar; Liver Function Tests; Kidney Function Tests; Nitric Oxide; Liver-ultrastructure; Kidney-ultrastructure; Microscopy, Electron; Guanidines-protective agents

Abstract: Cyclosporine A [CsA] is a potent and effective immuno-suppressive agent used to prevent rejection in organ transplant surgery and autoimmune diseases. Its use is frequently accompanied by nephrotoxicity and hepatotoxicity. The present study was designed to investigate the possible protective effect of aminoguanidine on Cyclosporine induced nephrotoxicity and hepatotoxicity in male albino rats. A total of sixty healthy adult male albino rats were used divided into four equal groups in this study. Group I rats served as control treated with distilled water orally only, group II was treated with CsA in a dose of 25mg/kg orally daily for 21 days, group III treated with CsA concurrently with aminoguanidine in doses of 25 and 20mg/kg orally daily for 21 days respectively and group IV was treated with olive oil orally [vehicle for CsA]. Rats were sacrificed 24 hs after last dose, blood, kidney and liver samples were taken. Histopathological examination by light and electron microscopic, immunohistochemistry for active caspase-3 were done. Besides, biochemical measurement; serum nitric oxide level and kidney and liver functions tests were done. CsA oral administration for 21 days significantly increased serum nitric oxide level impaired the renal and hepatic function tests and markedly distorted the renal and hepatic morphology in light and electron microscopic examination. Aminoguanidine administration improved serum nitric oxide level, kidney and liver function tests and preserved renal and hepatic morphological structures. Aminoguanidine has a protective effect against Cyclosporine induced nephrotoxicity and hepatotoxicity.

## **Dairy Products**

#### microbiology

Incidence of lipolytic and proteolytic fungi in some milk products and their public health significance.

El Diasty, Eman M.; Salem, R.M.

Omar El Mokhtar University - Faculty of Veterinary Medicine **Arab Journal of Biotechnology** 2009; 12 (1): 49-56 (27 ref.) **Keywords:** Fungi; Incidence; Aspergillus; Mycotoxins; Aflatoxin M1

**Abstract:** A total of sixty random samples of dairy products; 20 of either table butter, cooking butter or kareish cheese; were collected and subjected to mycological and mycotoxicological evaluation. The mean total mould counts were 7.3X 10[1] +/- 6X10[1, 1.8] X10[3] +/- 5.4X 10[2] and 4.1X 10[3] +/- 3.1 X 10[3] cfu m[-1] for table butter, cooking butter and kareish cheese samples respectively. Respective yeast counts were 1 X10[3] +/- 6.1 X 10[2], 3.3 X 10[4] +/- 3.X 10[4] and 1.5 X 10[4] +/- 1.3 X 10[4] cfu ml-1. The highest frequency distribution of all examined samples for mould and yeast counts lies within the range 10 -100 / gm. Aspergillus niger, A. flavus, Geotrichum spp. and Mucor spp. were isolated from the examined samples at varying percentages of 8.3- 41.7 . The predominant species of yeasts isolated from table butter, cooking butter and kareish cheese were Candida spp., Rhodotorula spp., and Saccharomyces spp. The isolated moulds and yeasts were evaluated for proteolytic and lipolytic activities on Tributyrin .Aflatoxin M1 was detected in 4 kareish cheese samples in a variable levels ranging from 5 to 35 ppb. The economic and public health significance of isolated moulds and yeasts as well as the sanitary precautions were discussed.

## **Dengue**

## diagnosis

Clinical features, diagnostic techniques and management of dual dengue and malaria infection.

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Jinnah Postgraduate Medical Centre

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 25-29 (33 ref.)

**Keywords:** Malaria-diagnosis; Dengue-blood; Malaria-blood; Disease Management; Fever; Immunoglobulin M; Immunoglobulin G; Enzyme-Linked Immunosorbent Assay; Plasmodium vivax; Plasmodium falciparum; Liver Function Tests; Leukopenia; Platelet Count; Hematocrit; Hemoglobins

# **Dental Equipment**

#### utilization

Compliance with the use of personal protective equipment among dentists working at the royal medical services.

Jebreen, Sami: Dababneh, Reem: Khouri, Antwan

King Hussein Medical Center - Department of Dental Prosthodontics

Journal of the Royal Medical Services 2009; 16 (1): 74-78 (13 ref.)

**Keywords:** Infection Control, Dental-statistics and numerical data; Compliance; Questionnaires; Masks-utilization; Gloves, Surgical-utilization

**Abstract:** The assessment of compliance with using personal protective equipment among a group of military dentists. A self-administered questionnaire was distributed to a total of 100 military dentists. The questionnaire comprised of two parts. The first included five general questions related to the duration of dental experience, gender, professional rank, frequency of recording medical history of patients, in addition to the availability of infection control policy in their departments. The second part was further subdivided into four sections concerned with the use of different personal protective equipment including masks, white coat, gloves and protective glasses. Of the total 100 questionnaires, the response rate was 87%. The majority of the dentists were male general practitioners. Only 57 [65.5%] of them recorded the medical history routinely and only 12 [13.7%] had an infection control policy in their department. The majority of the above mentioned dentists [94.2%] always wore gloves but only 81.6% of them changed their gloves after each patient. About 67.8% of the dentists always wore masks while treating their patients but only 10.3% of them changed the mask after each patient. Most of the dentists [97.7%] wore white coats and approximately half of them [50.57%] never used eyeglasses or protective face shields. Military dentists show good compliance with the use of personal protective equipment; however, some dentists do not utilize the full range of infection control procedures. The development of an infection control manual, in addition to continuous education with adequate supplies of personal protective equipment are necessary to reduce the risk of cross infection in dental clinics.

# **Dental Implantation**

#### methods

Immediate smile procedure a clinical case report.

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Smile Dental Journal 2009; 4 (1): 26-32 (14 ref.)

Keywords: Therapy, Computer-Assisted; Tomography, X-Ray Computed; Dental Implants

**Abstract:** Improvement of implantology driven by computers deeply changed our point of view to treat patients. Using a CT-scan based planning system; the surgeon is able to select the optimal location for implant placement. Precise osteotomy control is performed using stereo-lithographic surgical guides. The SAFE System is a serial instrumentation allowing transfer of planned implant positions to the mouth. Accuracy in implant placement is such that it allows not flapless implant placement with a submillimetric precision. Pain and swelling are minimized using trans-mucosal approach. Since 2002, vertical control of implant placement by the SAFE System opened the way to the Immediate Smile protocol. The prosthesis is made before the surgery without taking an impression and placed in the mouth during the same appointment as the surgery. The unique part of this procedure comes from the fact that the temporary bridge is screw retained on the implants without being relined and without using fancy and expensive components. The Immediate Smile technique and components are introduced in this article and a clinical case illustrates the process.

## **Dental Implants**

Comparison of basal and crestal implants and their modus of application.

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Smile Dental Journal 2009; 4 (1): 36-46 (14 ref.)

**Keywords:** Dental Restoration Failure; Alveolar Ridge Augmentation; Dental Implantation-methods; Infections; Osteolysis

**Abstract:** According to the well-known implantological rules for dental restorations, crestal implants are indicated in situations when an adequate vertical bone supply is given. Crestal implants function well in patients who provide enough bone when treatment starts, but results are not predictable as soon as augmentations become part of the treatment plan. Augmentation procedures are possible today, but they increase the risks and costs of dental implant treatment as well as the number of necessary operations. Patients providing severely atrophied jaw bones [i.e. those patients who need the implantologists'attention most], paradoxically receive little or no treatment, as long as crestal implants are considered the device of first choice. This article discusses the value of using basal implants and the differences that exist between basal implants and crestal implants in perioperative status, infection around integrated implants, load transmissions and replacement of failing implants.

## **Dental Restoration, Permanent**

# Acceptance and discomfort from atraumatic restorative treatment in secondary school students in Egypt.

Farag, A.; Frencken, J.E.

Minia University - Faculty of Oral and Dental Medicine - Department of Operative Dentistry

Medical Principles and Practice 2009: 18 (1): 26-30 (24 ref.)

Keywords: Behavior; Students; Schools; Glass Ionomer Cements; Dental Cavity Preparation; Pain; Dental Anxiety

**Abstract:** To assess the level of acceptance and discomfort experienced by secondary school students when undergoing an atraumatic restorative treatment [ART] restoration. Ninety secondary school students, aged 14 and 15 years, were included in the study. The ART restorations were prepared in 90 cavities and restored using an encapsulated high-viscosity glass ionomer. The depth of the cavities was judged from radiographs and clinically into outer, middle and inner third of dentine. Using a graded periodontal probe, cavity size was measured, into outer, middle and inner third of dentine. Using a graded periodontal probe, cavity size was measured, into outer, middle and the width of the mesiodistal and buccolingual/palatal distance of the occlusal surface. The students were asked about the level of sensation experienced during cavity preparation immediately after completion of restoration. X2-Test was used to test the effect of cavity depth and size on sensitivity from the teeth. Of the 90 students, 6 [6.6%] and 26 [29.2%] experienced pain and discomfort, respectively, during cavity preparation, more often in large than in small cavities [p = 0.003] and in cavities extending into the inner third than in the middle and outer third of dentine [p < 0.0001]. Only 1 student reported postoperative sensitivity. The ART approach to treat dental cavities was well accepted by this group of secondary school students. Only a few reported pain during cavity instrumentation, and this was more prevalent in large cavities and in cavities with the floor close to the pulp.

## **Diabetes Mellitus**

## Community-based diabetes programme: the micro-clinic project.

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Global Micro-Clinic Project

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1021-1026 (14 ref.)

Keywords: Community Health Services; Ambulatory Care Facilities; Cost of Illness; Evaluation Studies as Topic

**Abstract:** Increased urbanization in the Eastern Mediterranean Region has led to a significant rise in the prevalence of diabetes. Caring for diabetes under conditions of endemic uncertainty, violence and poverty is a great challenge. The micro-clinic model establishes a public domain of social and community interaction whereby friends, families and neighbours can collectively engage in education, treatment and group support, obtain shared access to appropriate technology and spread positive behaviours. Participants who are active in micro-clinics feel empowered to care for themselves and others. The micro-clinic model offers the prospect of an economically, socially and politically sustainable approach to health care.

#### complications

## Follow up of diabetic complications.

Omar, Belal; El Bana, Hassan; Khalid, Mohsen; Emara, Ibrahem; El Gazar, Helmy Internal medicine

New Egyptian Journal of Medicine [The] 2009; 40 (1): 58-66 (25 ref.)

**Keywords:** Kidney Function Tests; Body Mass Index; Echocardiography; Cholesterol; Triglycerides; Follow-Up Studies; Liver Function Tests-Tooth Loss; Diabetic Retinopathy

Abstract: Some research found that certain diabetic complications occur more frequently in some racial minority groups. Rate of diabetic complications in real-world practice is higher than expected from the clinical trial setting, especially among patients with complications at diagnosis. This suggests that in diabetic patients racial differences may exist in macro vascular and micro vascular disease frequency. 340 diabetic patients were chosen randomly from out patients' clinic of the national institute of diabetes and endocrinology. They received conventional treatment.by different doctors with no special protocol for treatment and was examined twice once at 2004 and another at 2006. Our result showed that during three year there are significant deterioration in weight, BMI. ECG, retinopathy, FBS, AST, ALT, cholesterol, triglyceride, urea, uric acid, GFR, HBIAC.And there were significant improve as regard BP, ACR, LDL. The major complications develop by Egyptian diabetic patients within 3 years follow up was increase percent of retinopathy [27%], followed by teeth loss [23%] then IHD [5%] with no patient develop ESRD. also there are deterioration of GFR. As regard risk factors there is deterioration in cholesterol followed by waist circumference, BMI, triglyceride then HDL.but significant improve in BP control In Egyptian diabetic patient nudus examination and lipid profile must checked regularly every three moth.

#### **Diabetes Mellitus, Experimental**

## pathology

## Stereological evaluation of renal glomeruli in offspring of diabetic female rats.

Dezfoolian, Abdolrahman; Panahi, Marzieh; Feizi, Farideh

Jondi Shapoor Medical Sciences University - Faculty of Medicine - Anatomical Sciences Department

Yakhteh Medical Journal 2009; 11 (1): 17-22 (44 ref.)

**Keywords:** Diabetes, Gestational; Nephrons-ultrastructure; Diabetic Nephropathies-pathology; Streptozocin; Microscopy, Polarization; Kidney Glomerulus-pathology; Rats, Sprague-Dawley

Abstract: Although in vitro studies have shown that high concentrations of glucose can induce dysmorphogenesis of the embryonic kidney, the possible adverse effects of exposure to intrauterine hyperglycemia on kidney development, especially in regard to nephrogenesis, has not been evaluated. The aim of this study is to investigate the effects of maternal diabetes on glomeruli structures of the offspring, focusing on the following parameters: glomeruli volume and number, mesangium volume, mesangial cell number and glomerular capillary volume. Before mating, fifteen female Sprague Dawley rats, divided into three groups, were diabetes induced by a single intraperitoneal dose of 65 mg/ kg streptozotocyn [STZ]. After 30 days of breast feeding, ten offsprings from each group [two per mother] were randomly selected for kidney removal. The kidneys were weighed and their tissues were processed for light microscopy. Glomerular features were evaluated quantitatively using dissection as well as the Cavalieri method and were then compared with sham and control groups. At birth, the mean body weight of diabetic mothers' offspring [DO] was significantly lower than that of the control group's offspring [CO] and sham group's offspring [SO] [p = 0.001], however, the mean body weight of the 30 day-old DO was not lower than that of CO and SO [p > 0.05]. The total renal volumes, cortical volumes, glomerular mean and total volumes, total mesangeal volumes, total capillary volumes and total glomerular numbers were significantly lower in the DO than in CO and SO [p < 0.05]. The numerical density of glomeruli and mesangial cells per glomeruli were significantly greater in DO than in CO and SO [p < 0.05]. We concluded that intrauterine hyperglycemia is accompanied by a nephron deficit which may not be compensated within the first 30 days after birth.

# **Diabetes Mellitus, Type 2**

Obesity and its relationship with glycemic control in type-2 diabetes.

Abdel Wahid, Hassan A.E.; Mansour, Nadia M.

Suez Canal University - Faculty of Medicine - Department of Family Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 73-78 (27 ref.)

**Keywords:** Obesity; Body Weight; Prevalence; Body Mass Index; Hemoglobin A, Glycosylated; Blood Glucose; Cross-Sectional Studies; Overweight

Abstract: Obesity is central to the development of insulin resistance, leading to type 2 diabetes and cardiovascular disease, among other serious medical conditions. In patients with type 2 diabetes, the benefits of weight loss include both improved overall glycemic control and cardiovascular disease risk profile. The aim of the present work was to study the pattern of overweight and obesity in type-2 diabetes. The Specific objectives included determination of the prevalence of the overweight and obesity among type-2 diabetes and assessment of their effects on the glycemic control. A cross sectional design was used. The target population was type-2 diabetic patients in Ismailia City, Egypt. The study population was type-2 diabetics attending the family medicine clinic in Ismailia University hospital. The study included 220 type-2 diabetics who were screened for overweight and obesity. The present study illustrates that, only 14.5% of type-2 diabetics had BMI within the normal range, [35% of male patients and 8% of female patients], while 45.9% were overweight; the percentage of overweight male patients was higher [50%] than female patients [45%]. Obesity was found in 39.5% of the patients [15% of the male and 47% of the female patients]. Extreme obesity was detected only in females [18%]. The glycosylated hemoglobin [g%] of overweight [11.5 +/- 2.7] was significantly different from that of the obese patients [13.2 +/- 3.6]. The study demonstrates, also, that fasting blood sugar [mg/dL] of diabetic patients with normal BMI [155.9 +/- 70.5] was significantly different from each of the overweight [227.5 +/-87.7] and obese diabetics [210.9 +/- 79.9]. Overweight and obesity are highly prevalent in type-2 diabetics. Also increase in the BMI is associated with poor glycemic control. These findings signify life style modifications that are immensely needed to decrease the bodyweight and improve the glycemic control.

#### blood

Ferritin and insulin resistance in patients with type 2 diabetes mellitus.

Sultan, Soad; Al Meligi, Amr; Altaweel, Nagwa; Abdel Azem, Hala

Cairo University - Faculty of Medicine - Departments of Internal Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 201-206 (41 ref.)

Keywords: Ferritins-blood; Insulin Resistance; Blood Glucose; Hemoglobin A, Glycosylated; Insulin

**Abstract:** Diabetes mellitus is a syndrome characterized by chronic hyperglycemia and disturbance of carbohydrate, fat and protein metabolism associated with relative or absolute deficiency of insulin secretion and/or insulin action. Ferritin is the major iron storage protein and plays a key role in iron metabolism. In general population, body iron stores are positively associated with the development of glucose intolerance, type 2 diabetes. The aim of the present study was to measure serum ferritin in patients with type 2 diabetes and to study the relationship between serum ferritin, fasting blood glucose, glycated hemoglobin, insulin level and insulin resistance in patients with type 2 diabetes mellitus. This study involved 40 female patients in child bearing period with type 2 diabetes mellitus selected from diabetes and endocrine clinic in Kasr El-Aini Hospital. Twenty healthy, age matched, females were taken as a control group. All subjects were subjected to: History taking, clinical examination and laboratory Investigation including fasting plasma glucose, glycated hemoglobin [HbAlc], fasting insulin and serum ferritin. We found that serum ferritin was significantly higher in patients with type 2 DM compared with the control group [p < 0.001] and in patients with type 2 DM ferritin level [p < 0.05] and insulin resistance [p < 0.001].

# **Diabetic Nephropathies**

#### immunology

T-cell cytokine production and endothelial dysfunction in type 2 diabetic patients with nephropathy.

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Theodor Bilharz Research Institute - Department of Clinical Chemistry

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 807-816 (31 ref.)

**Keywords:** Diabetes Mellitus, Type 2-immunology; E-Selectin; Interferon-gamma-blood; Interleukin-10-blood; T-

Lymphocytes; Endothelium-immunology; Creatinine-blood; Renal Dialysis

**Abstract:** This study assessed changes in serum levels of cytokines IFNgamma and IL-10 [biomarkers of inflammatory changes] and soluble biomarkers sICAM-1 and sE-selectin [biomarkers of endothelial dysfunction] in diabetic patients with and without nephropathy. IFNgamma and IL-10 were significantly elevated in patients with diabetic nephropathy [DN] and end-stage renal disease [ESRD] compared with controls and diabetic patients without DN. IFNgamma and IL-10 levels were significantly increased after haemodialysis. sICAM-1 and sE-selectin were significantly higher in diabetic, DN and ESRD groups compared with controls, and sICAM-1 but not sE-selectin was increased after haemodialysis.

#### Diarrhea, Infantile

# etiology

Role of feeding practices in causation of diarrhea in young infants [06 months of age].

Siddique, Nasreen; Mahmood, Qaiser; Qaiser, Affan

Department of Medicine

Medical Forum Monthly 2009; 20 (2): 23-25 (12 ref.)

Keywords: Feeding Behavior; Breast Feeding; Bottle Feeding-adverse effects; Questionnaires; Cross-Sectional

Studies; Infant

**Abstract:** To study the role of feeding practices in causation of diarrhea in young infants. This was a comparative cross sectional study conducted at OPD and Indoor Pediatrics Departments of Nishtar Hospital, Multan during the period from April 2008 to August 2008. A total of one hundred and sixty two infants of 06 months of age both male and female were included in the study by simple random technique. Half of the infants were on Breast feeding and half were on bottle feeding. Data were collected from parents/attendant of the young infants by a pre-tested structured questionnaire. The Data was analyzed by applying various Statistical formulas and tests such as frequencies, percentages, Means and Chi square test etc. Out of 86 Breast fed infants diarrhea was present in 30 [35%] infants and it was absent in 56 [65%] infants. Out of total 86 bottle fed infants diarrhea was present in 48 [56%] infants and it was assent in 38 [44%] infants. The level of significance was set at 0.001. It was concluded that bottle fed infants has significantly higher instances of diarrhea than breast fed infants. The proportion of male and female infants was same in both bottle fed and breast fed infants, so gender was eliminated as a confounding factor.

#### therapy

Acute diarrhea in children treated by lactobacillus acidophilus.

Hassoon, Abbas Fadhel; Mehdi, Sabih Salih

Babylon Medical College

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 2-6 (21 ref.)

Keywords: Lactobacillus acidophilus; Probiotics-therapeutic use; Treatment Outcome; Child; Acute Disease

**Abstract:** To see the effect of Lactobacillus acidophilus as a probiotic preparation in treatment of acute diarrhea in children. Forty nine patients aged between 2 and 24 months with acute diarrhea were enrolled in the study performed at Babylon Maternity and children Hospital in the period between October 2006 till October 2007, the patients were divided into two groups, the first group [31 patients] were given a preparation of Lactobacillus acidophilus and the other group [18 patients] were given a placebo for three days. Frequency of stool per day and stool consistency were recorded for both groups. Frequency and consistency were reduced significantly [p < 0.05 and p < 0.01, respectively] in treatment group compared to the placebo group. No complications were recorded. Probiotic preparation of Lactobacillus acidophilus can be used as an adjunct treatment for acute diarrhea in children. It has been found safe and acceptable, and the duration of treatment was reasonable.

## **Disaster Planning**

Planning for disasters in primary care.

Sharaf, Eman

Ministry of Health - Family Physician

Bahrain Medical Bulletin 2009; 31 (1): 35-37 (9 ref.)

Keywords: Primary Health Care; Disasters

## Diverticulum, Colon

## diagnosis

Giant sigmoid diverticulum: a case report.

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Medical Principles and Practice 2009; 18 (1): 70-72 (12 ref.)

**Keywords:** Sigmoid Diseases-diagnosis; Enema; Barium Sulfate-diagnostic use; Tomography, X-Ray Computed; Diverticulum, Colon-surgery; Laparotomy; Radiography, Abdominal

**Abstract:** To report an unusual presentation of a giant sigmoid diverticulum in the colon. Clinical Presentation and Intervention: The patient presented with an abdominal mass, altered bowel habits, and increasing weight. The provisional diagnosis was made by barium enema and CT scan. The patient underwent laparotomy, revealing a perforated giant sigmoid diverticulum that was excised using Hartmann's procedure. The perforation could have been precipitated by the barium enema study. The histopathology of the resected specimen revealed giant sigmoid diverticulum with no evidence of malignancy. CT scan was adequate for diagnosis of the suspected giant sigmoid diverticulum. Surgical intervention was successfully used to excise the diverticulum.

## **Domestic Violence**

Prevalence estimate of intimate partner violence in Jordan.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 880-889 (24 ref.)

Keywords: Prevalence; Questionnaires; World Health Organization

**Abstract:** This study examined the prevalence of intimate partner violence in Jordan among a sample of 517 reproductive health clinic attendees. Intimate partner violence was measured using the World Health Organization's domestic violence questionnaire which was modified by the results of focus group discussions conducted in Amman. The percentages of women experiencing at least 1 form of control or violence since marriage were: control, 97.2%; psychological violence, 73.4%; physical violence, 31.2%; and sexual violence, 18.8%. Modifications of the WHO questionnaire were needed to measure control and psychological violence in Jordan. Similar modifications might be required when conducting research in the Region.

# **Drug Delivery Systems**

#### methods

Solid dispersions: a review.

Dhirendra, K.; Lewis, S.; U dupa, N.; Atin, K. Manipal College of Pharmaceutical Sciences

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 234-346 (101 ref.)

Keywords: Solubility; Biological Availability; Hydrophobicity

**Abstract:** Solid dispersions have attracted considerable interest as an efficient means of improving the dissolution rate and hence the bioavailability of a range of hydrophobic drugs. This article reviews the various preparation techniques for solid dispersion and compiles some of the recent technology transfers. The different types of solid dispersions based on the molecular arrangement have been highlighted. Some of the practical aspects to be considered for the preparation of solid dispersions, such as selection of carrier and methods of physicochemical characterization, along with an insight into the molecular arrangement of drugs in solid dispersions are also discussed. Finally, an in-depth rationale for limited commercialization of solid dispersions and recent revival has been considered.

# Dysentery, Amebic

## diagnosis

Fulminant amebic colitis a life threatening rare entity.

Al Saad, Suhair; Al Khwaja, Safa Abdulla; George, Sara Mathew; Junaid, Mariam; Moheb, Khadija

Arabian Gulf University and Consultant Surgeon - Department of Surgery

Bahrain Medical Bulletin 2009; 31 (1): 8-12 (20 ref.)

**Keywords:** Retrospective Studies; Dysentery, Amebic-complications; Dysentery, Amebic-therapy; Gastrointestinal Hemorrhage; Colonic Diseases; Intestinal Perforation; Peritonitis; Colectomy

**Abstract:** To present two uncommon cases of Fulminant Amebic Colitis. Retrospective study. Surgical and Medical Department at Salmaniya Medical Complex. From March to September 2008, two cases of fulminant Amebic Colitis were seen and reviewed as far as their presenting features, investigation, characteristic histopathologic picture, and

management. Two cases of Amebic Colitis were found in the hospital records during the last ten years. Both presented to the clinic within the last six months. Both patients were males, young, from poor socio-economic class and are originally from Indian subcontinent. Both had vague and mild presentation. One progressed to massive lower GI bleeding and the other one progressed to colonic perforation and peritonitis. The second case had CT scan, which showed signs of colitis and suspected perforation but was not diagnostic of Amebic Colitis. The first case had subtotal colectomy and primary anastomosis; while, the second case had limited colectomy with proximal colostomy and distal mucus fistula. The diagnosis was based on histopathology of the resected specimens. Serology was confirmatory in only one patient. Fulminant Amebic Colitis is a rare entity. Clinical awareness and early surgical intervention are very important in the outcome. Two cases of fulminant Amebic Colitis have been managed by colonic resection of the affected part, in addition to Metronidazole and broad-pectrum antibiotic.

## **Education, Medical**

Medical education and medical educators in south Asia- a set of challenges.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 52-56 (36 ref.)

**Keywords:** Schools, Medical; Climate; Pharmaceutical Preparations; Physician-Patient Relations; Students, Medical; Biomedical Research

Abstract: South Asia has vast unmet health needs especially in rural areas. Community-based medical education can partly address these needs and can serve to introduce students to a number of community health problems. Climate change has the potential to produce major challenges for health and food security in South Asia. Medical students should be taught about climate change and methods to tackle its impact on health. The pharmaceutical industry in South Asia aggressively promotes their products. Disease mongering is becoming more common in South Asia. Educational initiatives to sensitize students regarding promotion are common in developed countries. In Nepal, an educational initiative critically looks at the industry's promotional tactics. Similar initiatives are required in other medical schools. The nature of the doctor-patient relationship is changing. An increasing demand for patient autonomy and for their involvement in therapeutic decisions is seen. Access to the internet and internet sources of health information is increasing. Medical schools should address these issues as well. Medical Humanities modules and courses in communication skills are required. Research can play an important role in alleviating the health problems of South Asia. Students should be taught the basics of scientific research and student research should be strongly encouraged. This is a review article.

# **Eggs**

# A study on the fungal contamination and prevalence of Aflatoxins and some antibiotic residues in table eggs.

Salem, R.M.; El Kaseh, R.M.; El Diasty, Eman M.

Omar El Mokhtar University - Faculty of Veterinary Medicine **Arab Journal of Biotechnology** 2009; 12 (1): 65-71 (29 ref.)

Keywords: Food Contamination; Aflatoxins; Anti-Bacterial Agents; Prevalence; Fungi

**Abstract:** A total of fifty random table egg samples were collected from EL-Beida city markets and subjected to mycological examination as well as the detection of residues of aflatoxin and inhibitory substances. The mean total mould and yeast counts of optically clean egg shell and soiled egg shell were 2.7 X 10[4] +/- 2.2 X 10[4] and 3.7 X 10[5] +/- 3.2 X 10[5], respectively. The mean mould and yeast count in egg content were 6.6 X 10[3] +/- 3.1 X 10[3] and 2.5 X 10[4] +/- 1.1 X 10[4], respectively. Aflatoxin residues were detected only in 7 samples and the mean aflatoxin content residues was 0.542 +/- 0.226 ppb. Residues of inhibitory substance were detected in 4% of the examined egg samples.

# Endoscopy, Gastrointestinal

## Paediatric gastrointestinal endoscopy: experience in a Sudanese university hospital.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1027-1031 (10 ref.)

**Keywords:** Hospitals, University; Prospective Studies; Hematemesis-diagnosis; Hypertension, Portal-diagnosis; Esophageal and Gastric Varices-diagnosis; Vomiting-diagnosis; Gastritis-diagnosis; Esophageal and Gastric Varices-therapy; Abdominal Pain-diagnosis

**Abstract:** We investigated the indications for and findings of gastrointestinal [GI] endoscopy in all children </= 16 years old referred for the procedure to the endoscopy unit at Soba University Hospital, Khartoum from January 2004 to January 2006. Thus 113 children were enrolled; 73% underwent upper GI endoscopy, 27% lower GI endoscopy [15% colonoscopy, 12% flexible sigmoidoscopy]. Indications for upper GI endoscopy included haematemesis [24%], portal hypertension [21%], abdominal pain [16%] and vomiting [15%]. Diagnoses included oesophageal varices [16%], gastritis [7%] and hiatus hernia [6%]. Indications for lower GI endoscopy included rectal bleeding [87%], diarrhoea [19%] and anaemia [10%].

# **Energy Intake**

Effect of low calorie diet and exercise on thyroid hormones and leptin levels.

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Cairo University - Faculty of Medicine - Department of Internal Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 33-39 (42 ref.)

Keywords: Exercise; Diet; Thyroid Function Tests; Triiodothyronine; Thyroxine; Thyrotropin; Leptin; Body Mass

Index; Thyroid Hormones

Abstract: To investigate the effect of low calorie diet alone and the effect of low calorie diet and exercise on the levels of thyroid hormones, leptin, and BMI. Also we tried to investigate if there is a relation between thyroid hormones and leptin levels. Two groups of normal male subjects, each group consists of 25 person matched for age and BMI. Group I had low calorie diet program for one month [1200-1500 Kcal]. Group II had the same low calorie diet in addition to program of therapeutic exercise on treadmill with moderate intensity every other day for one month. Evaluation of free T3, freeT4, TSH, leptin levels, and BMI were done before and after the study. Correlation between thyroid hormones and leptin levels were done. This study showed significant increase in Free T3, T4, and significant decrease in TSH, leptin and BMI after one month of low calorie diet program [group I] compared to their levels before the study. After one month of low calorie diet and the exercise program [group II], a highly significant increase in free T3, T4 and highly significant decrease in TSH, leptin and BMI compared to their levels before the study. Comparing the studied parameters of both groups after the study showed that there is a more significant increase in T3 and T4 and a more significant decrease in TSH and BMI in group II compared to group I. Leptin level showed no statistically significant difference. A positive correlation between BMI and leptin was found in both groups. We found no relation between thyroid hormones and leptin levels. Low calorie diet caused increase in the level of circulating thyroid hormones, and a decrease in TSH, leptin levels and BMI. Low calorie diet and moderate intensity therapeutic exercise caused more significant increase in the level of circulating thyroid hormones, more significant decrease in TSH level and BMI. No statistically significant difference in leptin level of both groups after the study. We found no relation between leptin level and thyroid hormone levels.

#### **Enteral Nutrition**

# Nutritional adequacy in patients of the intensive care unit in Suez Canal University Hospital who are tube fed enterally.

Fouda, Ghada Said; El Kassaby, Alaa El Din; Abdel Hamid, Alaa El Din Saad; Helmy, Amr Suez Canal University - Faculty of Medicine - Department of Emergency Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 167-172 (29 ref.)

**Keywords:** Intensive Care Units; Nutrition Assessment; Energy Intake; Laboratory Techniques and Procedures; Hospitals, University; Health Care Costs

Abstract: To assess the actual energy received by the patients of the intensive care unit in Suez Canal University hospital who are enterally fed compared to their estimated daily caloric requirement and to find out the causes of interruption of tube feeding. A descriptive study, to assess the adequacy of enteral tube nutrition intake and the factors that affect its delivery in the critically ill patients in Suez Canal university hospital, by monitoring the patients nutrition by Harris benedict equation [HBE] and laboratory investigations. The study was carried out in the general intensive care unit. All the patients receiving enteral nutrition were included with a target sample size of 92 patients. A date sheet was used to collect informations about the daily nutritional intake along with daily laboratory investigations including baseline values of blood glucose, potassium, phosphorus and blood gases, Urine analysis, CBC, triglycerides, creatinine, BUN, sodium, chloride, calcium, magnesium, coagulation, liver enzymes, billirubin, amylase, total protein, transferrin and transthyretin, twice weekly measurement of blood glucose, potassium, phosphorus and blood gases and once weekly measurement of CBC, triglycerides, creatinine, BUN, sodium, calcium, magnesium, coagulation, liver enzymes, billirubin, amylase, total protein, transferrin, transthyretin and urine analysis. Patients were followed up until enteral feeding withheld or death. Through following up the patients by measuring the daily caloric intake and laboratory investigations, the study showed that 67.4% of the patients were underfed and only 29.3% were adequately fed. The mean cause of feeding interruption was gastrointestinal factors [65.2%], such as vomiting and diarrhea, followed by intensive care unit factors [10.9%], such as surgical procedures and diagnostic procedures. Significant decrease in the values of BUN, total billirubin, total protein [T.protein], magnesium, PH and bicarbonate was found one week after starting enteral feeding. The majority of the included patients were found to be underfed. Gastrointestinal problems as diarrhea and vomiting played a major rule in unsuccessful delivery of adequate energy requirements to

## **Epidermal Necrolysis, Toxic**

#### diagnosis

Multiple skin bullae. Toxic epidermal necrolysis.

Al Abri, Suad; Al Zadjali, Nabil; Al Reesi, Abdulla

Sultan Qabos University - Department of Emergancy Medicine

Oman Medical Journal 2008; 23 (2): 118-119 (5 ref.)
Keywords: Blister-etiology: Skin: Diclofenac-adverse effects

# **Epilepsy**

#### drug therapy

An experimental design for finding of minimum dosage of carbamazepine and valproate in preventing of seizure attacks.

Samaei, Afshin; Nobahar, Monir; Vafaei, Abbas A.

Semnan University of Medical Sciences - Fatemiah Hospital

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 180-183 (21 ref.)

**Keywords:** Epilepsy-complications; Carbamazepine-administration and dosage; Carbamazepine-adverse effects; Valproic Acid-administration and dosage; Valproic Acid-adverse effects; Chromatography, Gas; Seizures-prevention and control

**Abstract:** Previous studies have shown that physicians use high doses of Carbamazepine [CBZ] and Valproate [VPA] to control of epileptic attacks, while these drugs incur of many side effects include of gastrointestinal, hematologic, psychiatric, cardiac and other side effects. The aim of this study was to determine the minimum therapeutic dose with and an acceptable blood level of these drugs. This semi-experimental study was done in 56 epileptic patients in during of one year. At the first demographic data including of age, sex, weight and the period of drug taking was recorded. Then the drug CBZ and VPA were prescribed to adults [more than 12 years old] 9-11 mg/kg and 12-14 mg/kg respectively, and in children [less than 12 years old] 12-14 and 12-15 mg/kg respectively. Serum levels of CBZ and VPA were measured monthly by gas chromatography method that is separation technique, is mostly employed in chemical analysis. The results indicated that serum levels of CBZ and VPA in adult were 7.4 and 74.7 and serum levels of drugs in children were 8.2 and 66.8 respectively. Also patients have not epilepsy attack in during the period of assessment. These findings showed that with a much lower dosage of the drugs, which is suggested in texts can lead to an appropriate blood level of CBZ and VPA for controlling the epileptic seizures.

# **Epinephrine**

#### therapeutic use

Safety and efficacy of topical epinephrine solution 1/100,000 in hypospadias surgery.

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King Hussein Medical Center - Department of Pediatric Surgery

Journal of the Royal Medical Services 2009; 16 (1): 30-33 (15 ref.)

Keywords: Hypospadias-surgery; Administration, Topical; Treatment Outcome; Prospective Studies

Abstract: To evaluate the safety and the efficacy of topical epinephrine solution 1/100,000 in hypospadias surgery. Prospective study of 143 patients with variant types of hypospadias aged between 1-14 years who underwent different procedures for correction of hypospadias over 12 months period [August 2004-August 2005] were included in the study. Topical epinephrine solution 1/100,000 was used in 103 patients [group I], 40 patients were operated without topical epinephrine solution 1/100,000 [group II]. Heart rate, blood loss, skin ischemia, formation of haematoma operative time and wound infection were evaluated. Tourniquet was used in group I only for erection test in four patients with proximal penile hypospadias and two with penoscrotal hypospadias, Minimal use of bipolar diathermy in four patients, with complicated hypospadias where extensive dissection took place, was needed. There was minimal blood loss [average 5ml], and a negligible increase in heart rate and no skin ischemia. The average operative time was 100 minutes [range from 50 -150]. Tourniquet and bipolar diathermy were used in 36 patients in group II with average blood loss of [25m1]. The average operative time was 135 minutes [range from 60-185]. In group I, one patient developed hematoma after accidental trauma 5-days Post-operatively at home, 23 patients were discharged in the same day with or without urethral stent, 70 patients were discharged within 1 to 3 days post-operatively with urethral stent, 10 patients had 7-10 days hospital stay for major hypospadias repair with urinary catheter and suprapubic catheter for urinary diversion. One patient had wound infection. The majority of patients in group II were admitted for 7-10 days with urinary catheter. Few patients had suprapubic catheter as well for urinary diversion. Two patients had wound infection and four patients had post operative bleeding. Topical epinephrine solution 1/100000 is safe, decreases bleeding and wound hematoma in hypospadias surgery. It eliminates the need of tourniquet, minimizes the use of bipolar diathermy, and decreases the operative time, early hospital discharge and minimal complications.

# **Estrogen Replacement Therapy**

Effects of hormone replacement therapy on insulin resistance and platelet function tests.

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Ege University - Department of Endocrinology and Metabolism, 5th Floor

Medical Principles and Practice 2009; 18 (1): 43-47 (24 ref.)

**Keywords:** Hormone Replacement Therapy; Insulin Resistance; Platelet Function Tests; Postmenopause; Estradiol; Norpregnanes; Estrogen Receptor Modulators; C-Reactive Protein

**Abstract:** The aim of this study was to evaluate measures of insulin resistance and platelet function in postmenopausal women with oral or transdermal hormone replacement therapy [HRT]. Eighty women divided into four

groups of 20 each were enrolled in the study. Group 1: postmenopausal hysterectomized women who received only transdermal estradiol [13.9 mg/12.5 cm2]; group 2: women with intact uterus who were treated with estrogen-progestin combination [HRT]; group 3: postmenopausal women who were treated with the selective estrogen receptor modulator tibolone, and group 4: women who were not taking any drugs for HRT were chosen as a control group [group 4]. In group 2, homeostasis model assessment of insulin resistance and fasting insulin levels were 2.90 +/- 0.37 and 9.3 +/- 3.0 micro U/ml, respectively, prior to administration of HRT. These levels were reduced to 1.91 +/- 0.41 [p = 0.001] and 7.1 +/- 2.7 micro U/ml [p = 0.002], respectively, after drug therapy. Mean levels of high-sensitivity C-reactive protein [hsCRP] were decreased with HRT only in group 2 [p = 0.002]. No changes for biochemical and hematological parameters were observed in the other groups. Platelet function tests showed no differences after HRT in any group. Estrogen-progestin combination HRT decreased measures of insulin resistance and hsCRP levels, but had no effect on platelet function tests in postmenopausal women.

## **Euphorbia**

## Biological screening of euphorbia helioscopial.

Uzair, M.; Loothar, B. A.; Choudhary, B.A.

Bahauddin Zakriya University - Faculty of Pharmacy

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 184-186 (17 ref.)

**Keywords:** Herbal Medicine; Antioxidants; Antifungal Agents; Anti-Bacterial Agents; Salmonella typhi-drug effects; Euphorbiaceae; Plant Extracts; Fusarium-drug effects; Bacillus subtilis-drug effects; Methylene Chloride; Methanol

**Abstract:** The present research is preliminary biological screening of Euphorbia helioscopia L. [Euphorbiaceae]. Dichloromethane and methanol extracts of the aerial parts of the plant were investigated for their antioxidant, antifungal, antibacterial and phytotoxic activities. Dichloromethane extract exhibited significant activity against Fusarium solani with 90% Inhibition, where as the same extract also showed non-significant activity against Salmonella typhi and Bacillus subtilis. Methanolic extract has promising radical-scavenging activity in this assay. Both the extracts have non-significant phytotoxicity against lemna minor.

#### **Exercise Test**

#### Usefulness of st segment depression limited to the recovery phase of exercise stress test.

Rashid, Muhammad Ammar; Mallick, Nadeem Hayat; Alam, Saima Naz; Noeman, Ahmed; Ehsan, Asma;

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Punjab Institute of Cardiology - Department of Cardiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 3-6 (20 ref.)

Keywords: Coronary Angiography; Coronary Artery Disease; Cross-Sectional Studies

## Eye Injuries

#### complications

#### Blunt non-perforating ocular trauma patterns of ocular damage and final visual outcome.

Zeb, Amir; Awan, Aziz; Hamid, A.; Uppal, Fayyaz; Salam, A.

Frontier Medical College - Eve Department

Medical Forum Monthly 2009; 20 (2): 33-35 (12 ref.)

**Keywords:** Wounds, Nonpenetrating-complications; Cataract; Glaucoma; Iritis; Vitreous Hemorrhage; Retinal

Hemorrhage; Retinal Detachment; Visual Acuity; Prospective Studies

**Abstract:** To study the causes of blunt ocular trauma in a closed-globe, its various clinical signs on presentation and final visual outcome. A prospective analytic study of one hundred cases of the blunt ocular trauma conducted in the Department of Ophthalmology, Ayub Teaching Hospital, Abbottabad. In one hundred cases. Seventy-nine [79%] were males and twenty-one [21%] were females. Hyphacma occurred in sixty-two cases [93.9%], mydriasis in twenty-nine cases [43.9%], traumatic iritis/uveitis fifty three [80.3%], and seventeen [25.8%] patients developed traumatic cataract. Traumatic Glaucoma occurred in 3% cases. Vitreous haemorrhage occurred in nineteen [63.3%] and seventeen [56.7%] cases were with retinal heamorrhages, commotio retinae was seen in ten [33.3%] post-traumatic optic atrophy occurred in eight [26.7%] and retinal detachment in six cases. Anterior segment involvement have better visual prognoses 89.4%, compared to posterior segment trauma which is 26.7%. A high percentage of youth and children suffered eye injuries, home setting and sports-related injuries were more common. Hyphaemas and lens injuries have relative little affect on the final visual outcome as compared to the posterior segments injuries.

# **Farber Lipogranulomatosis**

#### diagnosis

Farber disease: A rare neurodegenerative disorder.

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Quaid-e-Azam Medical College - Department of Paediatrics

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 67-68 (6 ref.)

Keywords: Neurodegenerative Diseases-diagnosis; Mucolipidoses; Joints-pathology; Brain-abnormalities

Abstract: This is the case report of a two-and-a-half-year old male infant with Farber disease, which is a rare neurodegenerative mucolipidosis. The child presented with regression of milestones, laryngeal involvement and painful joints with swellings around the joints. Neuroimaging findings and the biopsy of the soft tissue swellings helped to reach the diagnosis.

#### **Femoral Neck Fractures**

#### diagnosis

Simultaneous fracture of both femoral necks secondary to a hypocalcemic seizure.

El Khalifa, Tarek; Abdulla, Hassan Ali; Al Zaman, Yahya; Al Aradi, Ali Jaffer

Medical Complex - Orthopedic Department

Bahrain Medical Bulletin 2009; 31 (1): 40-42 (21 ref.)

Keywords: Hypocalcemia-complications; Femoral Neck Fractures-etiology; Seizures-complications; Epilepsy, Tonic-Clonic; Hypertension; Diabetes Mellitus, Type 2; Diabetic Nephropathies

Abstract: We report a rare case of simultaneous fracture of both femoral necks caused by hypocalcemic fit secondary to chronic renal failure. The case was successfully treated by bilateral bipolar arthroplasties.

## Fibromatosis, Aggressive

## diagnosis

Abdominal wall desmoid tumour: revisited.

El Mirghani, Ahmed; Kanzi, Khalafalla

Omdurman Islamic University - Faculty of Medicine - Department of Surgery

Sudan Journal of Medical Sciences 2009; 4 (1): 89-91 (5 ref.)

Keywords: Fibromatosis, Aggressive-ultrasonography; Fibromatosis, Aggressive-epidemiology

# Fibromuscular Dysplasia

## complications

Cerebral aneurysm in renovascular hypertension due to fibromuscular dysplasia.

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Endovascular Journal 2009; 2 (1): 33-35 (2 ref.)

Keywords: Fibromuscular Dysplasia-diagnosis; Hypertension, Renovascular; Intracranial Aneurysm-etiology; Intracranial Aneurysm-therapy, Angioplasty, Renal Artery Obstruction, Nephrectomy, Blood Pressure, Vascular Diseases

Abstract: A case with renovascular hypertension due to fibromuscular dysplasia [FMD] was associated with cerebral aneurysm. This patient was a twelve-year-old girl with cerebral aneurysm and complete obstruction of the right renal artery. The patient's cerebral aneurysm was successfully treated by endovascular techniques with successful right side nephrectomy, and pathologic changes corresponded to FMD. After nephrectomy, the patient's blood pressure became normal with no need for medical therapy. This report suggests that FMD should be considered to be a systemic angiopathy, including the cerebral artery as well as the renal artery.

## **Fingersucking**

#### adverse effects

Gangrenous thumbs of both hands post unusual method of thumb sucking prevention.

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Mousl University - Mousl Medical College - Department of surgery

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 69-72 (19 ref.)

Keywords: Fingersucking-therapy; Gangrene-diagnosis; Gangrene-surgery; Amputation; Mothers

Abstract: Trial of stopping thumb sucking reflecting the parents worry about their infants and children, but using a covered nylon fixing with an elastic band to both thumbs represents unusual and not reported method as in the present case, ending with gangrene and amputation of both thumbs at the level of metacarpophalengeal joints.

# **Food Handling**

Food sanitation practices in restaurants of Ramallah and Al-Bireh district of Palestine.

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Birzeit University - Institute of Community and Public Health

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 951-958 (20 ref.)

Keywords: Knowledge; Hygiene; Restaurants; Questionnaires; Handwashing; Smoking

**Abstract:** Safe handling of food in restaurants is a basic element in the reduction of foodborne illness. We investigated knowledge and practices about food safety by food-handlers in restaurants in Ramallah and Al-Bireh district of Palestine. A high proportion of workers in the restaurants had no previous experience in other restaurants and 63.4% had received no training on food sanitation and safety. Most of the restaurants in the refugee camps, villages and towns had only 1 worker. Restaurants lacked basic conditions for food sanitation and safety, such as hot water in most and cleaning materials in some. Many workers had poor personal hygiene practices. Training is needed for restaurant owners and staff to improve food handling practices and standards.

# Foreign Bodies

## diagnosis

Case of unusual foreign body in the rectum.

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NKP Salve Institute of Medical Sciences and Research, Digdoh Hills - Department of Surgery

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 131-132 (8 ref.)

**Keywords:** Foreign Bodies-radiography; Foreign Bodies-therapy; Intestinal Perforation; Paraphilias-therapy; Obstetrical Forceps; Sigmoidoscopgsy; Gastrointestinal Hemorrhage-etiology; Rectum

**Abstract:** A 44-year-old male patient with a foreign body in rectum [beverage bottle], introduced as sexual perversion, is presented with literature review. The management emphasis is on transanal retrieval and ruling out of the rectal and colonic perforation and the requirement for postremoval psychiatric treatment.

# **Forensic Dentistry**

#### Forensic odontology.

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Smile Dental Journal 2009; 4 (1): 22-24 (13 ref.)

Keywords: Denture Identification Marking; Forensic Anthropology; Domestic Violence; Child Abuse

**Abstract:** Forensic Odontology is a relatively new science that utilizes the dentist's knowledge to serve the judicial system. Worldwide, dentists qualified in forensic science are giving expert opinion in cases related to human identification, bitemark analysis, craniofacial trauma and malpractice. Human identification relies heavily on the quality of dental records; however Forensic Odontologists can still contribute to the identity investigation in the absence of dental records through profiling the deceased person using features related to teeth. Along with other healthcare providers, dentists encounter cases of injuries which could be non-accidental. Detection, interpretation and management are important from a legal and humanitarian point of view. Dentists should be aware of the legal impact those cases have, and should refer them to the appropriate authorities for suitable action. This article gives an insight to Forensic Odontology and outlines some of its medico-legal applications.

## Gallbladder Neoplasms

#### diagnosis

Comparative study of ultrasound guided fine needle aspiration cytology with open/laparoscopic biopsy for diagnosis of carcinoma gallbladder.

Iqbal, Munazza; Gondal, Khalid Masud; Qureshi, Ahmad Uzair; Tayyab, Muhammad

Fatima Jinnah Medical College - Department of Pathology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 17-20 (20 ref.)

**Keywords:** Gallbladder Neoplasms-pathology; Biopsy, Fine-Needle; Laparoscopy; Biopsy; Ultrasonography; Cytology; Gallbladder-pathology

#### **Gastric Outlet Obstruction**

#### diagnosis

Medical quiz. Intermittent pyloric outlet obstruction by the bezoar.

Al Saad, Suhair; Al Shinawi, Hamdi

Arabian Gulf University - College of Medicine - Surgery Department

Bahrain Medical Bulletin 2009; 31 (1): 34-50 (4 ref.)

Keywords: Bezoars-diagnosis; Pylorus-pathology; Gastroscopy; Abdominal Pain; Vomiting; Constipation

## **Gastrointestinal Hemorrhage**

## diagnosis

# Endoscopic findings in acute upper gastrointestinal hemorrhage at King Hussein Medical Center.

Ajlouni, Yousef; Harfoushi, Kassab; Obeidat, Walid; Owies, Sameer; Ghazzawi, Imad; Talafeeh, Abtan; Mrayat, Zakaria; Shawaqfa, Zuhair

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King Hussein Medical Center - Department of Internal Medicine

Journal of the Royal Medical Services 2009; 16 (1): 5-9 (23 ref.)

**Keywords:** Endoscopy, Gastrointestinal; Gastrointestinal Hemorrhage-epidemiology; Age Factors; Peptic Ulcer;

Data Collection

Abstract: To find out the diagnosis in patients presenting with acute upper gastrointestinal hemorrhage at King Hussein Medical Center. A total of 1118 cases of acute upper gastrointestinal hemorrhage patients aged over 16 years who underwent upper endoscopy over a six year-period at King Hussein Medical Center were studied. Most endoscopies were done within 24 hours from the occurrence of the gastrointestinal bleeding. Patients were divided into different age groups to compare the frequency of upper gastrointestinal hemorrhage between males and females in each group. The total number of patients was also divided into 2 subgroups: those below 50 years and above 50 years to compare the distribution of the endoscopic findings between young and older age groups. Upper gastrointestinal bleeding was more common in men at all age groups than that in women except in older patients [more than 70 years]. Eighty seven percent of the endoscopies were done for patients admitted to hospital through the emergency department, and 13% for patients who were already in hospital for some other reason. Sixty two percent of patients were aged over 50. The most common finding over all was duodenal ulcer [32%]. Normal endoscopy was reported in 21% of the cases. Other frequent sources of bleeding were stomach ulcers [18.5%], esophageal varices [5.2%], portal hypertensive gastropathy [0.6%]. Mallory-Weiss tears [3.3%], and gastric tumors [4.7%]. Gastric ulcers and malignancies were more common in older compared with younger age group [2 1.5%, 6.6% vs. 14%, 1.4% respectively]. Therapeutic endoscopic interventions were done in 17% of the patients; adrenaline injection for bleeding peptic ulcer in 16%. sclerotherapy for esophageal varices in 0.9% and banding in 0.1% patients. The frequency of acute upper gastrointestinal hemorrhage increases considerably with age. The most common finding for all age groups was duodenal ulcer. Malignancy was the most important finding in the older [> 50 years] age group.

#### **General Surgery**

#### standards

Facts about compliance of surgeons "an audit study of the quality of operation notes in the department of general surgery, King Faisal Hospital, Makkah, Saudi Arabia".

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Sudan Journal of Medical Sciences 2009; 4 (1): 11-16 (11 ref.)

Keywords: Guideline Adherence; Compliance; Retrospective Studies; Medical Audit

Abstract: An accurate, complete, legible medical record implies accurate, complete organized assessment and management of the patient. Operation notes as one of the important patient's medical records are often produced as evidence in medico-legal cases. In a court of law, that which is not written down may be perceived as never having occurred. Poorly written and illegible notes, along with the use of confusing abbreviations, are a common source of weakness in a surgeon's defense. This audit was carried out mainly to assess and review the compliance and adhere of surgeon to existing operation guidelines sheet of ministry of health [form 15], and to enhance professionalism. In this retrospective audit, 266 operation notes were reviewed in general surgical department of King Faisal Hospital, Makkah, Kingdom of Saudi Arabia, during a period of six months [January - June 2007]. Because we have no standing ethical committee in our hospital the approval and permission were given by the administration for this study. Notes were scrutinized and reviewed for the quality, accuracy of patient's personal data, details of operation and name of surgeon, operating team, details of operation, swabs, instruments counts, as well as for the inclusion of unacceptable abbreviations. The standard operation sheet [form 15] guideline of Ministry of Health, Kingdom of Saudi Arabia, attached to the patient's file was used as a reference. None of the notes were completely filled in this audit, some of

important vital data of patients e.g. identification data were missed in [122 patients 45.9 %], and usage of non standardized abbreviations was found in 118 [44.4%]. The types of the operation [emergency/elective] was recorded in 179 [67.3%] of all the operative notes. The time of the operation was recorded in 129 [48.5%] of the operative notes. Wound closure details were recorded in 153 [57.5%] of the notes and many other data like name of surgeon, anesthesiologists, type of anesthesia were variably missed. We conclude that a simple compliance to the attached operation note sheets can significantly improve the quality of the notes, continuity of care and potentially avoid medicolegal problems. There is an urgent need for revision and modification of form No: 15 operation sheet of Ministry of Health as well as introduction of computer database in operation notes. This should be an issue for the Faculty of Medicine, making the training of future surgeons more effective.

#### Glaucoma

#### etiology

Glaucoma after pediatric cataract surgery.

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Saudi Journal of Ophthalmology 2009; 23 (1): 9-15 (37 ref.)

**Keywords:** Cataract Extraction; Lenses, Intraocular; Retrospective Studies; Child; Lens Implantation, Intraocular; Pediatrics: Aphakia: Pseudophakia

Abstract: To compare glaucoma after pediatric cataract surgery in children who did and children who did not undergo primary posterior chamber lens [PCIOL] implantation. Retrospective case series. An institutional retrospective chart review was performed of all patients who underwent pediatric cataract surgery with and without primary PCIOL implantation before the age of 12 years [from January 1985 to February 2003]; the review excluded microcornea and any condition independently associated with glaucoma. Patients had a minimum of 5 years [60 months] postoperative follow up, which had to include intraocular pressure measurements. The outcome measure was the presence or absence of post pediatric cataract surgery glaucoma, defined as persistently elevated intraocular pressure >/= 28 mmHg, as measured on at least 2 occasions with confirmation of the diagnosis by the treating ophthalmologist. A total of 489 pseudophakic eyes and 269 aphakic eyes met our inclusion criteria. Eight eyes [1.6%] out of the 489 pseudophakic eyes were diagnosed with glaucoma, whereas 62 eyes [23%] out of the 269 aphakic eyes were diagnosed with glaucoma. Mean age at time of surgery for the pseudophakic eyes was 45.6 months [standard deviation [SD] +/- 32.3] and for the aphakic eyes was 10.1 months [SD +/- 18.9]. Mean follow up period postoperatively was 70.4 months [SD +/- 12.5] and 123.7 months [SD +/- 66.2] in the pseudophakic and aphakic eyes respectively. The presence of postoperative complication [s] as well as the need for further intraocular surgery was risk factors for glaucoma development in the aphakic eyes. Glaucoma was diagnosed at an earlier onset in the pseudophakic eyes compared with the aphakic eyes [15.8 months +/- 18.8 vs 59.0 months +/- 44.0, P < 0.0001]. Glaucoma control was more difficult in the aphakic eyes than in the pseudophakic eyes. Pseudophakic eyes had a significantly lower glaucoma incidence than aphakic eyes; however, because surgery was performed later in pseudophakic eyes we cannot conclude a protective effect from primary PCIOL implantation. Early age at cataract surgery as well as the presence of postoperative complication [s] and the need for further intraocular surgery [s] are risk factors for glaucoma development. Glaucoma after cataract surgery before 10 months of life tends to occur later and to be more difficult to control

# Growth

Implications of the use of the new WHO growth charts on the interpretation of malnutrition and obesity in infants and young children in Oman.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 890-898 (27 ref.)

**Keywords:** Reference Standards; World Health Organization; Prevalence; Protein-Energy Malnutrition; Malnutrition; Obesity; Thinness

**Abstract:** We examined the difference in the prevalence estimates of the outcome indicators for the new World Health Organization [WHO] child growth standard reference [WHO 2006] and the National Center for Health Statistics [NCHS]/WHO reference using the National Protein-Energy Malnutrition Survey dataset. Based on the NCHS/WHO reference, overall prevalence estimates of underweight, wasting, stunting and overweight were 17.8%, 7.4%, 10.9% and 1.3% compared to 11.3%, 7.6%, 13.0% and 1.9% respectively calculated according to the WHO 2006 reference: stunting and overweight showed statistically significantly higher estimates, whereas underweight was statistically significantly lower. The differences were not consistent across age groups.

# Halogenation

Investigation of intermittent chlorination system in biological excess sludge reduction by sequencing batch reactors.

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 53-60 (31 ref.)

Keywords: Sewage; Waste Disposal, Fluid; Chlorine; Oxygen; Biomass

**Abstract:** The excessive biological sludge production is one of the disadvantages of aerobic wastewater treatment processes such as sequencing batch reactors. To solve the problem of excess sludge production, oxidizing some of the sludge by chlorine, thus reducing the biomass coefficient as well as the sewage sludge disposal may be a suitable idea. In this study, two sequencing batch reactors, each with 20 L volume and controlled by on-line system were used. After providing the steady state conditions in the reactors, sampling and testing of parameters were done during 8 months. The results showed that during the solid retention time of 10 days the kinetic coefficient of Y and Kd were 0.58 mg biomass/mg COD and 0.058/day, respectively. At the next stage, different concentrations of chlorine were used in the reactors intermittently. Results showed that 15 mg chlorine/gMLSS in the reactor was able to reduce the yield coefficient from 0.58 to 0.3 mg biomass/mg COD. In other words, the biological excess sludge was reduced about 48%. But the soluble chemical oxygen demand increased slightly in the effluent and the removal percentage decreased from 95% in the blank reactor to 55% in the test reactor.

# Haloperidol

## administration and dosage

Bioavailability and in-vivo transdermal delivery of haloperidol.

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Sudan Journal of Medical Sciences 2009; 4 (1): 47-54 (17 ref.)

Keywords: Haloperidol-pharmacokinetics; Administration, Cutaneous; Tablets; Rabbits

**Abstract:** Sustained blood level with effective therapeutic blood level in psychotic patients in the range of usual therapeutic dose is favorable. To investigate where this sustained and effective therapeutic blood level and improve in bioavailability could be achieved by using haloperidol/transdermal gel formulation. In-vivo transdermal delivery of haloperidol was studied in rabbits comparing transdermal gel formulation containing 1, 8-cineole as penetration enhancer and oral tablet. Concentrations of haloperidol in plasma were measured by reverse phase HPLC. The pharmacokinetic parameters generated from this study were evaluated statistically using one-way analysis of variance [ANOVA]. The results showed that transdermal gel formulation increased rate and extent of absorption and improve bioavailability of haloperidol. The plasma concentrations of haloperidol were declined in biexponential fashion where the area under the curves and absorption rate C[max]/AUC elimination rate constant K[el], T[max], mean residence time [MRT], mean absorption time [MAT], and total clearance [CL[total]] were significantly different p < 0.05, but volume of distribution [V[d]] did not differ significantly p > 0.05. The absolute bioavailability from the oral tablet, and the transdermal formulation was 38% and 57% respectively and highly significant P < 0.01. This study suggest that it is possible to achieve significant sustained therapeutic blood levels for longer time and also suggest that further human investigations of the transdermal dosage are warranted.

# Health Knowledge, Attitudes, Practice

Beliefs, perceptions and practices about asthma among Iranian asthma patients.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 912-919 (22 ref.)

Keywords: Asthma; Questionnaires; Perception; Health Education

**Abstract:** To evaluate the beliefs and practices of patients diagnosed with asthma about various aspects of their condition we interviewed 123 patients attending 2 outpatient departments of hospitals in Tehran. Most of the participants did not recall their past medical history of asthma. Many patients with a history of using oral inhalers did not use these regularly [41.9%]; the major reason reported was feeling no need to use medication during symptom-free intervals. Only 32 [30.5%] patients demonstrated the correct technique for using their oral inhaler. Patients with asthma need more education about prevention and control of symptoms. Neglect by physicians of the Global Initiative for Asthma management guidelines was another major concern.

Knowledge, attitudes, beliefs and practices in Lebanon concerning HIV/AIDS, 1996-2004.

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Lebanese Health Society

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 920-933 (12 ref.)

Keywords: HIV; Acquired Immunodeficiency Syndrome; Cross-Sectional Studies; Condoms

**Abstract:** This cross-sectional study, aimed at evaluating the impact of HIV prevention interventions in Lebanon since 1996, was performed between January 2004 and July 2004 on 3200 Lebanese aged 15-49 years. Of the sexually active respondents, 13.0% of men and 2.6% of women had regular partners other than the spouse but only 25.0% used a condom in their last sexual intercourse. However, 16.8% had sex with casual partners and 71.7% of those used a condom. Knowledge about preventive practices against HIV/AIDS has regressed since 1996, 85.7% compared to 94.9%. Self reports of symptoms suggestive of sexually transmitted disease were 9.1% compared to 5.6% in 1996.

#### **Health Personnel**

Factors determining choice of health care provider in Jordan.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 959-968 (10 ref.)

Keywords: Public Sector; Health Services Accessibility; Patients; Health Surveys

**Abstract:** This paper examines factors influencing a patient's choice of provider for outpatient health care services in Jordan. Factors including demographic, socioeconomic, insurance status, quality of care, household size and cost of health care were studied using a multinomial logit model applied to a sample of 1031 outpatients from the Jordan healthcare utilization and expenditure survey, 2000. The patient's socioeconomic and demographic characteristics affected provider choice. Insurance was not statistically significant in choosing Ministry of Health facilities over other providers. Patients utilizing the public sector were price sensitive, and therefore any attempt to improve accessibility to health care services in Jordan should take this into consideration.

#### Heart

#### Heart trauma.

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Endovascular Journal 2009; 2 (1): 31-32 (14 ref.)

**Keywords:** Wounds and Injuries; Wounds, Stab; Bone Marrow; Biopsy; Cardiac Tamponade; Thoracotomy; Echocardiography; Treatment Outcome; Wounds, Nonpenetrating

**Abstract:** To report five cases of heart trauma, managed in a civil trauma surgery ward in one year and to carry out a review of literature .Three young male patients have been transferred to our center after direct stab wound to their upper chest at the left side. Another one was a sixty years old man who was trapped between two parts of an elevator door and the fifth case was an iatrogenic trauma during bone marrow biopsy in a fifty five years old patient. All of them underwent emergency left sided anterior thoracotomy because of the positive signs of cardiac tamponade and circulatory instability. The exploration revealed cardiac tamponade in all cases due to three perforations in right ventricle, one perforation in left ventricle at the apex and one perforation at the root of aorta. Echocardiography was performed in one case and revealed cardiac tamponade. In all cases repair of perforation in the beating heart was performed. Four patients survived. Heart trauma is an emergent and life threatening situation which needs immediate surgical intervention without any unnecessary workup. The outcome of surgery depends on several factors including trauma surgery team expertise.

# Heart Defects, Congenital

#### complications

Total anomalous pulmonary veins connection: the perioperative risk factors.

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Journal of the Arab Board of Medical Specializations 2009: 10 (1): 60-63 (7 ref.)

**Keywords:** Heart Defects, Congenital-diagnosis; Heart Defects, Congenital-classification; Risk Factors; Reconstructive Surgical Procedures; Mortality; Retrospective Studies; Echocardiography; Lung Diseases-complications; Pulmonary Veins-abnormalities; Perioperative Care

**Abstract:** Operative reconstruction of total anomalous pulmonary veins connection [TAPVC] in the literature has high morbidity and mortality. The aim of the study was to investigate the perioperative risk factors to lower the mortality rate. We retrospectively studied the cases of 42 infants operated for Total Anomalous Pulmonary Veins Connection between August 2002 to August 2007 at Damascus University Cardiovascular Surgical Center. We evaluate the role of right ventricle pressure, Left Ventricle End Diastolic Volume [LVEDN], the anatomical type of anomalous, age and weight of patients, pulmonry infections and delay in doing surgery as perioperative risk factors. Our study demonstrates that neither Left Ventricle End Diastolic Volume nor RV pressure were risk factors. Pulmonary infections secondary to long-standing pulmonary congestion was the only important risk factor. It is highly recommended to operate in the first months of life before the occurring of any pulmonary infection.

#### Helicobacter Infections

### diagnosis

Comparison of noninvasive diagnostic tests for helicobacter pylori infection.

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Medical Principles and Practice 2009; 18 (1): 57-61 (20 ref.)

Keywords: Helicobacter pylori; Breath Tests; Urea; Endoscopy, Gastrointestinal; Urease; Serologic Tests; Serology Abstract: Since the 13C-urea breath test [UBT] has become a highly reliable method for the noninvasive diagnosis of Helicobacter pylori infection, this study was performed in order to compare the sensitivity, specificity and accuracy among noninvasive tests including capsule UBT, conventional UBT and serology in the diagnosis of H. pylori infection. One hundred patients received capsule UBT, conventional UBT and gave blood samples for the diagnosis of H. pylori infection. Upper gastrointestinal endoscopy was performed in all patients. H. pylori infection was defined as the presence of a positive culture or positive results of both histology and rapid urease test [CLO test]. McNemar's test was used to determine the significance of differences among capsule UBT, conventional UBT and serology. Differences were considered significant at p < 0.05. According to the predefined criteria, the sensitivity, specificity, positive predictive value and negative predictive value of capsule UBT, conventional UBT and serology was 100, 95.7, 96.4 and 100%; 100, 85.1, 88.3 and 100%, and 90.6, 85.1, 82.7 and 88.9%, respectively. The accuracy of capsule UBT was higher than that of conventional UBT and serology [98 vs. 93 and 88%, respectively]. Capsule UBT had a similar ability for the detection of H. pylori infection compared with conventional UBT and serology [McNemar's test, p > 0.05]. According to our study, capsule UBT was highly accurate compared with other noninvasive tests including conventional UBT and serology. It could become a good alternative to endoscopy for the diagnosis of H. pylori infection.

# Helicobacter pylori

Glimpse of the epidemiological research on helicobacter pylori in Saudi Arabia.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 85 (9 ref.)

Keywords: Helicobacter Infections-epidemiology; Breath Tests

#### Helicobacter pylori infection in children.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 86-94 (100 ref.)

**Keywords:** Helicobacter Infections-diagnosis; Helicobacter Infections-transmission; Helicobacter Infections-complications; Social Class; Helicobacter Infections-epidemiology; Breath Tests-methods; Endoscopy; Enzyme-Linked Immunosorbent Assay; Immunoglobulin G; Gastritis-pathology; Peptic Ulcer; Gastroesophageal Reflux; Proton Pumps Inhibitors; Clarithromycin; Metronidazole

**Abstract:** Helicobacter pylori infection is a common problem in pediatric practice, and its acquisition is related with poor socioeconomic conditions. Although the organism is thought to be responsible for many diseases, only a handful of them have a direct causal relationship. At present, only a small number of children with well-defined clinical syndromes are benefited from testing and treatment. The treatment should include at least two antibiotics with a proton pump inhibitor.

# Helicobacter pylori: prevalence and relationship with abdominal pain in school children in makkah city, western Saudi Arabia.

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Saudi Journal of Gastroenterology [The] 2009: 15 (2): 100-103 (35 ref.)

**Keywords:** Helicobacter Infections-epidemiology; Breath Tests-methods; Abdominal Pain-etiology; Questionnaires; Child; Schools; Prevalence; Cross-Sectional Studies; Urea; Recurrence

**Abstract:** The published data on Helicobacter pylori [H. pylori] prevalence and its relationship with abdominal pain in Saudi Arabia is scarce. This study was carried out to determine the prevalence of H. pylori and its relationship with chronic recurrent abdominal pain [RAP] among school students in Makkah City, Saudi Arabia. Three hundred and fourteen school students, 103 at the intermediate level [grades 7-9] aged 12-15 years and 211 at the secondary level [grades 10-12] aged 15-18 years were tested for H. pylori. Urea breath test [UBT] was used for this purpose. Children with chronic RAP were identified as per the Apley criteria. Overall, the UBT was positive in 86/314 [27.4%] students. It was positive in 45/103 [43.7%] intermediate school students and 41/211 [19.4%] secondary students. Out of the 55 students with chronic RAP, 40 [73%] were positive for H. pylori . Further, 62.9% and 82.1% were positive among the intermediate and secondary school students with RAP, respectively. The overall and specific odds ratios of RAP were 12.35 [95% confidence interval [C.I.] 6.30-24.22] and 10.40 [95% C.I. 1.75-11.73] for the intermediate school students

and 22.69 [95% C.I. 7.99-64.44] for the secondary school students. The prevalence of H. pylori among the school children in Makkah, Saudi Arabia, is relatively low compared with developing countries. The prevalence was found to be higher among the younger age group. Further, there was a significant relation between H. pylori infection and RAP among the school students.

# A study of helicobacter pylori-associated gastritis patterns in iraq and their association with strain virulence.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 125-127 (19 ref.)

 $\textbf{Keywords:} \ \ \textbf{Helicobacter Infections-diagnosis;} \ \ \textbf{Helicobacter Infections-complications;} \ \ \textbf{Gastritis-pathology;} \ \ \textbf{Stomach}$ 

Neoplasms-etiology; Biopsy; Polymerase Chain Reaction; Virulence Factors; Gastritis-microbiology

**Abstract:** Helicobacter pylori [H. pylori] infection causes peptic ulceration and gastric adenocarcinoma. In Iraq, gastric cancer is rare. We investigated whether infected adults had the antral-predominant pattern of H. pylori - associated gastritis, which does not predispose to cancer. Materials and Methods: We evaluated histopathological changes by the Sydney scoring system in gastric biopsies taken from 30 H. pylori -infected adults and studied the correlation of these changes with the virulence factors. The Mann-Whitney test was used for the comparison of histopathological data. The presence or absence of each pathological index was evaluated with respect to the possession of virulence factors by the infecting H. pylori strain using the X[2] test. Gastric lymphocyte infiltration was more prominent in the antrum [P = 0.01]. Neutrophil infiltration was mild and gastric mucosal atrophy was rare. No relationship was found between virulence factors and histopathological changes. The mild pathology and antral-predominant gastritis help explain the low cancer rate in Iraq.

# Hematoxylin

The best stain for morphological study of human seminal fluid's smears.

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Sudan Journal of Medical Sciences 2009; 4 (1): 1-5 (16 ref.)

Keywords: Semen-cytology; Semen Analysis; Eosine Yellowish-[YS]; Andrology

Abstract: There is a high need for proper evaluation of the morphological features of human sperms. The importance of this lies in the field of andrology, male fertility and in vitro fertilization. The wet smears can give rough clue about the shape of the sperms, but it is neither accurate nor reproducible. This study aimed to determine the best stain which can be used for seminal fluid cytology. This study was conducted in Port Sudan, Red Sea State, Sudan in the period from October 2006 to September 2007. The total number of patients was 50. Samples which were collected from normospermic patients [NSP] were prepared by direct smear technique. Samples which were collected from oligospermic patients [OSP] and azoospermic patients [ASP] were prepared by direct smear technique and also by indirect smear techniques [concentration method]. Smear samples were stained by freshly prepared Harris's Haematoxylin, Papanicolaou stain, May-Grunwald Giemsa stains [MGG], supra vital stain, Giemsa stain and leishman's stain. In this study, the best stain was Harris's Haematoxylin [80% excellent for the head of sperm, 70% good for the neck, 59% excellent for the tail, 42% very good for cells in background]. Harris's stain was followed by papanicolaou stain and the third best stain was supra vital stain. MGG was better than Giemsa in staining of semen smears [75% good versus 25% good] in overall performance. The worst stain was Leishman's stain. Stained smears must be used for the morphological study of semen samples. Harris's Haematoxylin is the best stain for semen cytological features. Stains which used for the semen samples should be freshly prepared.

#### Hemorrhoids

## drug therapy

Investigation of vasoactive ion content of herbs used in hemorrhoid treatment in Turkey.

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Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 187-192 (30 ref.)

Keywords: Herbal Medicine; Vasoconstrictor Agents; Chromatography, Ion Exchange; Plants, Medicinal

**Abstract:** The aim of the present study is to determine anion and cation contents of the herbals used in Turkish folk remedy to explore the rationale of their use in hemorrhoid treatment in the context of the vasoactivity of these elements. Herbs used in the treatment of hemorrhoid were determined by the way of literature search. These herbs were obtained from certificated herb sellers. Grinded herb samples were placed in individual tubes containing methanol and incubated for 48 hours at 30°C. At the end of the incubation, supernatants were analyzed for their ion concentrations by using ion chromatography. Results: The difference between ion levels between systemic and locally used herbs, was not statistically significant [p > 0.05]. Anion concentrations [except nitrate] of locally used herbs were slightly higher than systemically used herbs [p > 0.05]. Cation levels [except magnesium] of systemically used herbs were slightly higher than locally used herbs [p > 0.05]. It was shown that the concentration of vasoconstrictor effective ions was higher than the concentration of vasodilator effective ions [p < 0.001]. While vasoconstrictor ion concentration

of systemically used herbs was 88.06 +/- 147.42mg, vasodilator ion concentration of locally used herbs was 90.15 +/- 136.94mg. The difference between vasodilator concentrations of groups was more evident; 5.39 +/- 9.80 mg and 14.32 +/- 66.48 mg for locally and systemically used herbs respectively. This study showed that herbal remedies used for the treatment of hemorrhoid in Turkey contain vasoactive and especially vasoconstrictor ions. Vasoconstrictor agents could amplify each others' effects as it has been previously shown, therefore, it is probable that the vasoconstrictor ion contents could contribute to the curative effects of herbals in the treatment of hemorrhoids.

## Hepatectomy

#### adverse effects

Prevention of bile leak after liver surgery: a fool-proof method.

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 128-130 (19 ref.)

**Keywords:** Biliary Tract Surgical Procedures-methods; Postoperative Complications; Cholangiopancreatography,

Endoscopic Retrograde; Liver-surgery; Bile

**Abstract:** Bile leak is not uncommon after liver surgeries. There is no adequate method described to prevent this morbid complication. At the end of the liver procedure, transcystic normal saline was injected under pressure with distal clamping. Leaking saline on the cut surface of the liver was sutured. The process was repeated till no leaking was observed. A suction drain was kept for any bile leak. Open liver resection and hydatid cyst surgery cases were included. There were 24 cases, with 13 males and 11 females. The age range was from 4 to 80 years, with a mean of 48 years [SD +/- 17.7]. The number of leak sites that could be sutured were 0-4 [mean of 2.3 +/- 0.5]. None had bile leak postoperatively. Transcystic injection under pressure with distal clamping demonstrates the leak sites. Suturing them prevents the postoperative bile leak.

## Hepatitis C, Chronic

## drug therapy

Combination therapy with interferon and ribavirin for chronic hepatitis C infection in betathalassaemia major.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 785-791 (21 ref.)

**Keywords:** Drug Therapy, Combination; Interferons-therapeutic use; Ribavirin-therapeutic use; beta-Thalassemia; Blood Transfusion; Treatment Outcome

**Abstract:** Treatment of chronic hepatitis C virus [HCV] infection in transfusion-dependent betathalassaemia major patients is complicated by existing hepatic siderosis and the fear of ribavirinassociated haemolysis. We evaluated the efficacy and side-effects of combination interferon-alpha [INF] and ribavirin therapy for HCV-infected thalassaemia patients. A total of 17 patients were enrolled [10 nonresponders to INF monotherapy, 7 naive to treatment, mean age 23.1 years] and they received 12 months of combination therapy. The sustained virological response rate 6 months after treatment was 58.8%. Blood transfusion requirements during treatment temporarily increased by 36.6%. Combination therapy was tolerated by, and may be useful for, HCV-infected thalassaemia major patients.

## Hepatitis, Autoimmune

# diagnosis

Autoimmune hepatitis and hepatitis C infection: diagnostic dieemma.

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New Egyptian Journal of Medicine [The] 2009; 40 (1): 46-50 (16 ref.)

**Keywords:** Hepatitis C, Chronic-diagnosis; Hepatitis C, Chronic-therapy; Diagnosis, Differential; Autoantibodies; Hypergammaglobulinemia; Adrenal Cortex Hormones; Interferons; Hepatitis, Autoimmune-therapy

**Abstract:** The evidence for an association between autoimmune forms of chronic hepatitis and hepatitis C virus [HCV] infection is controversial. Although anti-liver kidney microsomal antibody-positive autoimmune chronic hepatitis appears to be associated with HCV infection, evidence of such an association is less convincing with other subtypes of autoimmune chronic hepatitis. Autoantibodies are frequently found in patients with chronic hepatitis C, although usually in low titers which suggests that HCV elicits an immune response in the host. In a small subset of patient with chronic hepatitis C, autoantibodies are seen in high titers along with hypergammaglobulinemia, which further clouds the distinction between autoimmune chronic hepatitis and chronic hepatitis C. This has important therapeutic implications because inappropriate treatment of autoimmune chronic hepatitis with interferon-based therapy may exacerbate liver

disease. Conversely, corticosteroid therapy for chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Few data are available to show how patients with features of both autoimmune hepatitis and chronic hepatitis C should be treated.

## Hepatitis, Toxic

## etiology

Hairdye-Induced hepatitis: an unusal cause of acute hepatitisbony metastasis of gastric adenocarcinoma.

Gokak, Varadaraj P.; Mitnala, Sasikala; Cheemalkonda, Ramji; Banarjee, Rupa; Padaki, Nagaraj Rao; Reddy, D. Nageshwar

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 138-139 (4 ref.)

**Keywords:** Hepatitis, Toxic-diagnosis; Hepatitis, Toxic-immunology; Hair Dyes-adverse effects; Hepatitis; Acute Disease

#### **Herbal Medicine**

Anti-bacterial activity of ethanolic extract of indoneesiella echioides [L] Nees. evaluated by the filter paper disc method.

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Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 123-125 (7 ref.)

**Keywords:** Anti-Bacterial Agents; Staphylococcus aureus-drug effects; Escherichia coli-drug effects; Plants, Medicinal; Plant Extracts; Ethanol

**Abstract:** The study was carried out to investigate the antibacterial activity of the ethanolic extracts of Indoneesiella echioides [L] Nees. was evaluated by the filter paper disc method. This method is based on the diffusion of an antibiotic from a filter paper disc through the solidified culture media of a Petri dish used for study. The growth of inoculated is inhibited entirely in a circular area Zone around the filter paper disc containing a solution of antibiotic and the plant extract. The microorganisms used were: 1. Staphylococcus aureus [Gram positive 2. Escherichia coli [Gram negative] The organisms were maintained on nutrient agar slants. These were tested using nutrient broth. One loop ful of the respective cultures was taken in slants which were maintained below 40oC were taken and inoculated in the broth and incubated at 37oC for 24hrs and were observed for the growth of the organism with naked eye for their turbid nature. It was compared with that of sterile broth. The presence of turbidity indicated growth and suitability of the culture for further work.

## Hip Dislocation, Congenital

#### surgery

Influence of age on the outcome of single stage reconstructive surgery for congenital dislocation of the hip joint.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 43-48 (31 ref.)

**Keywords:** Reconstructive Surgical Procedures; Age Factors; Treatment Outcome; Prospective Studies; Osteotomy; Femur

Abstract: This study was conducted to assess the effect of age on the ultimate outcome measures following single stage surgical procedure of soft tissue release, relocation, capsulorrhaphy, femoral shortening with varus/derotation osteotomy and pelvic osteotomy. A case series. The study with two groups of pretest-posttest design was conducted at Department of Orthopaedic Surgery, Jinnah Postgraduate Medical Centre [JPMC], Karachi, from 1993 to January 2008. Patients included were having neglected, congenital dislocation of the hip joint, aged over 3 years. Patients with failed previous surgery, paralytic, teratological, traumatic or septic dislocations and patients with less than 5 years follow-up were excluded from the study. The patients were divided into two groups, 3-7 years [37 hip joints] and over 7 years [13 hip joints]. The single stage surgical procedure of open relocation, femoral shortening/derotation/ varus osteotomy and pelvic osteotomy was the dependent variable; whereas, the final clinico-radiological results based upon Tonnis grading, Severin's clinical/radiological grading, Klisic's overall rating and acetabular index were the independent variables of the study. Pre- and postoperative data was assessed for overall improvement and the difference in outcome measures between the two age groups. Significant overall improvement on all parameters was achieved after surgery. When results were compared between two age groups, there was no significant difference in the final outcome as per Tonnis grading and Severin's clinical typing as modified by Gibson [97.3% versus 84.4% normal hip joints or Tonnis grade 1 and 78.37% versus 53.85% Severin's type 1] but the results based upon Severin's radiological grading [62.16% versus 15.38%] and Klisic's overall rating [62.16% versus 15.38%] were significantly better in 3-7

years as compared to those over 7 years. There was no significant difference between the two age groups when compared for improvement in acetabular index. On further analysis, a progressive deterioration of results with increasing age was observed, yet the results in those aged over 7 years were reasonably justified surgical correction of congenital dislocation of the hip joint. Majority of the complications were seen in children operated at the age of 4-5 years. There were 7 cases [14%] of redislocation/subluxation and 6 were in 3-7 years age group. There were 4 cases [8%] of the avascular necrosis of the femoral head. Three patients had residual coxa vara and 2 had significant limb shortening. Limb lengthening was done in these 2 cases. The final results displayed progressive deterioration of clinical, radiological and functional outcome measures with aging after single stage reconstructive surgery for the congenital dislocation of hip joint. However, despite this, the results in children over 7 years were also good/excellent in most of the cases justifying surgery.

# Hydrocephalus, Normal Pressure

#### diagnosis

Brain atrophy versus normal pressure hydrocephalus by CSF flow measurement at MRI.

Baker, Ihab I.; El Sayed, Naglaa M.; El kalioubie, Mona M.; Atta, Yasser A.

Cairo University - Department of Radiology

Medical Journal of Cairo University [The] 2009; 77 (1): 19-26 (15 ref.)

Keywords: Brain-pathology; Atrophy; Diagnosis, Differential; Magnetic Resonance Imaging; Cerebrospinal Fluid

Abstract: Cine phase contrast magnetic resonant imaging [MRI] has been increasingly used during the last decade for evaluating cranial and spinal cerebrospinal fluid [CSF] flow. The aim of our study is to assess the value of cine-phase contrast MRI CSF flowmetry in cases of normal pressure hydrocephalus [NPH] and to differentiate it from brain atrophy. CSF flow study was performed with the use of an optimized two dimensional cine phase-contrast MR technique. The protocols of examination involved quantitative and qualitative analysis of CSF flow properties at the level of the aqueduct of Sylvius and was applied to 10 patients with NPH, 9 patients with cerebral atrophy and 5 healthy volunteers. Correlative statistical analysis was done and revealed that the systolic peak and mean velocity as well as the systolic stroke volume values in NPH patients were statistically significantly higher than those of the normal controls denoting hyper dynamic aqueductal CSF flow. In cases of atrophy, we found statistically significant markedly lower systolic peak velocity, end-diastolic peak velocity and stroke volume values in comparison to healthy volunteers indicating a hypo dynamic CSF circulation. Our results confirm the value of cine phase MRI as a validated tool for characterizing CSF hydrodynamics in various pathological conditions. They also confirm that an MR imaging evaluation of CSF potentially can be very helpful in distinguishing cases of NPH from cases of atrophy before any CSF diversion procedure is contemplated.

# **Hymen**

# Hymen care for unmarried Muslim females: role of the forensic consultant in gynaecology interventions.

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University of Jordan - Faculty of Medicine - Department of Forensic Medicine and Pathology

EMHJ - Eastern Mediterranean Health Journal 2009: 15 (4): 861-867 (13 ref.)

**Keywords:** Forensic Medicine; Islam; Gynecologic Surgical Procedures-legislation and juriprudence; Single Person **Abstract:** This case series illustrates the role of the forensic consultant in hymen care for unmarried Muslim females

exposed to gynaecology interventions. The age range of the 12 females attending University of Jordan Hospital in Amman was 35 days to 28 years. Gynaecology interventions included the use of a vaginoscope, circular resection of the hymen in cases of congenital imperforate hymen, evacuation of perineal abscess and evaluation of a torn hymen. The forensic consultant provides a valuable role in reassuring patients and parents about procedures used to avoid rupturing the hymen, and in protecting the gynaecologist's and patients' rights by providing reports of the status of the hymen before and after intervention in cases where damage is unavoidable.

# **Hypertension**

## etiology

## Risk factors for hypertension among the adult Moroccan population.

Tazi, M.A.; Abir Khalil, S.; Arrach, M.L.; Chaouki, N.; Lahmouz, F.

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Health Ministry - Directorate of Epidemiology and Control of Diseases

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 827-841 (39 ref.)

**Keywords:** Risk Factors; Age Factors; Rural Population; Diabetes Complications; Body Mass Index; Waist Circumference; Hypercholesterolemia-complications; Exercise; Questionnaires

**Abstract:** This study used data from the Moroccan national survey in 2000 to identify the principle risk factors for hypertension in a representative sample of the population age 20+ years. The risk of hypertension increased steadily with age and was higher among rural residents [OR = 1.42] and those with diabetes [OR = 1.72]. The risk increased with increased body mass index, waist size and hypercholesterolaemia. The risk of hypertension decreased by 36%

and 46% respectively for those who walked 30-60 min and > 60 min daily. Consumption of fish and fresh fruits 1+ times per week was associated with a lower risk. Among those with hypertension, only 21.9% were previously diagnosed and 8.8% were under medical treatment.

# Ichthyosis, Lamellar

## complications

Ichthyosis congenita harlequin type: A case report.

Al Issa, Ahmad: Khader, Maher: Muttair, Rivad: Al Rawashdeh, Basel

King Hussein Medical Center - Department of Pediatrics

Journal of the Royal Medical Services 2009; 16 (1): 52-54 (12 ref.)

Keywords: Ichthyosis, Lamellar-pathology; Prognosis

Abstract: This is a case report of a rare and severe form of congenital ichthyosis involving skin, eyes, ears, mouth, feet and hands. Unfortunately, the patient died at the fifth day of age due to severe cardio-pulmonary compromise.

## **Idiopathic Pulmonary Fibrosis**

# physiopathology

#### Sleep quality and associated daytime consequences in patients with idiopathic pulmonary fibrosis.

Mermigkis, C.; Stagaki, E.; Amfilochiou, A.; Polychronopoulos, V.; Korkonikitas, P.; Mermigkis, D.; Bregou. M.;

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Sismanoglion General District Hospital - Third Pulmonary Department

Medical Principles and Practice 2009; 18 (1): 10-15 (24 ref.)

Keywords: Sleep; Questionnaires; Fatigue; Polysomnography

Abstract: The aim of this study was to describe sleep quality and associated daytime consequences in idiopathic pulmonary fibrosis [IPF]. Fifteen patients with IPF and 15 control subjects matched on age and anthropometric variables were included in the study. Sleep quality and its daytime consequences were assessed by clinical interview, the Pittsburgh Sleep Quality Index [PSQI], the Functional Outcomes in Sleep Questionnaire [FOSQ], the Fatigue Severity Scale [FSS], the Epworth Sleepiness Scale and attended all-night polysomnography. Polysomnography revealed a decrease in sleep efficiency and slow wave sleep, and an increase in stage 1 sleep and arousal index in IPF patients compared to controls. Daytime tachypnea persisted during sleep. Oxygen saturation below 90% was observed during 34.3 +/- 37.3% of the total sleep time [TST]. Quality of sleep and daytime function were moderately to significantly impaired based on the PSQI and FOSQ. The total FOSQ score was negatively correlated with TST with oxygen saturation below 90% [p = 0.01, r = -0.62]. FSS scores were correlated with TST at oxygen saturation below 90% and mean oxygen saturation during sleep [p = 0.002, r = 0.74, and p = 0.007, r = -0.66, respectively]. Our data suggest significant sleep disruption and consequent impairment of physical and social functioning in patients with IPF. In the absence of effective treatments for IPF, the improvement of sleep quality should be a primary therapeutic goal.

#### therapy

#### Pulmonary artery angioplasty and stenting of anastomotic pulmonary hypertension after single lung transplantation for idiopathic pulmonary fibrosis.

Ghasemi, Massoud; Najaflzadeh, Katayoon; Kaboli, Afsoon Sasan General Hospital - Department of Invasive Cardiology

Endovascular Journal 2009; 2 (1): 28-30 (8 ref.)

Keywords: Pulmonary Artery; Angioplasty; Stents; Anastomosis, Surgical; Hypertension, Pulmonary; Lung Transplantation; Constriction, Pathologic; Angioplasty, Balloon; Angiography

Abstract: To determine the feasibility and safety of percutaneous stent angioplasty of pulmonary arterial anastomotic stenosis in post lung transplant recipient. We describe a case of pulmonary hypertension recurring in a lung transplant recipient secondary to arterial anastomotic stenosis and not recurrence of primary diseases. The condition completely improved after pulmonary artery balloon angioplasty and Stenting. Vascular anastomotic stenosis is a rare but serious complication associated to high mortality after lung transplantation. Pulmonary artery stenosis at anastomotic site should be suspected in patients with unexplained increasing dyspnea on exertion and breathlessness with evidence of pulmonary hypertension diagnosed by transesophageal echocardiography in transplant patients. The diagnosis can be confirmed using pulmonary angiography. Surgical repair has known as a main therapeutic option in these patients. However, pulmonary artery interventional procedure including balloon angioplasty and Stenting can considered as an alternative and an effective treatment in pulmonary arterial anastomotic stenosis in post lung transplant patients, to avoid surgery and its associated morbidity and mortality.

# Infertility, Female

Follicular fluid endothelial inflammatory and coagulation markers in good and poor responders to controlled ovarian hyperstimulation for ICSI procedures.

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Cairo University - Faculty of Medicine - Departments of Obstetrics and Gynecology

Medical Journal of Cairo University [The] 2009; 77 (1): 57-63 (42 ref.)

**Keywords:** Ovulation Induction; Sperm Injections, Intracytoplasmic; Follicular Fluid; C-Reactive Protein; von Willebrand Factor; Risk Factors; Polycystic Ovary Syndrome; Body Mass Index; Ovarian Hyperstimulation Syndrome

Abstract: Granulosa cells have endothelial like function and can produce many proteins characteritic to endothelial activity. Evaluation of these protein products allows understanding of the microfollicular environment to be reflected on better safe management for controlled hperstimulation for poor and good responders during artificial reproductive techniques. To compare levels of markers of inflammation and endothelial dysfunction [C-reactive protein, CRP and von Willebrand factor antigen, vWF] and the poor response to induction of ovulation during controlled ovarian hyperstimu-lation [COH] for ICSI procedures. 78 infertile patients were assigned for ICSI [intracytoplasmic sperm injection] procedure. The patients were divided according to their resoponse into group A [poor responders] who have yielded only five or less follicles of 18mm or more in size, and group B who have adequate response to controlled ovarian hyper stimulation. The follicular fluid from the two groups was tested for markers of inflammation; C-reactive protein [CRP] and marker of endothelial damage; vonWillibrand Factor [vWF]. The main cause of infertility in poor responders is ovulatory [polycystic ovary syndrome]. The body mass index and age is higher significantly in the poor responders. Both markers studied have higher level in the follicular fluid from the poor responders than normally responding patients [but statistically significant only for CRP]. The levels of the two markers have a positive correlation to the body mass index which is significantly higher in the non responders. The granulose cells have endothelial like activity and produces many proteins that have effect on the microenvironment of the growing follicles. CRP and vWF are markers for inflammation and endothelial stress which are produced in follicular fluid of the poor responders to controlled hyper stimulation in amounts more than the normally responding ones. Further studies are needed to deeply understand the value of proteins produced by granulosa cells for efficacy and safety of ovulation induction during artificial reproductive techniques.

# **Intestinal Polyps**

## epidemiology

Colorectal polyps: A clinical, endoscopic and pathologic study in Iranian children.

Ashtiani, Mohammad Taghi Haghi; Monajemzadeh, Maryam; Motamed, Farzaneh; Tabriz, Hedieh Moradi; Mahjoub, Fatemeh; Karamian, Hamid; Sani, Mehri Najafi; Khatami, Gholam Reza; Khodadad, Ahmad; Farahmand, Fatemeh; Fallahi, Gholam Hossein

University of Tehran - Medical Sciences, Medical Center Hospital - Department of Pathology

Medical Principles and Practice 2009; 18 (1): 53-56 (21 ref.)

**Keywords:** Intestinal Polyps-pathology; Colonic Diseases; Colon; Rectal Diseases; Rectum; Child; Retrospective Studies; Colonoscopy; Endoscopy

**Abstract:** To study the clinical presentation, histology and colonoscopic features of lower gastrointestinal polyps in Iranian children. Medical reports of children with colorectal polyps were retrospectively reviewed from 1996 to 2005 at the Children's Medical Center Hospital, Iran. A total of 563 cases were studied. Data related to age, sex, family history, signs and symptoms, the size, location, polyp types and associated lesions were collected and analyzed. The mean age of children was 5.66 +/- 2.88 years [range 2 months to 17 years], with a male-to-female ratio of 1.61:1.0. The highest incidence was between ages 2 and 10 years [85.1%]. Rectal bleeding was the presenting symptom in 78.5% cases. The polyps were solitary in 94% of cases. A majority of polyps [86.3%] were juvenile and 86.7% located in the rectosigmoid area. Three percent of cases had a positive family history. One case of Turcot syndrome was also identified. Juvenile polyps remain the most common polyps in Iranian children. Although the presence of a solitary polyp in the rectosigmoid colon is more prevalent, in a significant number of cases they are multiple and located in proximal parts. Polyps must be removed even when asymptomatic because of their probable neoplastic potential.

#### **Intestinal Volvulus**

#### diagnosis

Compound volvulus in pregnancy.

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Uuniversity of Mosul - College of Medicine - Department of Surgery

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 66-68 (14 ref.)

Keywords: Intestinal Volvulus-surgery; Risk Factors; Pregnancy; Treatment Outcome

**Abstract:** Ileosigmoid knotting or compound volvulus is a very uncommon cause of intestinal obstruction. A case of compound volvulus is reported in a 28-year-old pregnant lady in week 24 of an otherwise uneventful pregnancy. She was presented with a diagnostic dilemma. The features of this uncommon condition with an emphasis on its rare occurrence in pregnancy and literature review are highlighted.

# Intra-Aortic Balloon Pumping

#### adverse effects

Factors affecting mortality in patients treated with intra-aortic balloon counter pulsation due to cardiogenic shock post CABG.

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Cairo University - Faculty of Medicine - Departments of Cardiothoracic Surgery and Anaesthesia

Medical Journal of Cairo University [The] 2009; 77 (1): 213-217 (16 ref.)

Keywords: Coronary Artery Bypass-adverse effects; Shock, Cardiogenic-therapy; Myocardial Infarction; Mortality

**Abstract:** During many years of intra-aortic balloon counter pulsation [IABP] application in the treatment of myocardial infarction [MI] more and more indications for this treatment have been proposed. Despite increasing experience with IABP, the clinical effects of IABP use are still unclear, especially when applied in cardiogenic shock. Incidence of cardiogenic shock has remained high, complicating 7 to 10 per cent of acute MI [I]. The aim of this study was to determine results of IABP use and factors which affect mortality in cardiogenic shock [CS] post CABG. 30 patients [mean age 58.3 +/- 12.6 years, 22 males] undergoing IABP were included in the study. Data were collected and mortality rates were assessed. In-hospital death occurred in 12 patients. Over half of these patients [n = 7; 58.3%] died during first 7 days from insertion of IABP. The reason for IABP introduction was CS post CABG in all patients. The mortality in patients complicated by CS was 40%. The features which significantly influenced mortality in these patients were age-patients who died were older [64 +/- 7.8 Vs. 58.6 +/- 8.2; p = 0.03] and ST segment changes-there was lower mortality rate in a subgroup with ST elevation AMI [8 Vs. 4 patients, p = 0.003]. We also observed slightly higher incidence of anterior wall AMI in survivors than in non-survivors [p = 0.06]. Our study presents CS post CABG treated with IABP. In this study, survivors and non-survivors differed mainly in age, ST segment changes and infarction site. Non ST segment elevation AMI was associated with worse prognosis.

#### Itraconazole

# Design and evaluation of itraconazole loaded solid lipid nanoparticulate system for improving the antifungal therapy.

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Krupanidhi College of Pharmacy

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 131-138 (29 ref.)

**Keywords:** Drug Delivery Systems; Antifungal Agents-chemistry; Antifungal Agents-toxicity; Calorimetry, Differential Scanning; Nanoparticles

Abstract: The objective of the study was to design and evaluate Itraconazole loaded solid lipid nanoparticles [SLNs] drug delivery system, where Itraconazole nanoparticles with suitable size ranges are expected to improve the therapeutic efficacy and reduction of toxicity of this broad spectrum antifungal agent. Components of the SLNs were lipid [palmitic acid] and surfactants [Pluronic F127 and Tween 40]. The Itraconazole loaded nanoparticles were prepared by microemulsion dispersion method. Experiments were carried out with optimized ratio of excipients, where drug-lipid ratio and surfactant-cosurfactant ratio [Km] were varied to optimize the formulation characteristics. The effects of dispersion media, its pH, ionic content, etc. were investigated to optimize the SLNs production. Particles size analysis and zeta potential measurements were done using Malvern Mastersizer Hydro 2000G. The particles were also subjected to DSC, IR and XRD analyses. The in vitro drug release profile from nanoparticles was found to prolong up to 12h. Kinetic analysis of release indicated that nanoparticles formed were matrix in nature, in which Itraconazole dispersed uniformly. Optimized formulations were found to have a lipid-drug ratio of 1.5:1 and prepared at a Km ratio of 1:2 to maximize drug loading, modulate release and minimized particle size. The microemulsion mediated nanoparticle preparation methodology ensured high drug loading [ca. 80%], low and narrow size distribution and provided a reproducible and fast production method. The study elaborates on the feasibility and suitability of lipid based colloidal drug delivery system, employing optimize design to develop a clinically useful nanoparticle system with targeting potential.

## Jaundice, Obstructive

#### etiology

# Obstructive jaundice due to primary choroidal malignant melanoma metastasis: an unusual presentation.

. Maheshwari, Gaurav; Shivathirthan, Nairuthya; Haldar, Premashish J.; Kamath, Dinesh

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Jagjivanram Railways Hospital - Department of Surgical Gastroenterology

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 141 (5 ref.)

**Keywords:** Jaundice, Obstructive-diagnosis; Jaundice, Obstructive-diagnosis; Choroid Neoplasms-pathology; Neoplasm Metastasis; Melanoma-secondary; Melanoma-drug therapy; Tomography, X-Ray Computed; Endoscopy, Gastrointestinal

# Jervell-Lange Nielsen Syndrome

## diagnosis

Jervell and Lange-Nielsen syndrome in four Jordanian families.

Madani, Awni; Hejazi, Issa; Haweleh, Abdelfatah; Khreisat, Imad; Haddadin, Rania; Hakim, Fakhri

King Hussein Medical Center - Department of Pediatric Cardiology

Journal of the Royal Medical Services 2009; 16 (1): 69-73 (12 ref.)

**Keywords:** Long QT Syndrome-diagnosis; Electrocardiography; Congenital Abnormalities; Deafness; Child;

Syncope-diagnosis

Abstract: To report the importance of the cardiologic aspect in the evaluation of syncope in children with congenital deafness. A total of 16 deaf-mute siblings in four Jordanian families were studied. Each family had at least one sibling with congenital deafness and syncopal attacks. Audiogram confirmed the profound sensorineural hearing loss in all the siblings. Electrocardiogram was done in all symptomatic siblings and corrected QT interval was calculated. Screening for corrected QT interval prolongation was performed in the asymptomatic siblings and parents. Eight siblings had abnormal prolongation of corrected QT interval and were diagnosed as Jervel-Lange-Nielsen syndrome [congenital sensorineural deafness and abnormal prolongation of corrected QT interval]. The syncope in all symptomatic siblings was controlled with the use of propranolol while the asymptomatic siblings were given propranolol for prophylaxis. Electrocardiogram is an important diagnostic test in congenitally deaf children, especially those with syncopal episodes.

#### Keratoacanthoma

#### diagnosis

Keratoacanthoma: An unusual presentation.

Al Hogail, Ibrahim A.; Bhatt, Taseer A.

King Fahad Medical City - Dermatology Faculty of Medicine **Bahrain Medical Bulletin** 2009; 31 (1): 43-44 (13 ref.)

Keywords: Forehead-pathology; Wounds, Nonpenetrating; Skin Diseases

**Abstract:** Keratoacanthoma is an epithelial neoplasm occurring on the sun exposed skin of elderly persons. It usually presents as solitary flesh colored nodule with central keratin plug and is characterized by rapid growth followed by spontaneous regression in weeks to months. We present a 45 year old male with keratoacanthoma on forehead present for a long time with recent rapid increase in growth following trauma.

#### Ketoprofen

## administration and dosage

Enhanced transdermal delivery of ketoprofen from bioadhesive gels.

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Banar as Hindu University - Institute of Technology - Department of Pharmaceutics

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 193-198 (25 ref.)

**Keywords:** Drug Delivery Systems; Polymers-chemical synthesis; Polymers-pharmacokinetics; Administration, Cutaneous; Gels; Rats

**Abstract:** The aim of this study was to evaluate and compare the in vitro and in vivo transdermal potential of bioadhesive gels of ketoprofen by using gelling polymers like sodium carboxymethylcellulose, xanthan gum, poloxamer 407 and carbopol 934P as bioadhesive polymer with and without penetration enhancer [oleic acid]. The effect of oleic acid as a penetration enhancer was examined when it was added to the bioadhesive formulations. Gels were evaluated for bioadhesive force and viscosity. To study the in vitro potential of these formulations, permeation studies were performed with Franz diffusion cell using excised rat abdominal skin. Carrageenan induced rat paw edema model was used to investigate their in vivo performance. The commercial formulation of ketoprofen was used as a reference formulation. The in vitro permeation studies indicate that ketoprofen bioadhesive gel of poloxamer 407 with penetration enhancer was superior to gels of sodium carboxymethylcellulose and xanthan gum with penetration enhancer [oleic acid]. The permeation rate of ketoprofen from poloxamer 407 based bioadhesive gel with 15% v/w penetration enhancer. In the paw edema test poloxamer 407 based bioadhesive gel with 15% v/w penetration enhancer. In the paw edema test poloxamer 407 based bioadhesive gel with 15% v/w penetration enhancer. In the paw edema test poloxamer 407 based bioadhesive gel with 15% v/w penetration enhancer. So the permeation and effectiveness. The in vitro and in vivo studies showed that bioadhesive gels of ketoprofen could be used for effective therapy.

# **Kidney Calculi**

## therapy

Retrograde ureteropyeloscopic holmium laser lithotripsy for shockwave refractory renal calculi.

Ibrahim, Hamdy M.; Al kandari, Ahmad M.; El Shebini, Yehya H.; Habib, Enmar I.

Kuwait Ministry of Health - Department of Al Adan Urology Unit

Medical Journal of Cairo University [The] 2009; 77 (1): 149-153 (17 ref.)

Keywords: Lithotripsy, Laser; Ureteroscopy; Abdomen-ultrasonography; Tomography, X-Ray Computed

Abstract: To assess the efficacy and safety of the retrograde ureteropyeloscopic holmium laser for treating renal stones that are refractory to treatment with extracorporeal shock wave lithotripsy [ESWL]. A total of 23 patients [4 females and 19 males] with a mean age of 42.7 +/- 9.8 years [range 27 to 63 years] underwent flexible ureteroscopy and holmium: YAG laser lithotripsy. They had been treated with a mean of 2.87 previous SW sessions. Mean stone size was 1.23 +/- 0.4cm [range 0.5 to 2.3cm] and the mean number of stones per patient was 2 stones [range 1 to 6 stones] for a total of 45 stones overall. Nineteen patiets had intrarenal stones, 3 had combined ureteral and renal stones and one had ureteral stone. Success was defined as stone-free status or residual fragments less than 3mm and it was assessed by postoperative abdominal radiography, CT or ultrasonography. The overall success rate of stone fragmentation was 78.2%. Eighteen patients had no stone fragments or residual fragments less than 3mm that were expected to pass spontaneously. Of the 23 patients 4 had lower pole residual stones more than 5mm in size, 3 of them underwent second ureteroscopic procedure and one underwent PCNL as the stones were not accessible because of lower pole infundibular stricture. After the second treatment, the success rate reached 91.3%. There were no major complications, 3 patients had postoperative fever and significant irritative bladder symptoms secondary to the internal stent in 5 cases [21.7%]. Mean operative time was 72.39 +/- 22.25 minutes and mean hospital stay was 3.22 +/- 1.27 days. Ureteroscopic laser lithotripsy can be used effectively and safely to treat upper tract stones unresponsive to SWL. Patients with stone burden > 10 mm and those with an abnormal renal anatomy require more than one procedure.

# **Kidney Diseases**

## diagnosis

Crossed fused renal ectopia with staghorn calculus and gross hydronephrosis.

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Combined Military Hospital - Department of Radiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 69-70 (9 ref.)

**Keywords:** Kidney-abnormalities; Kidney Calculi-diagnosis; Hydronephrosis-diagnosis; Hematuria; Urography; Back Pain

**Abstract:** Crossed fused renal ectopia is a rare renal anomaly. Formation of staghorn and struvite calculi within it has never been reported in local literature. A 25-year-old man with macrohematuria and right flank pain was admitted to the hospital. An intravenous pyelography revealed right sided crossed fused ectopic kidney showing a staghorn and struvite calculi in upper-moiety along with gross hydronephrosis. Patient was conservatively managed after exclusion of other congenital anomalies.

## Kidney Failure, Acute

## diagnosis

#### Acute renal failure in a patient with both leptospirosis and dengue fever.

Mohammad, Ehab; Mohsin, Nabil; Al Abri, Saif; Al Abaidani, Idris; Jha, Amitabhj; Camble, Pramod; Budruddin, Mohammad; Khalil, Mohammad; Pakyarra, Abbas; Al Busaidy, Sulaiman

Royal Hospital - Department of Nephrology

Oman Medical Journal 2008; 23 (2): 101-103 (16 ref.)

Keywords: Leptospirosis-diagnosis; Dengue-diagnosis; Fever; Fatigue; Anorexia

**Abstract:** The spectrum of tropical nephropathies includes Acute Renal Failure [ARF] or Acute Kidney Injury [AKI] due to infective agents that are endemic in the tropics which include Leptospira [LS] and Dengue Viruses [DV]. The major histological feature is Acute Tubular Necrosis [ATN]. 1, 2 We report the case of a patient who presented ARF with coinfection with both agents. The clinical manifestations were consistent with both diseases. A renal treatment was supportive and the outcome was positive. We conclude that co-infection with these two tropical agents was possible. It may have been overlooked when the diagnosis of one agent was confirmed, especially that aware of the possibility of coinfection, as the management may be different. Spontaneous full recovery in these circumstances is still possible with supportive treatment.

# Kidney Failure, Chronic

Quality of care assessment and adherence to the international guidelines considering dialysis, water treatment and protection against transmission of infections in university hospital based dialysis unit in Cairo, Egypt.

Ibrahim, Salwa; Darwish, Hatem; Abdel Rahaman, Mohamad; Belal, Dawlet

Cairo University - Department of Internal Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 155-160 (28 ref.)

**Keywords:** Water Microbiology-microbiology; Quality of Health Care; Guideline Adherence; Infection Control; Sodium; Potassium; Mortality; Hospitals, University; Retrospective Studies; Renal Dialysis

Abstract: End stage Renal Disease [ESRD] has emerged as a major public health problem around the world. In recent decades, several important advances have been made in the therapy of hemodialysis [HD] with introduction of international guidelines to ensure the delivery of optimum care to HD patients. Increased mortality risk in HD patients unable to meet six targets in different areas of HD practice has been reported by the DOPPS investigators. In this retrospective study, we assessed the current practice patterns of care for HD patients in the Kaser El-Aini Nephrology and Dialysis Center in comparison with Dialysis Outcomes Quality Initiative [DOQI] Guidelines, European Best Practice Guidelines [EBPG], CDC guidelines for prevention of transmission of infections among HD patients, and American Association for Medical Instrumentation [AAMI] standards for dialysis water quality. Mean URR% was 63 +/- 8.8% in prevalent HD patients. A-V Fistula was the vascular access in 91% of prevalent HD patients, whereas temporary catheter was used in 9% of cases mostly as a bridge till A-V fistula creation/ maturation. Bicarbonate was the base used in 80% of cases. 97% patients had thrice weekly sessions and 3% had twice dialysis sessions/week. Mean serum albumin was 4.19 +/- 0.39g/dl, 66.66% of prevalent patients had serum albumin level > 4g/dl. Mean serum calcium was 8.66 +/- 1.4mg/dl, phosphorus was 6.26 +/- 2.54mg/dl with approximately 60% of patients had serum phosphorus level > 5.5mg/dl. CaxPi product was higher than 55 in around 40% of cases and PTH level was in the range of 150-300 pg/ml in around 10% of prevalent patients. Mean hemoglobin [HB] was 10.03 +/- 4.18g/dl in prevalent cases; however, around 70% of cases had hemoglobin level less than 11 g/dl. Iron deficiency was prevalent as 18% of patients had serum ferritin < 200ng/l and 34% had TST < 20%. 70% of patients were HCV positive and 4% were HBsAg positive and all were negative for HIV serological test. Dialysis water was monitored regularly for chemical and bacterial contamination as recommended by the AAMI, but endotoxin assay is currently not included in the monitoring checklist. Annual mortality rate was 8% in 2007. The current Audit revealed a reasonable quality of care for HD patients in the fields of vascular access care, dialysis adequacy and nutrition areas. It also reveals the need for improving anemia management and control of hyperphosphatemia with dietary counseling and more frequent dialysis. To fully meet guidelines targets, each patient should., be treated in an individualized way with more counseling, nutritional education and individualized dialysis prescription. Besides, the unit needs to adopt primary and secondary intervention strategies to prevent and promptly correct any deviation from desired targets.

## Labor, Induced

Association of induction of labor in primigravidae with cesarean section and post partum hemorrhage in Omdurman maternity hospital, Sudan 2007.

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Omdurman Islamic University - Chair of Post Graduate Medical Studies Board - Obstetrics and Gynecology

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 19-22 (10 ref.)

**Keywords:** Cesarean Section-statistics and numerical data; Postpartum Hemorrhage-epidemiology; Gravidity; Fetal Distress; Risk Factors; Cross-Sectional Studies; Misoprostol

Abstract: This is a descriptive cross-sectional hospital based study, to determine Cesarean Section [C/S] rate and post partum hemorrhage [PPH] in association with induction of labor in primigravidae and risk factors behind that, in Omdurman maternity hospital during the year 2007. After an informed consent from patients and hospital directorate, 105 primagravidae with singleton pregnancy, were induced after completed 37 weeks for various indications, and 105 primagravidae delivered spontaneously were carefully selected for control with minimal confounders including age, education and maternal medical disorders. Fifty four cases [51.4%] were induced with artificial rupture of membranes [ARM], followed by oxytocin titration only, while 51 cases [48.6%] were induced with intra-vaginal misoprostol followed by ARM and oxytocin titration. In this study, rate of induction in primigravida was 6.1%, mainly due to post date [53.3%]. Cesarean section was significantly higher in induced patients [36.2%] than in control group [18.0%]. Fetal distress was the commonest indication for C/S 17.1%, followed by failure of induction 13.3% and failure to progress 5.7%. No significant difference observed in PPH following induction or spontaneous labor. Induction of labor in primigravida is associated with an increased risk of C/S; however, there is no significant difference in association with PPH.

#### Lactational amenorrhoea

Lactational amenorrhoea and modern contraceptives use among nursing women in Egypt 2003.

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Ministry of Health - Department of Primary Health Care

Oman Medical Journal 2008; 23 (2): 72-77 (28 ref.)

Keywords: Lactation; Breast Feeding; Contraception; Amenorrhea

Abstract: To evaluate the potential for Lactational Amenorrhoea Method [LAM] and passive LAM among women with children below 6 months in the 2003 Egypt Demographic Health Survey [2003 EDHS], to assess the determinants of amenorrhea, and to examine the association of exclusive breastfeeding and amenorrhea with using modern contraceptive methods among nursing mothers of children below 2 years, adjusting for other associated variables. Data from the 2003 EDHS was downloaded from the DHS website. A sub-sample of women fulfilling all the four criteria were selected: 1] women with last birth of children less than 2 years; 2] currently married; 3] not being sterilized; and 4] currently breast feeding their children. Accordingly, 1934 women entered into the statistical analysis, of them 629 had children below 6 months. Nearly 24% of nursing mothers with children below 6 months met LAM criteria, of them passive LAM users constituted 79.1%. For women with children below 24 months, determinants of amenorrhea were exclusive breast feeding, unemployment, number of living children, husband education, number of feeding at night, and having a male sex child. Higher education, urban residence, positive attitude towards contraception increased the likelihood of modern contraceptives use, whereas amenorrhea, exclusive breast feeding, and having a wanted child decreased its likelihood in multivariate analysis. Exclusive breast feeding was associated with amenorrhea and modern contraceptive methods use in a direct and inverse fashion respectively. LAM is a commonly used method but it is liable to discontinuation or violation of its criteria. Hence, it is recommended to educate both the health care providers and users about it.

#### Lead

#### blood

Determination of blood lead levels in adult Bahraini citizens prior to the introduction of unleaded gasoline and the possible effect of elevated blood lead levels on the serum immunoglobulin IgG.

Freije, Afnan Mahmood; Dairi, Maheen Ghuloom

University of Bahrain - College of Science - Department of Biology

Bahrain Medical Bulletin 2009; 31 (1): 17-20 (40 ref.)

**Keywords:** Gasoline; Immunoglobulin G-blood; Prospective Studies; Adult; Environmental Exposure; Immune Systems

**Abstract:** This study is designed to investigate the possible effect of environmental lead exposure on the immune system. Prospective study. University of Bahrain, College of Science, Department of Biology, Isa Town Campus. The concentration of lead [Pb] and the serum immunoglobulin IgG were measured in the blood of 40 human adults by atomic absorption spectrophotometry and ELISA assay in April 2000, soon before the implementation of unleaded gasoline [July, 2000] in the Kingdom of Bahrain. The blood lead levels of participants were found to be elevated [mean 15.3 +/- 5.7 microg/dl], in comparison with the standard international levels, in which blood lead levels of > 10 microg/dl are designated as lead poisoning. On the other hand, the serum immunoglobulin IgG was within the normal range [mean 1007.1 +/- 147.1 mg/dl]. However, no correlation was found between the blood lead levels and the serum IgG levels [p = 0.14]. This study has shown that blood lead levels in 29 [72.5%] of the participations were higher than the internationally accepted level. The study also suggests that elevated blood lead levels did not have an effect on the efficiency of the humoral immunity represented by serum IgG.

## **Lipid Peroxidation**

Antioxidant status and lipid peroxidation activity in evaluating hepatocellular damage in children.

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National Research Centre - Medical Research Division - Department of Medical Biochemistry

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 842-852 (34 ref.)

**Keywords:** Oxidative Stress; Glutathione Reductase-blood; Glutathione Transferase-blood; Malondialdehyde-blood; Sensitivity and Specificity; Hepatitis C-diagnosis; Hepatitis B-diagnosis; Schistosomiasis-diagnosis; Liver Diseases-diagnosis; Liver Function Tests; Antioxidants; Biopsy

**Abstract:** Serum levels of glutathione reductase [GR], glutathione S-transferase-alpha [GST-alpha] and malondialdehyde [MDA] were determined to evaluate their use in diagnosing hepatocellular damage in 75 children with liver disease. Except for level of GR in patients with HBV, GR, GST-alpha and MDA were raised significantly in patients compared with controls. At 100% specificity, the sensitivity of the 3 markers for detecting hepatitis B virus, hepatitis C virus and schistosomiasis infection respectively were: 16.7%, 100.0% and 17.7% for GR; 33.3%, 62.1% and 38.2% for GST-alpha; and 25.0%, 10.3% and 29.4% for MDA. GR was more sensitive in hepatitis C infection, while MDA reflected changes in liver ultrasound and GST-alpha was the best indicator for histopathological changes.

# Lipoma

## diagnosis

Chondroid lipoma: a case report.

Gokhale, Uday; Pillai, G. Rajasekharan; Varghese, R.V.; Samarsinghe, D.

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Sultan Qaboos Hospital - Department of Pathology Oman Medical Journal 2008; 23 (2): 116-117 (7 ref.)

Keywords: Lipoma-pathology; Forearm-pathology; Soft Tissue Neoplasms; Review Literature as Topic

**Abstract:** Chondroid lipoma is a unique, uncommon benign lipomatous tumour. Due to distinct morphological simily, it is important to distinguish it from extraskeletal chondrosarcoma and myxoid/round cell liposarcoma [MRCLS]. We report such a neoplasm with brief a review of literature.

#### **Liver Diseases**

## virology

Hepatitis B and C viral infections in chronic liver disease: a population-based study in Qatar.

Rikabi, A.; Bener, A.; Al Marri, A.; Al Thani, S.

Hamad Medical Corporation - Department of Laboratory Medicine and Pathology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 778-784 (19 ref.)

**Keywords:** Hepatitis, Chronic-virology; Hepatitis B-epidemiology; Hepatitis C-epidemiology; Incidence; Cohort Studies

**Abstract:** We investigated the incidence of hepatitis B [HBV] and C [HCV] virus infection among patients with liver disease in Qatar from 2000 to 2005. The grading and staging of HBV and HCV cases were obtained from pathology reports at the principal reference laboratory for Qatar. Of the 915 liver patients studied, 29.4% had HCV and 2.5% had HBV. The incidence of HBV and HCV infection was greater in non-Qataris than Qatari nationals and in males than females, especially for HCV. Most cases were uncomplicated [89.0%] and had no inflammation [76.4%]. The incidence of HCV has been increasing in liver patients in recent years up to a rate of 481 per 1000 patients with liver disease in 2005.

# Lupus Erythematosus, Systemic

#### blood

Changes in molecular size and shape of hemoglobin of systemic lupus erythermatosus.

Aziz, Samir Wassef; Rafaat, Bassem Mohamad; Hassan, Nahed S.; Hanafy, Aahmed

National Research Center - Department of Biochemistry

Medical Journal of Cairo University [The] 2009; 77 (1): 141-147 (34 ref.)

**Keywords:** Hemoglobins; Electric Conductivity; Hemoglobins, Abnormal; Carboxyhemoglobin; Methemoglobin; Sulfhemoglobin

**Abstract:** Different hemoglobin derivatives concentration and electrical conductivity were measured for patients suffered from, in addition the dielectric relaxation in the frequency range 100 KHz up to 10 MHz of Hb molecule of systemic lupus patients compared to normal control. Abnormal dynamic motion of Hb was found, a lack of changes in the size and/or shape of Hb. Also, the dielectric results indicating that the molecular shape tends to deviate from the spherical form as the activity [severity] of the disease increases.

# The clinical utility of vascular endothelial growth factor as predictive marker for systemic lupus erythematosus activity in children and adolescents.

El Masry, Mohamad R.; Elwan, Amany E.; Darweesh, Hanan; Hussein, Hany

Cairo University - Faculty of Medicine - Department of Internal Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 207-212 (22 ref.)

**Keywords:** Endothelium, Vascular; Endothelial Growth Factors; Child; Adolescent; Disease Progression; Vascular Endothelial Growth Factor A-blood

Abstract: Angiogenesis plays an important role in the pathogenesis and progression of collagen diseases. Vascular endothelial growth factor [VEGF] is a potent stimulating factor for angiogenesis and vascular permeability. To asses for changes of VEGF in lupus patients in childhood and adolescents and its relation to lupus activity and to demonstrate the possible correlation between the serum level of VEGF and certain clinical and laboratory parameters and disease activity score. We investigated the serum concentration of VEGF using an enzyme-linked immunosorbent assay [ELISA] in a group of 35 children and adolescents with systemic lupus erythematosus [SLE] and 25 healthy controls. All cases were recruited from Kasr El Aini Hospital. VEGF was detectable in all patients with SLE, and in all normal individuals. The level of serum VEGF in lupus patients was higher than control, also its level in active SLE was higher than inactive disease or in controls. We found that serum levels of VEGF was significantly higher in patients with renal involvement than those with no renal involvement [p < 0.003]. It was also higher in SLE patients with moderate to sever skin disease neurological and joint involvement compared with patients with no or mild skin disease, no neurological

and no joint involvement respectively but the differences were statistically insignificant. A positive correlation was detected between higher VEGF serum levels and ESR and SLAM score [p < 0.01 and < 0.04 respectively], on the other hand VEGF was negatively correlated to platelets count and complement level [C3] [p < 0.05 and < 0.01 respectively]. VEGF serum levels are higher in children and adolescents with SLE patients especially active lupus. Also its level is correlated to many of clinical and laboratory parameter of lupus. So it may be a useful marker of disease activity.

# Lycopersicon esculentum

#### genetics

Production of transgenic tomato plants with enhanced resistance against the fungal pathogen Fusarium oxysporum.

Abbas, Dina E.; Abdallah, Naglaa A.; Madkour, Magdy M.

Agricultural Genetic Engineering Research Institute [AGERI] - Agricultural Research Center [ARC]

Arab Journal of Biotechnology 2009; 12 (1): 77-83 (28 ref.)

**Keywords:** Food, Genetically Modified; Fusarium; Fungi; Antifungal Agents; Chitinase; Polymerase Chain Reaction **Abstract:** Tomato [Lycobersicum esculentum Mill] cultivar CastleRock was used to produce fungal resistant plants by

introducing an antimicrobial chitinase gene. Hypocotyl with a part of cotyledon [hypocotyledonary] of young tomato seedlings were used as explant material. The transformation performed by delivering the vector pGL2 harbouring a class I rice chitinase gene [chi11] under the control of the CaMV 35S promoter and hygromycin resistant gene as a plant selectable marker, using biolistic bombardment mediated transformation system. Shoots were regenerated onto selective regeneration medium supplemented with 1 mg/l BAP, 1 mg/l Zeatin ripozide, 5mg/l AgNO[3] and 25mg/l hygromycin, then subjected to rooting medium for developing roots. Putative transgenic plantlets of R0 were confirmed by PCR analysis using specific primers for the transgene, and most regenerated plants showed positive results. However, PCR and dot blot analyses were conducted using R1 seedlings to confirm the stable integration of transgenes in R1 progeny. Bioassay for transgenic plants was performed on the transgenic R1 young seedlings and non-transgenic controls by challenging with a vigorous isolate of the fungal pathogen Fusarium oxysporum f. sp. Lycopersici to assay for the resistance against fusarium wilt disease among individuals. Data from transgenic plants showed lower percentages of infection ranging from 11 to 60% in lines 8 and 5 respectively compared to the control plants [80% infected]. The percentage of resistance ranged from 11 to 77.7% in lines 7 and 8, respectively compared to 10% in non-transgenic control plants. In addition, the average percent of the tolerant seedlings were19.69% that had been infected but showed delayed symptoms and suppression in symptom extension. The obtained results indicated that expression of the chitinase protein [Chi 11] in transgenic tomato plants acquired them antifungal activity against Fusarium.

# **Lymphatic Diseases**

## etiology

A clinicomorphological study of non-neoplastic lymphadenopathy.

Muhammad, Niaz; Goraya, Azimallah Asif; Babar, Amir Muhammad; Masud, Khawaja Usman Bolan Medical College

Medical Forum Monthly 2009; 20 (2): 8-13 (30 ref.)

**Keywords:** Lymphatic Diseases-pathology; Tuberculosis, Lymph Node-pathology; Fever; Staining and Labeling; Cat-Scratch Disease; Toxoplasmosis; Sarcoidosis; Immunohistochemistry

**Abstract:** The Clinico Morphological Changes in 150 Cases of Non-neoplastic lymph adenopathy were studied at BMC Complex Hospital Quetta. The ages of these patients ranged from 2 years to 80 years. Maximum number of patients with lymphadenopathy [65 out of 150] 43.3% cases were in 11-20 years ago group. Females [56%] presenting with lymph node enlargement were more affected than males [44%]. The commonest presenting complaint was fever [67%]. Cervical lymph nodes [82.6%] were the commonest site of involvement. On histopathological examination, four morphological groups were highlighted; tuberculous lymphadenitis [50%], chronic non-specific lymhadenitis [44%], viral lymphadenitis [49] acute bacterial lymphadenitis [2%]. The study also highlights the yield of Mycobacteria on fluorescent staining as highly significant [P < 0.001] as compared to Ziehl-Neelsen staining, there by proving the superiority of fluorescent stain.

#### Macular Edema

## therapy

Current management of diabetic macular edema.

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Cleveland Clinic Foundation - Cole Eye Institute

Saudi Journal of Ophthalmology 2009; 23 (1): 31-36 (27 ref.)

Keywords: Diabetic Retinopathy-therapy; Adrenal Cortex Hormones-administration and dosage; Laser Therapy; Vascular Endothelial Growth Factor A; Laser Coagulation; Retrospective Studies; Aptamers, Nucleotide; Antibodies, Monoclonal; Recombinant Fusion Proteins; Steroids

Abstract: Diabetic macular edema, a finding in diabetic retinopathy, is a leading cause of vision loss in working-age adults. Several management strategies that have been advocated for the treatment of diabetic macular edema, including laser photocoagulation, intravitreal corticosteroid injection, and vascular endothelial growth factor inhibitors, are discussed.

# Malocclusion, Angle Class II

## Evaluation of dentoalveolar compensation in skeletal class ii malocclusion in a Pakistani University Hospital setting.

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The Aga Khan University Hospital - Department of Surgery

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 11-16 (23 ref.) Keywords: Incisor; Dental Occlusion; Jaw; Cross-Sectional Studies; Hospitals, University; Cephalometry

# **Maternal Mortality**

#### Maternal mortality ratio at the royal medical services hospitals: Hospital-based data.

Al Sumadi, Aiman; Shwyat, Rami

King Hussein Medical Centre - Department of Obstetrics and Gynecology Journal of the Royal Medical Services 2009; 16 (1): 26-29 (18 ref.)

Keywords: Survival Rate; Data Collection

Abstract: To calculate and analyze of the maternal mortality ratio at the Royal Medical Services hospitals. The data were obtained from the annual statistics reports of the Royal Medical Services, death certificates, medical records, and labor ward records. Over a 5 years period [2000-2005]. Nineteen cases were identified. The maternal mortality ratio was calculated to be 17.08 per 100,000 live births. Age, parity and socio-economic class were the main factors affecting the ratio. Obstetric hemorrhage and thromboembolic disorders were the two major causes of maternal deaths. Maternal mortality rate is a reflection of health care system of the country. In the absence of a national register for maternal mortality ratio, hospital-based statistics will be a valuable alternative. The available maternal mortality ratio of 17/100,000 live births at the Royal Medical Services hospitals is an acceptable figure and compares favorably with the international figures, with similar contribution of different causes.

## Medical Records Systems, Computerized

## Open source software in electronic health care records [EHR]: Is it the future?

Al Muharragi, Mohammed A.

Bahrain Defense Force Hospital - The Royal Medical Services

Bahrain Medical Bulletin 2009; 31 (1): 38-39 (5 ref.)

Keywords: Software; Medical Records; Automatic Data Processing

#### Melatonin

#### therapeutic use

#### Evaluation of melatonin for prevention of radiation myelopathy in irradiated cervical spinal cord.

Shirazi, Alireza; Haddadi, Gholam Hasan; Ghazi khansari, Mahmoud; Abolhassani, Farid; Mahdavi, Seied Rabie; Eshraghyan, Mohamad Reza

Tehran University of Medical Sciences - Faculty of Medicine - Medical Physics Department

Yakhteh Medical Journal 2009; 11 (1): 43-48 (31 ref.)

**Keywords:** Spinal Cord Diseases-radiotherapy; Radiotherapy-adverse effects; Malondialdehyde-analysis; Glutathione-analysis; Rats; Cervical Vertebrae; Spinal Cord; Radiation-Protective Agents

Abstract: Radiation myelopathy [RM] is known as a serious complication of head and neck radiation therapy. Furthermore, the radioprotective roles of melatonin have been investigated on different tissues. The aim of this study was to assess the radio protective effects of melatonin on biochemical, histopathological and clinical manifestations of RM in the rat cervical spinal cord. Four groups of rats were investigated as follows: The control group was treated with vehicle. The second group [melatonin only] was intraperitoneally injected with 100 mg/kg melatonin. The third group's [radiation] cervical spinal cord area was irradiated with 22 Gy cobalt-60 gamma-rays. The fourth group [melatonin plus irradiation] received 100 mg/kg melatonin intraperitoneally, and after 30 minutes their spinal cord area was irradiated with 22 Gy gamma radiation. Five animals from each group were randomly selected. 72 hours, 8 and 22 weeks after irradiation for analysis of malondialdehyde [MDA] and glutathione [GSH] levels, and underwent histopathological studies. The MDA levels in the irradiation group were significantly higher than in the control group [p < 0.001]. Furthermore, the GSH levels in this group were significantly lower than that of those in the control group [p < 0.001]. Administration of melatonin markedly reduced MDA [p < 0.001] and increased GSH [p < 0.05] levels in this group.

Demyelination and clinical signs of myelopathy were decreased in the melatonin plus irradiation group in comparison to the irradiated group. Our study confirms the radioprotective effects of melatonin at early stages of biochemical, as well as late histological and clinical changes in the spinal cord.

# Meningomyelocele

## complications

Effect of biofeedback training on fecal incontinence in children with myelomeningocele.

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Al Azhar University - Faculty of Medicine - Department of Physical Therapy

Medical Journal of Cairo University [The] 2009; 77 (1): 121-127 (25 ref.)

**Keywords:** Fecal Incontinence-therapy; Child; Physical Therapy Modalities; Biofeedback Psychology; Treatment

Outcome; Urodynamics; Spinal Dysraphism

Abstract: This study aimed at evaluating the effects of biofeedback training on children with fecal incontinence. Twenty children [12 males and 8 females], diagnosed as spina-pifida [myelomeningocele], were recruited from pediatrics outpatient clinic, King Abdul-Aziz university hospital, Jeddah, Saudi Arabia. Their age ranged from ten to fifteen years. Anorectal manometric functions were assessed for all children before and after treatment. The children were randomly divided into two groups of equal number [control and study]. Both groups received physical therapy program [daily rectal evacuation program, diet control and pelvic floor muscle exercises]. In addition, the study group received biofeedback training program. Treatment for all patients continued for three months [one hour/session, three times/ week]. The results revealed statistically significant improvement in the outcome measures in the study group. Biofeedback training improved anal squeeze as well as rectal sensation. Biofeedback training in conjunction with conventional therapy program was effective in improving fecal incontinence in children with myelomeningocele.

## Mesenchymal Stem Cells

## drug effects

# Bio treatment protects rat marrow-derived mesenchymal stem cell culture against the TNF-a induced apoptosis.

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Yakhteh Medical Journal 2009; 11 (1): 35-42 (27 ref.)

**Keywords:** Mesenchymal Stem Cells-ultrastructure; Oximes-pharmacokinetics; Tumor Necrosis Factor-alpha; Apoptosis-drug effects; Cell Growth Processes; Bone Marrow; Rats, Wistar; Indoles

**Abstract:** This study is an attempt to examine the anti apoptotic effects of BIO on rat MSC culture. Rat marrow primary cell culture was established and exposure groups were defined; cultures with 0.01, 0.1, 1 micro M BIO. Cells cultured without BIO treatment were used as controls. During culture expantion, the average doubling time, as an index of the rate of cell growth, were determined and compared. To examine whether or not BIO is able to protect MSCs against apoptosis, the passaged-3 cells from each group were induced to undergo apoptosis with the addition of TNF-alpha [Tumor necrotic factor-alpha]. Three days after, the cultures were quantified in terms of the percentages of apoptotic cells using either the Tunnel or Annexin V staining method. Marrow cells cultivated with 0.1 and 1 micro M BIO appeared to expand at a significantly more rapid rate than the 0.01 micro M BIO and the control cultures [p < 0.05]. Tunnel staining indicated that in 1 micro M BIO-treated groups, there were lower percentages of apoptotic nuclei than in groups with other concentrations of BIO [p < 0.05]. The BIO protective effect appeared to be dose-dependent in that the cultures with high BIO content possessed less apoptotic nuclei. The results obtained by Annexin staining were in agreement with the results of Tunnel staining. The Annexin method additionally takes into account the early apoptotic cells which are not detectable by the Tunnel method. Taken together, it seems that cultivation with BIO could both increase the growth rate of marrow cells and protect MSCs against induced apoptosis.

## Metals, Heavy

### pharmacology

The impact of toxic heavy metals on the hematological parameters in common carp [Cyprinus carpio L.].

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 23-28 (39 ref.)

**Keywords:** Metals, Heavy-blood; Carps-blood; Cadmium; Chromium; Nickel; Lead; Hemoglobins; Iron; Hematocrit;

Erythrocytes; Blood Glucose; Copper; Ascorbic Acid; Cholesterol

**Abstract:** The aim of the present investigation was to determine the effect of heavy metal pollutants such as cadmium, chromium, nickel and lead in aquatic system on common carp [Cyprinus carpio L.] by using a set of biochemical parameters. The experimental group of fish was exposed to a sublethal concentration of 5 mg/L of combined [Cd+Pb+Cr+Ni] metal solution containing 1.25 mg/L of each metal ion [1/10th of LC 50/48 h] for a period of 32 days. The results indicated that the values of the hemoglobin were in the range of 55.30 +/- 1.20 g/L to 74.55 +/- 1.33 g/L [p < 0.001] and the packed cell volume was in the range of 26.72 +/- 0.26% to 30.68 +/- 0.43% [p < 0.01]. Concentrations of red blood cells, blood glucose and total cholesterol were significantly elevated. The level of serum iron and copper was increased. The results showed the decreased activity of vitamin C during chronic exposure to toxic heavy metals, which indicates the presence of reactive oxygen species-induced peroxidation. The study suggested that the presence of toxic heavy metals in aquatic environment has strong influence on the hematological parameters in the fresh water fish common carp [Cyprinus carpio L.].

## Methanol

### toxicity

Fatal prognosis of methanol toxicity: identification of predictive factors.

Rezk, Nabil Nassif; Allam, Mohamad Farouk

Ain Shams University - Faculty of Medicine - Departments of Forensic Medicine and Clinical Toxicology

Medical Journal of Cairo University [The] 2009; 77 (1): 101-105 (20 ref.)

Keywords: Blood Gas Analysis; Follow-Up Studies; Survivors; Mortality; Poison Control Centers

Abstract: Human methanol poisoning is characterized by serious visual impairment, hepatic toxicity, formic acidosis, central nervous system toxicity, and death. This study was conducted on all patients admitted to Ain Shams Toxicology Centre because of methanol toxicity over one year, form January 1, 2004 to December 31, 2004. The patients were divided into two main groups; Group I included patients who survived after methanol poisoning meanwhile group II included patients who died after methanol poisoning. All patients were clinically examined for cardiovascular system manifestations, neurological, ophthalmic and effects of acidosis. All patients were subjected to routine investigation including renal profiles and liver profiles, as well as specific investigations mainly arterial blood gases and serum electrolytes. Also, data about if the patient was in need for and had haemodialysis was registered. Patients in group I presented with tachycardia, hypertension, pallor, sweating, blurring of vision, and some of them were agitated. On the other hand patients in group II showed hypertension, arrhythmias, convulsion and coma [grade III, IV], elevated renal profiles [serum creatinine mainly], together with hyperkalaemia and sever acidosis. Comparisons between group I and group II were done using student's t-test for continuous variables and Person's Chi-square test for categorical variables. The adjusted predicted factors for fatal prognosis were obtained using the logistic regression analysis. The results of the study revealed that mortality was much more prevalent among those who suffered from significant cardiovascular, CNS, ophthalmic, and renal signs of toxicity together with metabolic acidosis and hyperkalaemia. The multivariable analysis has identified one independent predictive factor significantly associated with fatal prognosis. This factor was convulsion [p < 0.001]. It can be concluded that early diagnosis and management of methanol poisoning may improve survival. Also, cardiovascular, CNS toxic manifestations and metabolic acidosis were strong predictors of methanol poisoning out come. Our results call for further investigation of predictive risk factors for the fatal prognosis of methanol toxicity; future studies preferably should include measuring of serum and tissue formic acid, and performed on large prospective cohorts over several years, to increase their internal validity.

#### Milk

#### microbiology

Microbiological monitoring of raw milk and yoghurt samples collected from El-Beida city.

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Omar El Mokhtar University - Faculty of Veterinary Medicine

Arab Journal of Biotechnology 2009; 12 (1): 57-64 (30 ref.)

Keywords: Yogurt-microbiology; Microbial Sensitivity Tests; Hygiene; Mycotoxins; Yeasts

**Abstract:** A total of 80 raw milk and yoghurt samples were randomly collected from different farms and retail markets of different sanitation levels and examined mycologically and bacteriologically at El-Beida city in Libya. Moulds and yeasts were detected in 80 and 50% of raw milk and yoghurtsamples, respectively, with respective mean values of 4.3 X10[5] +/- 2.5X 10[5] and 2.1 X10[4] +/- 1.9 X 10[4]. Aspergillus spp., Cladosporium spp., Mucor spp., Curvularia spp., Penicillium spp., Geotricum spp., Candida spp., Rhodotorula spp., Torulopsis spp. and Saccharomyces spp. could be isolated from both raw milk and yoghurt. Five samples of 40 raw milk once were positive for AFM1 with the mean value of 5 ppb. While in yoghurt samples, AFM1 were detected with mean value of 2.2 ppb among 3 samples of 40. Total counts of aerobic bacteria of examined raw milk and yoghurt samples were 6.1 X 10[5] +/- 5.5 X 10[5] and 6.5 X 10[5] +/- 6.0 X 10[5], respectively. While the mean coliform counts/ ml were 7.0 X10[6] +/- 5.0 X 10[6] and 6.0 X 10[3] +/- 4.0 X 10[3] for raw milk and yoghurt, respectively. Enterobacteriaceae counts /ml of raw milk and yoghurt samples were 2.6 X 10[6] +/- 5.5 x 10[5] and 1.5 X 10[4] +/- 1.2 X 10[4] . The economic and public health situation of isolated fungi as well as the control measures for improving the quality of raw milk and milk products were discussed.

# Mitral Valve Prolapse

Are arrhythmias in rheumatic mitral regurgitation common as in mitral valve prolapse in children?

Lotfy, Wael; Tayeh, Osama; Hussein, Gehan; Tawfik, Sherif; Mahmoud, Fadia

Cairo University - Faculty of Medicine, Kasr El Aini Hospital - Departments of Paediatric and Critical Care Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 27-32 (24 ref.)

Keywords: Mitral Valve Insufficiency; Arrhythmias, Cardiac; Child; Prevalence; Rheumatic Fever; Echocardiography Abstract: Rheumatic fever is a common cause of acquired heart disease in children and young adult throughout the developing world and the pancarditis caused by rheumatic fever may manifest by palpitations. Ventricular arrhythmias are a common feature in patients with mitral valve prolapse [MVP] and several factors have been identified in those patients who progress to sudden death, including severe mitral regurgitation. So could arrhythmias in children with rheumatic mitral regurgitation [MR] be as common as in patients with mitral valve prolapse? This study included 30 patients [pts] with isolated rheumatic mitral regurgitation with different grades [mild, moderate and severe mitral regurgitation] diagnosed by echocardiography [group I] compared to group II [control group], which included 30 healthy children with a normal heart confirmed by echocardiography. All the study population was subjected to the following: Full medical history and physical examination, laboratory investigations, twelve leads ECG, chest X-ray, echocardiography and Ambulatory twenty four hours ECG monitoring [Holter]. The total prevalence of arrhythmias detected by Holter monitoring in the studied patients and control group were 40% [12 pts] and 16.6% [5 pts] respectively, p value = 0.04. As regard the type of arrhythmias; sinus tachycardia occurred in 10 pts [33.3%] and 4 pts [13.3%] in group I and II respectively [p value > 0.05]. Infrequent premature atrial contractions [PACs] occurred in 2 pts [6.7%] in group I and one patient [3.3%] in group II [p value > 0.05]. The incidence of arrhythmias detected by Holter recording was insignificant with mild MR compared to the control group [p value = 0.4]. Thereafter, the prevalence of arrhythmias increased proportionally to the degree of MR. The occurrence of arrhythmias in pts with moderate and severe rheumatic MR was significantly higher as compared to the control group [p value = 0.02 and 0.009 respectively]. The incidence of arrhythmias was not significantly higher in cases of rheumatic MR with active rheumatic fever [4 pts had arrhythmias out of 5 pts with rheumatic activity] than those with rheumatic MR without rheumatic activity [p value = 0.07]. The prevalence of arrhythmias in the patients studied in relation to the echocardiographic findings revealed a significantly higher incidence of arrhythmias in rheumatic MR with left atrial enlargement; eleven out of thirteen pts had sinus tachycardia and PACs [p value = 0.0001]. We conclude from this study that rheumatic mitral regurgitation in the pediatric age group is associated with sinus tachycardia and uncommonly with premature atrial contractions; no other arrhythmias were detected even in association with cardiac enlargement or active carditis. The incidence of arrhythmias in MVP is much more common than in rheumatic MR. Ventricular arrhythmias occurs in

#### **Mouth Diseases**

significantly related to the severity of mitral regurgitation.

Growing burden of noncommunicable diseases: the contributory role of oral diseases, Eastern Mediterranean Region perspective.

MVP, while it did not occur with rheumatic MR in our study. The incidence of arrhythmias in rheumatic MR is

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1011-1020 (76 ref.)

**Keywords:** Knowledge; Risk Factors; Developing Countries; Research; Chronic Disease; Mediterranean Region; Diabetes Mellitus; Cardiovascular Diseases; Osteoporosis; Kidney Failure, Chronic; Respiratory Tract Diseases

**Abstract:** Associations of oral diseases with noncommunicable diseases such as diabetes, cardiovascular diseases, chronic respiratory diseases, osteoporosis and chronic renal failure are widely reported in the literature from developed countries. Commonality of risk factors, changes in systemic inflammatory mediators and body metabolism play a role in this association. This paper reviews current knowledge on the burden and association of oral and systemic diseases, and highlights the paucity of information and research from the Eastern Mediterranean Region and other developing countries. A call is made for further research to understand the status and significance of oral-systemic disease associations and develop guidelines for their control in this Region.

# Multiple Myeloma

## diagnosis

Multiple myeloma in younger age.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 62-63 (11 ref.)

**Keywords:** Bence Jones Protein; Bone Marrow-pathology; Biopsy; Technetium Tc 99m Medronate; Neoplasm Metastasis

**Abstract:** A Multiple Myeloma [MM] is rare in younger age group. We report MM in a 30-year-old female, who presented with multiple lytic areas upon skeletal survey, but with negative Bence Jones protein. Bone marrow biopsy

confirmed it to be a case of multiple myeloma. Patient was put on chemotherapy and radiography to which she responded and now is ambulatory.

## Myasthenia Gravis

# The pattern and presentation of myasthenia gravis in Al-Shaab and Omdurman Teaching Hospitals.

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Sudan Journal of Medical Sciences 2009; 4 (1): 37-41 (16 ref.)

**Keywords:** Thymectomy; Autoimmune Diseases; Cross-Sectional Studies; Retrospective Studies; Edrophonium-therapeutic use; Neostigmine-therapeutic use; Diplopia; Hospitals, Teaching; Prevalence

Abstract: Myasthenia gravis [MG] is the most common acquired autoimmune disorder of neuromuscular transmission. It has different patterns of presentation to study the pattern and mode of presentation of Myasthenia Gravis in Al-Shaab and Omdurman Teaching Hospitals, Khartoum Sudan. The demographic and clinical characteristics of 50 patients of myasthenia gravis [MG] were reviewed in Alshab and Oumdrman Teaching Hospitals for five months period from May to October 2008. Out of 2400 patients attending neurology clinics 50 were found to have Myasthenia Gravis [MG] with female; male ratio of 2.5:1. The age at presentation was the second decade of life in 34%. Most of the patients [42%] were from Khartoum State followed by North Kordofan State [14%]. High occurrence of late onset fatigability and weakness was seen in 92 % of our patients. Ocular muscles involvement was detected in 78%, MG was aggravated by hot weather and fever in 12% of the patients. Quinine represented the most common drug which aggravated the myasthenia symptoms in 4%. Diabetes mellitus and thyroid diseases were the most associated auto immune diseases seen in 12% and 4 % respectively. The diagnosis was made by classic history and neurological examinations in 88% and positive neostigmin test in64%. The majority of patients were treated with steroids. Thymectomy was done in 10% patients. The outcome was excellent as 82% improved and only one [2%] patient died. Going with literature diagnosis of MG was made depending on classical history, full neurological examination and confirmed by tensilon test. Because of different reasons more sophisticated tests were not done in our patients. Only patients with malaria who were treated with quinine showed deterioration of their symptoms in our study. Strikingly, myasthenia crisis which were reported in 27% of patients were not seen in our population. Because of lack of usage of steroid sparing agents the vast majority [96%] of our patients were treated with steroids. Generalized myasthenia gravis with ocular involvement is common in our patients. However, pure OMG was not seen. Thymectomy was done in a small number of our patients with reference to other studies.

# Mycoses

## diagnosis

Invasive infection in a young immunocompetent soldier caused by scytalidium dimidiatum.

Ikram, Aamer; Hussain, Wajid; Satti, M. Luqman; Wiqar, M. Amin

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Armed Forces Institute of Pathology - Department of Microbiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 64-66 (10 ref.)

**Keywords:** Immunocompetence; Military Personnel; Orbit-microbiology; Maxillary Sinus-microbiology; Tomography, X-Ray Computed

**Abstract:** Scytalidium dimidiatum is mainly responsible for human skin and nail infections but the mould has also been reported for invasive infections in immunocompromised individuals. We report a young immunocompetent individual diagnosed with invasive non-traumatic Scytalidium dimidiatum infection involving the left orbital cavity and maxillary sinus.

## **Myocardial Infarction**

## surgery

Primary coronary angioplasty versus intravenous thrombolysis for acute myocardial infarction - A comparative study at Queen Alia Heart Institute.

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King Hussein Medical Centre - Department of Cardiology

Journal of the Royal Medical Services 2009; 16 (1): 38-42 (15 ref.)

**Keywords:** Thrombolytic Therapy; Angioplasty, Transluminal, Percutaneous Coronary; Reperfusion; Retrospective Studies; Treatment Outcome; Length of Stay

**Abstract:** To assess the results of primary coronary angioplasty in comparison to thrombolytic therapy for the treatment of patients with acute myocardial infarction, and to compare the time from arrival of a patient with acute myocardial infarction at the coronary care unit of Queen Alia Heart Institute to having reperfusion therapy. This is a retrospective study looking at consecutive reperfusion eligible patients with acute myocardial infarction who were treated [according to their physician's discretion] with either primary angioplasty or thrombolysis at Queen Alia Heart

Institute between November 2002 and July 2005. Data regarding patients' demographic characteristics, door to reperfusion time, risk factors for coronary artery disease, hospital stay, in-hospital mortality and various complications were collected. We had a total of 277 reperfusion eligible patients, including 143 who had primary angioplasty and 134 had thrombolysis. The mean age of our population was 57.9 years. Eighty percent of them were males. Sixty six percent were smokers. The prevalence of diabetes and hypertension were 39% and 41% respectively. The mean hospital stay in the primary angioplasty group was 3.9 [SD +/- 2.1] days compared to 6.6 [+/- SD 3.4] day's in the thrombolysis group [P 0.01]. Primary angioplasty was associated with a statistically significant lower in-hospital mortality [2%] compared with 8.5% in the thrombolysis groups [P 0.01]. There was no statistical significant difference in the incidence of reinfarction between the thrombolysis groups [1.9%] versus the angioplasty group [2.0%] [acute stent thrombosis] [P > 0.50]. The mean time from arrival to the emergency room to first balloon inflation of the infarct related artery was 63 minutes compared to 42 minutes door to needle time in the thrombolysis group. Our data showed that primary coronary intervention for patients presenting with acute myocardial infarction at our centre has a favorable outcome with lower in-hospital mortality and a shorter hospital stay compared to thrombolysis.

## **Neoplasms**

# epidemiology

#### Pattern and incidence of cancer at El Obeid Hospital, Western Sudan.

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University of Kordofan - Faculty of Medicine and Health Sciences - Department of General Surgery

Sudan Journal of Medical Sciences 2009; 4 (1): 43-46 (24 ref.) Keywords: Gastrointestinal Neoplasms-epidemiology; Incidence

Abstract: The growing population of elderly people, the changes in life style, the new dietary habits and the HIV pandemic resulted in more exposure to cancer promoting factors in developing countries, including Sudan. Sudan is a large country with different climatic regions and the population has wide diversity of ethnic groups with varying cultures. Nevertheless, the burden of cancer in the different regions of the country is unknown. To study the incidence rate and the pattern of cancer at El Obeid Teaching Hospital, Western Sudan. The records of all patients admitted with cancer to the wards of El Obeid Teaching Hospital, Western Sudan during 2006 and 2007 were studied. The cancers were classified according to the organs affected and then ranked in their order of relative frequency. The mean age, age range, gender, the incidence rates and the relative frequency rates were calculated. There were 111 new cancer patients in 2006 and 169 patients in 2007. Females were 52.9% of cases. The mean ages were 61.8 and 56.8 years for males and females respectively. Cancer of the gastrointestinal tract is the most common malignancy in both sexes, followed by breast and then cervical cancer in females; while it was followed by leukaemia in males. Hepatocellular, oesophageal, gastric and recto-sigmoid were the main gut cancers. Cancer of the gastrointestinal tract was the commonest malignancy at El Obeid Hospital, Western Sudan. Establishment of a local radiation and isotopes centre is needed in this part of the country to provide oncology services and integrate preventive programs. A regional cancer registry centre supplements the national efforts to evaluate the magnitude of the problem in order to plan further future strategies.

## Nigella sativa

### chemistry

# Repeated administration of Nigella sativa decreases 5-HT turnover and Nigella produces anxiolytic effects in rats.

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Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 139-144 (35 ref.)

**Keywords:** Anxiety-drug therapy; Serotonin-biosynthesis; Serotonin-therapeutic use; Flumazenil-therapeutic use; Serotonin-metabolism; Anti-Anxiety Agents; Rats, Wistar

**Abstract:** The black cumin or Nigella sativa L. seeds have many acclaimed medicinal properties. Pharmacological studies have been conducted on the aqueous and methanol extracts of N. sativa L. seeds to evaluate their effects on the central nervous system. In the present study, N. sativa oil was used to study its effect on anxiety in rats. Open field and elevated plus maze models were selected for the evaluation of anxiolytic effect of drug. After four weeks of daily administration of drug, the rats exhibited an increase in open field activity. The drug also produced anti-anxiety effect in rats when tested in elevated plus maze. Concentrations of 5-HT, 5-HIAA in brain and concentrations of plasma and brain tryptophan determined by HPLC-EC detector. Result shows that oral administration of N. sativa oil increased brain levels of 5-HT but the levels of brain 5-HIAA decreased significantly. Brain and plasma levels of tryptophan also increased significantly following oral repeated administration of N. sitiva oil. Based on this, it may be suggested that N. sativa oil is a useful choice for the treatment of anxiety.

# **Octamer Transcription Factors-3**

## genetics

Oct-4: more than a pluripotent Marker?

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Yakhteh Medical Journal 2009; 11 (1): 1-12 (108 ref.)

**Keywords:** Octamer Transcription Factors-3-immunology; Embryonic Stem Cells; Tumor Markers, Biological; DNA Methylation

Abstract: 23/Sep/2008, Accepted: 23/Nov/2008Oct-4/ Pou5f1/ Oct-3, a POU domain family protein acts as a crucial transcription factor dur- ing embryonic development. It helps in maintenance of self renewal as well as pluripotential state of embryonic stem [ES] cells. Its expression starts right from 2 cell stage especially prior to 8 cell stage till the blastocyst stage where it is strongly expressed in inner cell mass [ICM]. Thereafter, it is located predominantly in primordial germ cells [PGCs] till the birth. It targets particularly those genes which bear an octameric motif ATGCAAAT in promoter or enhancer region. Most of the target genes of Oct-4 are expressed in undifferentiated ES cells and knockdown of Oct-4 results in ES cell differentiation as a result of down regulation of targets of Oct-4 which are expressed in ES cells. Since, Oct-4 is crucial for embryo survival its expression needs tight regulation. Oct-4 is carefully regulated epigenetically as well as by several other factors. DNA methylation and histone modification play an important role in expression of Oct-4 while proximal promoter, enhancer and distal enhancer are the crucial regulatory elements present on Oct-4 upstream region. There is increasing evidence that Oct-4 is expressed in adult stem cells and these stem cells can get converted to cancer stem cells. Since, it is expressed in germ cells, immunohistochemical localization of Oct-4 and thereby its role as a marker for germ cell tumor detection is increasing. Thus, role of Oct-4 is not only restricted as a marker for undifferentiated cells; it is also proving to be crucial factor which targets several genes involved in ES cell survival as well as help in establishing germ cell origin of metastatic tumors.

#### Ofloxacin

## administration and dosage

Sustained ophthalmic delivery of ofloxacin from an ion-activated in situ gelling system.

Abraham, Sindhu; Furtado, Sharon; Bharath, S.; Basavaraj, B.V.; Deveswaran, R.; Madhavan, V. M.S Ramaiah College of Pharmacy

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 175-179 (12 ref.)

**Keywords:** Drug Delivery Systems-methods; Ophthalmic Solutions; Alginates-therapeutic use; Hexuronic Acids; Glucuronic Acid; Delayed-Action Preparations

**Abstract:** The poor bioavailability and therapeutic response exhibited by conventional ophthalmic solutions due to rapid pre-corneal elimination of the drug may be overcome by the use of in situ gel forming systems that are instilled as drops into the eye and then undergo a sol-gel transition in the cul-de-sac. The present work describes the formulation and evaluation of an ophthalmic delivery system of an antibacterial agent ofloxacin, based on the concept of ion-activated in situ gelation. Sodium alginate was used as the gelling agent in combination with HPC [Hydroxy Propyl Cellulose] that acted as a viscosity-enhancing agent. In vitro release studies indicated that the alginate/HPC solution retained the drug better than the alginate or HPC solutions alone. The formulations were therapeutically efficacious, sterile, stable and provided sustained release of the drug over a period of time. These results demonstrate that the developed system is an alternative to conventional ophthalmic drops, patient compliance, industrially oriented and economical.

#### **Onchocerciasis**

## drug therapy

Effects of ivermectin with and without doxycycline on clinical symptoms of onchocerciasis.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 34-38 (25 ref.)

**Keywords:** Ivermectin-therapeutic use; Doxycycline-therapeutic use; Drug Therapy, Combination; Simuliidae; Filariasis; Keratitis; Iridocyclitis; Optic Atrophy

# **Ophthalmologic Surgical Procedures**

Peribulbar block in pediatric posterior segment ocular surgery.

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Medical Journal of Cairo University [The] 2009; 77 (1): 1-4 (15 ref.)

**Keywords:** Child; Retina-surgery; Vitreous Body-surgery; Anesthesia, General; Anesthesia, Local; Pain, Postoperative; Pain Measurement; Prospective Studies; Single-Blind Method

**Abstract:** Vitreous and retinal [VR] surgery with or without scleral buckling is associated with significant postoperative pain in adults, and recent studies have addressed the effect of retro or peribulbar block on these parameters VR surgery in children has received little attention regarding the incidence of pain and the role of regional anesthesia in modifying these parameters. In this study, we compared peribulbar block with conventional opioid analgesia in children undergoing VR surgery. In a prospective, randomized, single-blind study, 85 children [age 8 to 14 years] were allocated to receive peribulbar block [n = 42] or intravenous fentanyl 2micro g/kg [n = 43] after induction of general anesthesia. Parameters compared were: Intraoperative incidence of oculocardiac reflex and requirement for additional analgesic; postoperative pain intensity; time to first analgesic, total number of postoperative analgesic supplements; and parental assessment of the child's postoperative comfort at 24 hours. The incidence of intraoperative oculocardiac reflex was significantly less in the peribulbar group [p = .0001]. Significantly more children receiving peribulbar block were pain free on awakening [p = .0004] and throughout the postoperative period. The number of children requiring opioid was significantly lower with peribulbar block [p = .008]. Peribulbar block appears to be a safe and clinically superior alternative to intravenous fentanyl for pediatric VR surgery.

# **Optic Disk**

### abnormalities

Selected malformations of the optic nerve head - morphology etiology and associations.

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Saudi Journal of Ophthalmology 2009; 23 (1): 51-57 (59 ref.)

**Keywords:** Optic Nerve Diseases-diagnosis; Optic Disk-Embryology; Optic Disk-growth and development; Coloboma-diagnosis; Coloboma-genetics; Moyamoya Disease-diagnosis; Syndrome

**Abstract:** Although individually rare, congenital malformations of the optic nerve head can be associated with significant visual morbidity, other ocular malformations, and systemic disorders, some of which life-threatening. This paper reviews the clinical features that allow the differentiation of typical colobomas of the optic nerve head from the morning glory disk anomaly. The former can be inherited and are associated with a variety of systemic syndromes and malformations; the latter are not inherited and are associated notoriously with basal encephaloceles and with Moyamoya disease of the carotid vascular system. Finally, the papillo-renal syndrome and the PHACE syndrome are briefly reviewed and their associated optic nerve malformations delineated.

## **Oral Health**

# National survey of the oral health of 12- and 15-year-old schoolchildren in the United Arab Emirates.

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Ministry of Health - Preventive Dentistry Section

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 993-1004 (9 ref.)

**Keywords:** Dental Health Surveys; Students; Schools; Dental Caries; Periodontal Diseases; Prevalence; Fluorosis, Dental

**Abstract:** This paper describes the first national survey of oral health in the United Arab Emirates [UAE]. Using WHO criteria, dental caries and fluorosis were recorded in 2651 schoolchildren aged 12 and 15 years, and periodontal disease in those aged 15 years. The prevalence of dental caries in the permanent teeth of 12-year-olds was 54%; the mean DMFT [number of decayed, missing or filled permanent teeth] per child was 1.6. The prevalence of dental caries in 15-year-olds was 65% and the mean DMFT was 2.5. For the UAE as a whole, 70% of 12-year-old schoolchildren had no dental fluorosis and 37% of 15-year-olds had healthy periodontal tissues.

# **Oral Hygiene**

Do smokers benefit from dental hygiene oral prophylaxis? a Nigerian pilot study.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 976-982 (41 ref.)

**Keywords:** Smoking-complications; Periodontitis-etiology; Periodontitis-prevention and control; Risk Factors; Toothbrushing; Oral Hygiene Index; Cross-Sectional Studies

**Abstract:** Smoking is a major, preventable risk factor for periodontitis. This pilot study in Nigeria evaluated the effect of dental oral prophylaxis on oral hygiene and periodontal indices among 13 systemically healthy smokers and 8 non-smokers. All participants received full-mouth scaling and root planing, tooth polishing, demonstration of correct brushing technique and a new toothbrush and toothpaste. After 6 months, debris index, calculus index, oral hygiene

index and community periodontal index of treatment needs status code 0 scores showed no improvement in smokers. There was a 50% improvement of all indices among non-smokers. Smokers showed no benefit from dental oral prophylaxis in this study.

### **Orbital Cellulitis**

# epidemiology

#### Risk factors of preseptal and orbital cellulitis.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 39-42 (21 ref.)

**Keywords:** Risk Factors; Insect Bites and Stings; Wounds and Injuries; Cross-Sectional Studies; Sinusitis; Abscess; Ectropion

**Abstract:** To estimate the frequency and major risk factors of preseptal and orbital cellulitis. A cross-sectional analytical study. The Khyber Institute of Ophthalmic Medical Sciences, Hayatabad Medical Complex, Peshawar from July 2003 to December 2006. All consecutive patients between ages 6 and 40 years, admitted to the institute with the diagnosis of preseptal and orbital cellulitis were included in the study. The patients were divided into two groups. Group I included patients with ages 6-16 years and group II with ages 17-40 years. The clinical features, diagnosis and risk factors were entered on a specially-designed proforma. The risk factors included were trauma, insect bite, localized or systemic infection and postsurgical. Odd ratio and p-values were calculated for potential risk factors. The frequency of orbital cellulitis was 0.1% of total admission. Out of 26 patients, 42.30% patients were in group I and 57 in group II. In group I, insect bite was the most common risk factor identified in 40% of patients with preseptal cellulitis and trauma as a common cause in 50% with orbital cellulitis. In group II, trauma was the leading cause in 50% of patients with preseptal cellulitis and sinusitis as a common cause in 18.1% with those of orbital cellulitis. In both groups the p-values were found insignificant [p > 0.5]. Complications included cicatricial ectropion in 44.4% and orbital abscess in 41.1%. For orbital cellulitis, trauma was important cause in group I and sinusitis in group II.

# Oryza sativa

## genetics

## Overexpression of rice chitinase gene: evaluation of chitinase ability as a bio-antifungal agent.

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Cairo University - Faculty of Agriculture - Department of Genetics

Arab Journal of Biotechnology 2009; 12 (1): 85-98 (33 ref.)

Keywords: Chitinase; Antifungal Agents; Plant Leaves

**Abstract:** Seven local fungal isolates of Pyricularia grisea were purified from infected rice leaves. The total proteins were extracted and SDS-PAGE was carried out to differentiate between the expression of proteins in infected and healthy plants. SDS-PAGE analysis revealed the accumulation of 35-kDa chitinase after 16, 20, 24 and 48 hr [hours post inoculation]. Rice chitinase gene [1.023 bp] was successfully amplified from the total RNA extracted from infected rice using RT-PCR. The amplified fragment was cloned and overexpressed in E. coli BL21 cells as 6x-Hisfusion protein. Recombinant chitinase fusion protein was successfully purified using Ni-NTA affinity column chromatography. Two chitinase activity assays against P. grisea were carried by the filter disc and the dissimilar concentrations plates method. The results indicated that the expressed chitinase protein had an antifungal activity against P. grisea.

### **Osteitis Deformans**

#### therapy

#### Paget's disease scintgraphy and hormonal treatment.

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New Egyptian Journal of Medicine [The] 2009; 40 (1): 7-18 (27 ref.)

**Keywords:** Osteitis Deformans-diagnosis; Alkaline Phosphatase; Signs and Symptoms; Radionuclide Imaging; Diphosphonates-therapeutic use; Calcitonin-therapeutic use; Treatment Outcome; Osteitis Deformans-complications; Osteitis Deformans-radiography; Vitamin D-therapeutic use; Calcium-therapeutic use

**Abstract:** Pagetr's Disease is an intense osteoclastic resorption of bone followed by intense osteoblastic activity accompanied by intense vascularity replacement of normal lamellar bone with connective tissue with a significant in mature collagen content and subperiosteal new bone formation resulting in the characteristic cortical thickening. Pagefs disease can cause pain in the bones or joints, headaches and hearing loss, pressure on nerves, increased head size, bowing of limb, or curvature of spine. Tests used to diagnose Paget's disease include X-ray, blood and urine tests and bone scanning. The recommended treatment, in addition to receiving 1000-1500 mg of calcium, adequate sunshine, ca400 units of vitamin D daily, are the bisphosphonates and calcitouin which need to be monitored

by hormonal analysis within the treatment period, also serum alkaline phosphatase [SAP] level in the blood is important in monitoring the progress of treatment.

#### Osteochondroma

## diagnosis

Rib exostosis: An incidental finding.

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Salmaniya Medical Complex - Department of Radiology **Bahrain Medical Bulletin** 2009; 31 (1): 45-46 (10 ref.)

Keywords: Osteochondroma-radiography; Bone Neoplasms; Exostoses-diagnosis; Exostoses-radiography; Asthma;

Radiography, Thoracic; Cough; Tomography, X-Ray Computed; Ribs-pathology; Osteochondroma-surgery

**Abstract:** We report an 18 year old young man with bronchial asthma presenting with productive cough for one month. His chest radiograph and computed tomography [CT] demonstrated an exostosis of the right first rib, which was an incidental finding not related to his complaint. We report the radiological findings and complications that may accompany rib exostosis.

# Osteoporosis

#### Osteoporosis knowledge among female school students in Jordan.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 906-911 (20 ref.)

Keywords: Knowledge; Students; Schools; Questionnaires; Health Education

**Abstract:** Although osteoporosis is a preventable disease affecting millions of people, public awareness remains low. This study used a pretest-posttest quasi-experimental design to explore osteoporosis knowledge among adolescent female students in Jordan. A questionnaire was administered to 148 students recruited from a secondary school in the city of Irbid before and after a series of health education sessions based on the health belief model. A significant increase in overall scores for osteoporosis knowledge was seen [mean score pretest = 24.1 and posttest = 29.8, P < 0.001]. Further research geared toward the follow-up of attained knowledge and behavioural change over time is greatly needed.

# Otolaryngology

## Evolution of ENT services in Oman.

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Oman Medical Journal 2008; 23 (2): 65 (3 ref.)

Keywords: Health Services

# Ovary

#### ultrasonography

#### Ovarian reserve and bmi between fertile and subfertile women.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 21-24 (22 ref.)

Keywords: Ovarian Follicle; Body Mass Index; Fertility

## Pancreatic Pseudocyst

#### diagnosis

Uncomplicated spontaneous rupture of the pancreatic pseudocyst into the GUT- C T documentation; a series of two cases.

Mir, Mohammed F.; Shaheen, Feroze; Gojwari, Tariq A.; Singh, Manjeet; Nazir, Pervez; Ahmad, Shafeeq

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Sher i Kashmir Institute of Medical Sciences - Department of Radiodiagnosis

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 135-136 (4 ref.)

**Keywords:** Pancreatic Pseudocyst-complications; Pancreatic Pseudocyst-radiography; Tomography, X-Ray Computed; Gastrointestinal Hemorrhage-etiology; Rupture, Spontaneous

**Abstract:** Spontaneous rupture of the pancreatic pseudocyst into the surrounding hollow viscera is rare and, may be associated with life-threatening bleeding. Such cases require emergency surgical intervention. Uncomplicated rupture of pseudocyst is an even rarer occurrence. We present herein two cases of uncomplicated spontaneous rupture of a pancreatic pseudocyst into the stomach with complete resolution.

#### **Pancreatitis**

## diagnosis

Diagnostic and prognostic value of CRP in post-ERCP pancreatitis.

Sayed, Ahmad Taha; El Moatasem, Emad M.; Darwish, Hatem A.

Cairo University - Faculty of Medicine - Department of Internal Medicine

Medical Journal of Cairo University [The] 2009; 77 (1): 113-120 (35 ref.)

**Keywords:** Cholangiopancreatography, Endoscopic Retrograde-adverse effects; Pancreatitis, Acute Necrotizing-diagnosis; C-Reactive Protein-therapeutic use; Amyloses; Lipase; Follow-Up Studies; Prognosis

Abstract: Acute pancreatitis [AP] is an inflammation of the pancreas secondary to a variety of causes. It is the most common serious complication of endoscopic retrograde cholangiopancreatography [ERCP]. As most ERCP is performed on an outpatient base, early evaluation can allow safe discharge of the majority of patients. The aim of this study was to identify the value of C-reactive protein [CRP] in the diagnosis and prognosis of post-ERCP pancreatitis [PEP]. One hundred patients who were candidate for ERCP examination either diagnostic or therapeutic included in the present study. All patients has been followed-up daily for at least 48 hours after ERCP for symptoms and signs suggestive of post-ERCP pancreatitis and follow-up of post ERCP pancreatitis patients has been done until pancreatic enzymes and CRP became normal. Serum amylase, lipase and CRP were done immediately after ERCP and on 2[nd] and 7[th] day after ERCP. CT abdomen was performed for patients who develop post-ERCP pancreatitis. Patients were divided into group A [GA] which developed post-ERCP pancreatitis [25 patients [25%]] and group B [GB] which had no pancreatitis [75 patients [75%]]. Serum amylase and lipase were significantly higher in GA relative to GB at T[0], T[2], T[7]. Additionally, at T[2] both serum amylase and lipase was more than 3 fold the upper limit of normal in GA. Also data concerned with CRP level at T[0], T[2], T7 revealed a significant increase in GA relative to GB. Data were highly significant at T[2] and T[7]. Out of the 25 cases of Post-ERCP pancreatitis, 17 cases showed CT findings consistent with acute pancreatitis. 13 of them had mild and moderate disease. The remaining 4 cases had severe acute pancreatitis. Since the mean value of CRP at T[7] in GA is still high above upper limit of normal, while serum amylase and lipase were not, and the significant rise in CRP level at T[0], T[2], T[7] in GA was directly correlated to the CT findings. Therefore, these data might suggest the importance of the CRP level as a diagnostic test and also in the assessment of the prognosis of Post-ERCP Pancreatitis, it is cheap, readily available but it is not an early marker.

## **Paranasal Sinus Diseases**

## surgery

## Causes and management of failure in endoscopic middle meatus antrostomies.

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Journal of the Arab Board of Medical Specializations 2009; 10 (1): 49-53 (17 ref.)

**Keywords:** Endoscopy; Treatment Failure; Tissue Adhesives; Sinusitis-surgery; Retrospective Studies; Disease Management

Abstract: The aim of this study is to analyse the causes and the management of failed endoscopic middle meatus antrostomies [EMMA] in chronic sinusitis and benign sinonasal lesions or tumors. We carried a retrospective study about 257 EMMA cases performed in our department for 201 patients between 1996 and 2006. All patients had complete ORL examination and preoperative sinonasal CT. After surgery, preoperative and postoperative symptoms were compared and nasal endoscopy was performed in all cases. Persistent rhinologic and radiological symptoms were considered as a failure of surgery. In these cases, revision surgery was performed, either by endoscopic approach or by Caldwell-Luc procedure. Mean follow-up period was 2 years. The indication of surgery was the presence of chronic sinusitis, benign lesions or benign tumors in 53.2%, 41.8% and 5% of cases respectively. Seventy-one EMMA procedures failed [27.6%]. Causes of failure were mainly represented by the presence of synechia [38%], ostium stenosis [24%], medical causes and comorbidity [15.5%], persistent or recurrent lesions [15.5%] and missed natural ostium [7%]. Nineteen patients [9.4%] required revision surgery because of persistent symptoms after medical therapy. Either endoscopic or vestibular approaches were performed. Seventy-three percent of the revision cases respond to surgical treatment with complete resolution of symptoms. Failure of EMMA can be due to numerous and variable causes. The management of failed EMMA includes medical therapy, revision endoscopic surgery or vestibular approaches.

# **Paraneoplastic Syndromes**

# diagnosis

Paraneoplastic motor neuron disease resembling amyotrophic lateral sclerosis in a patient with renal cell carcinoma.

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Medical Principles and Practice 2009; 18 (1): 73-75 (12 ref.)

**Keywords:** Motor Neuron Disease-diagnosis; Amyotrophic Lateral Sclerosis-diagnosis; Carcinoma, Renal Cell-diagnosis; Kidney Neoplasms; Muscle Weakness; Fasciculation; Upper Extremity; Electrodiagnosis; Tomography, X-Ray Computed; Nephrectomy

**Abstract:** To report an unusual paraneoplastic syndrome, amyotrophic lateral sclerosis, associated with renal cell carcinoma. Case Presentation and Intervention: A 59-year-old man presented with muscle weakness and fasciculations in the upper extremities. Neurological examination showed that the fasciculations arose spontaneously in the upper limbs. Electrodiagnostic studies revealed an active neurogenic disorder. The patient was diagnosed with a motor neuron disease mimicking amyotrophic lateral sclerosis. Urine analysis revealed microscopic hematuria. Abdominal computerized tomography scans showed a 9.5 x 8 cm renal mass in the lower pole of the right kidney. Curative right radical nephrectomy was performed. Pathologic examination showed a clear cell adenocarcinoma. After nephrectomy, the muscle weakness and fasciculations disappeared spontaneously within 2 months. The patient was disease-free for 58 months after right radical nephrectomy. He complained of muscle weakness and fasciculation at the last follow-up again. Physical examination revealed fasciculation in the upper limbs. Abdominal tomography showed a 22 x 20 mm solid mass in the lower pole of the left kidney. Kidney-saving surgery was performed and the diagnosis of renal cell carcinoma was confirmed pathologically. Following surgery, fasciculations completely disappeared and muscle weakness diminished within 3 months. This case highlights motor neuron disease as a rare paraneopolastic syndrome in association with renal cell carcinoma and resolution after removal of the tumor.

## **Pericardial Effusion**

## etiology

Echocardiography in helping to determine the causes of pericardial effusion in the Sudanese patients.

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Sudan Journal of Medical Sciences 2009; 4 (1): 63-69 (32 ref.)

Keywords: Echocardiography; Pericardial Effusion-diagnosis; Cross-Sectional Studies; Prospective Studies

Abstract: Pericardial disease is not uncommon in Sudan and the etiology may impose a diagnostic problem. The aim of this study is to determine the etiology of isolated pericardial effusion and to assess the usefulness of the echocardiographic features of the effusion in helping to determine the etiology. This is an observational cross-sectional prospective study done from Jan. 2002 to Aug. 2003. Fifty one patients were collected from four centers in Khartoum State. Chest X-ray, Echocardiogram and ECG were done for all patients. Pericardiocentesis was done for 35 patients [68.6%]. Specific investigations for the etiological diagnosis were done when appropriate. Male to female ratio was 1.3:1. The age ranged between 4 and 80 years with 68% of patients in the age group 11-40 years. Forty one Patients [82%] were referred with a correct diagnosis of pericardial effusion. The etiology was evident clinically or by specific investigation in 31 patients [61%] and 20 patients [39%] needed pericardiocentesis. The common etiologies were tuberculosis, malignancies, rheumatological, idiopathic and bacterial infection consecutively. The result showed useful echo features to differentiate between tuberculous, occult malignancy and idiopathic etiologies. Thickened Effusion, fibrin strands and shaggy pericardium are suggestive of tuberculosis while thickened Effusion without fibrin strands or shaggy pericardium makes malignancy a competitive diagnosis and the thin appearance of the effusion with shaggy pericardium and no fibrin strands goes more with idiopathic effusion while the features of massive effusion, tamponade or the hemorrhagic appearance of the fluid although common in these three etiologies has no much differential value.

# Periodicals as Topic

An audit of editorial processing at JCPSP: Issues and compliance.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 1-2 (3 ref.)

Keywords: Journalism, Medical

#### **Peritonitis**

## diagnosis

## Ruptured ovarian teratoma presenting as peritonitis.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 59-61 (10 ref.)

**Keywords:** Teratoma-diagnosis; Ovarian Neoplasms; Peritonitis-therapy; Rupture, Spontaneous; Abdomen, Acute; Laparotomy; Peritoneal Lavage; Ovariectomy; Ovary-pathology

**Abstract:** A 55-year-old lady reported to the surgical OPD with clinical findings of acute peritonitis. Emergency laparotomy was performed. The peritoneal cavity was full of purulent material, however, the gut was normal. An 8 x 6 cm thick walled cyst was found in the left ovary with a minute perforation and purulent fluid coming out of it. Thorough peritoneal lavage along with left cophorectomy was performed. The postoperative recovery was smooth. Histopathology confirmed benign cystic teratoma of ovary.

### **Phacoemulsification**

#### methods

# Time parameters in continuous versus pulsed ultrasound phacoemulsification: a comparative study.

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Medical Journal of Cairo University [The] 2009; 77 (1): 89-93 (16 ref.)

Keywords: Ultrasonography, Doppler, Pulsed

Abstract: To compare the effective phaco time, nuclear removal time as well as total surgery time when using continuous versus pulsed ultrasound in cataract removal by phacoemulsification. A non randomized comparative study that included 106 eye of 106 patients who suffered from vision impairing cataract and were scheduled for cataract removal by coaxial phacoemulsification. Patients were subdivided into two groups; Group A [55 eyes] in which continuous mode was used and group B [51 eyes] in which the pulsed mode was used. Both were further subdivided into 5 subgroups according to LOGS III nuclear grading system. All patients had standard phacoemulsification with IOL implantation. There was no statistically significant difference between both groups as regards the nuclear removal time and the total surgery time. Effective phacoemulsification time [EPT] showed statistically significant difference between both groups in cases of cataract with nucleus grade 5 [p value -0.000]. It is advisable to use the pulse mode in cases of hard nuclei. These methods of power modulation aim at reduction of energy production with corneal protection and better visual outcome.

#### **Pharmacists**

# Relationship of pharmacist interaction with patient knowledge of dispensed drugs and patient satisfaction.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 934-943 (18 ref.)

**Keywords:** Knowledge; Patient Satisfaction; Prospective Studies; Community Pharmacy Services; Prescription Drugs; Pharmacies; Questionnaires

**Abstract:** A prospective survey of pharmacists' tasks and patients' knowledge and satisfaction was conducted in 35 randomly selected community pharmacies in Tabriz, Islamic Republic of Iran. The total pharmacist interaction received a mean score of 3.05 out of 5. Providing written directions for use attained the highest score of 0.98 out of 1. Patients scored 3.18 out of 5 for knowledge about their medicines. There was a close correlation between patients' knowledge of dispensed drugs and pharmacist interaction [r = 0.95]. Mean total prescription filling time was 7.6 min, but only 1.4 min was spent on pharmacist-patient counselling. The interaction between pharmacist and patient increases patients' knowledge about dispensed medicines and their satisfaction with the pharmacist's activities.

## **Phyllodes Tumor**

## surgery

Malignant phylliodes tumours: Results of breast conserving surgery and immediate reconstruction.

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Sudan Journal of Medical Sciences 2009; 4 (1): 25-29 (31 ref.)

Keywords: Mastectomy, Subcutaneous; Mammaplasty; Treatment Outcome

**Abstract:** Malignant phylliodes tumour [MPT] is a rare breast tumor. Surgery is the mainstay in treatment but varies from local resection to modified radical mastectomy. In this study, we present our experience using wide local excision or subcutaneous mastectomy and immediate breast reconstruction in the management of MPT. Twenty-three recurrent MPT and ten patients with histological evidence of MPT were included. All patients with recurrent MPT [n = 23] had subcutaneous mastectomy, two centimeter wide excision of the scar and immediate breast reconstruction with either Latissimus Dorsi [LD] myocutaneous flap [n = 10] or Latissimus Dorsi muscle flap [n = 13]. Seven of the newly diagnosed patients had wide local excision of the tumor, reconstruction with LD muscle flap, two had wide local excision and reduction of contra lateral breast, and one had subcutaneous mastectomy and silicon implant. The margin resection varied between five and fifteen centimeter in wide local resection group and subcutaneous mastectomy group respectively and the size of tumors varied between five and fifteen centimeters in diameter. During the follow up period, which ranged between twenty-four and eighty-four months one local recurrence, was recorded [3.03%] and none of the patients had distant metastasis or regional lymph nodes involvement. This approach has secured wider excision of MPT, offered breast reconstruction, and has reduced the chances of recurrence in our patients.

# **Physical Examination**

Development and use of checklists for assessment of medical students in clinical examinations on real patients: a preliminary study.

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Sudan Journal of Medical Sciences 2009: 4 (1): 17-24 (7 ref.)

Keywords: Students, Medical; Questionnaires

Abstract: Clinical performance examinations [CPE] are important methods for assessing medical students and postgraduate medical trainees. Unfortunately, assessment [scoring] in these exams as it is practiced in most medical schools is based mainly on the general impression and level of experience of the examiner. Hence, it has the disadvantage of being non-structured, subjective, and sometimes highly biased. The objective of this study was to develop objective structured tools [checklists], use them in the clinical examination, and to compare their scores to those given by the conventional way. Case-specific checklists were developed for some common long and short clinical examination cases. These were tried in the final undergraduate surgery exam at Alazhari University, August 2008. Scores [marks] given to the same student, using the conventional and the checklist systems were compared using the chi square and correlation statistics. Questionnaires were filled by the examiners after using the checklists. Checklist and conventional scores were strongly correlated in the long case exams. A significant difference between the scores was, however, noted in the short case exams. Care should be taken in interpretation because of the small number of data. Evaluators felt that the checklist system was more objective and structured and hence fairer than the conventional method. Although checklist final scores took a bit longer time to calculate, that was not significant practically. Examiners gave valuable feedback regarding the construction and the use of checklists. The use of checklists in the clinical examination was more objective, more structured, and more accurate than the conventional method. The development of checklists requires hard team work and frequent updating and use to develop experience. We propose using checklists as alternative tools of assessment with many advantages over the conventional method, and to prepare the examination culture to adopt the OSCE.

# **Plagiarism**

Plagiarism-part 11: finding and dealing with a fraudster.

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Bahrain Medical Bulletin 2009; 31 (1): 5-7 (8 ref.)

Keywords: Fraud; Journalism, Medical

#### Plant Oils

## toxicity

Biological studies on the protective role of artichoke and green pepper against potential toxic effect of thermally oxidized oil in mice.

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Arab Journal of Biotechnology 2009; 12 (1): 27-39 (39 ref.)

**Keywords:** Protective Agents; Helianthus; Capsicum; Mice; Reproduction; Liver Function Tests; Oocytes; Polymerase Chain Reaction; Cynara scolymus

Abstract: The present investigation was designed to evaluate oocyte competence including quality, meiotic progression and expression of ERK2 gene and activities of liver enzymes [ALT, AST and gamma-GT] in female mice fed diets containing sunflower oil repeatedly used in frying processes [FO]. The protective role of artichoke and green pepper against such potential dangers were also studied. Results revealed that mice fed FO diet had a significant decrease in number of good collected oocytes compared with those fed normal oil [NO] diet. Mice fed FO diet and artichoke extract at two levels, 0.5% [FO-A1] and 1% [FO-A2] as drinking water or FO diet plus dried ground green pepper at two levels, 5% [FO-G1] and 10% [FO-G2] had a significant increase in number of good collected oocytes compared with those fed FO diet. Animals fed FO-A1 or FO-G1 diets had the highest percentage of good oocytes. A statistically significant increase in the percentages of mature oocytes occurred in mice fed FO-A1, FO-A2, and FO-G1 diets as compared to those fed FO diet. The animals fed FO-G2 diet had a non-significant increase of percentages of mature oocytes than the animals fed FO diet. The expression of ERK2 gene was high in ovary tissues collected from female mice fed NO, FO, FO-A1, or FO-G1 diets. However, the ERK2 gene expression was low in mice fed FO-A2 or FO-G2 diets. Biochemical assay showed that mice fed FO diet had significant decrease in AST and ALT activities. A significant increase in enzyme activity of gamma- GT compared with those fed NO diet was also observed. A statistically significant increase in activities of AST and ALT enzymes was observed in mice fed FO-A2, FO-G1 and FO-G2 diets. However, mice fed FO-A1, FO-A2, FO-G1 and FO-G2 diets had significant decrease in the activity of gamma-GT enzyme compared with those fed FO diet. The present study demonstrated evidence that prolonged intake of diets containing sunflower oil repeatedly used in frying processes could be considered a cause of induced abnormalities in reproductive materials and liver enzymes activities of female mice. However, artichoke and green pepper proved to be suitable protectors against hazards of such toxic materials.

# Plasmodium falciparum

#### drug effects

The therapeutic efficacy of sulfadoxine/pyrimethamine against plasmodium faldparum in Yemen.

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Medical Principles and Practice 2009; 18 (1): 62-66 (24 ref.)

**Keywords:** Malaria, Falciparum-drug therapy; Pyrimethamine-therapeutic use; Sulfadoxine-therapeutic use; Drug Combinations; Mefloquine-analogs and derivatives; Antimalarials

**Abstract:** The aim of this study was to determine the sensitivities of Plasmodium falciparum clinical isolates to sulfadoxine/pyrimethamine [SP] using in vivo and in vitro methods. In vivo and Mark III in-vitro test techniques according to World Health Organization protocols of antimalarial drug tests were used to determine the SP susceptibility of the P. falciparum isolates from 100 malaria patients of both sexes between the ages of 3.5 and 45 years and living in Tihamah, Yemen. The study was conducted between 19 March and 12 May 2005. In vivo: no therapeutic failure occurred; the clinical outcome matched the parasitological response and all patients were parasite free by day 3 and remained so on days 7, 14 and 28. In vitro: all the P. falciparum isolates developed to schizonts in zero-drug-concentration wells, but were inhibited in 40 nmol/l of SP; the mean effective concentration [EC99] was 67.17 nmol/l. Our findings showed that the SP combination is still effective for the treatment of uncomplicated P. falciparum malaria in Yemen. It is recommended that further studies be carried out to address the importance of dihydropteroate synthetase/dihydrofolate reductase mutations as predictive markers of sulfadoxine/pyrimethamine resistance in Yemen.

## Pneumonia, Aspiration

#### diagnosis

Lipoid pneumonia following aspiration of ghee [animal fat] in an Omani infant.

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Oman Medical Journal 2008; 23 (2): 108-111 (11 ref.)

**Keywords:** Dietary Fats-adverse effects; Infant; Radiography, Thoracic; Tomography, X-Ray Computed; Lungpathology; Biopsy; Bronchoalveolar Lavage

**Abstract:** We are reporting, what we believe, is the first case of biopsy proven exogenous lipoid pneumonia in an Omani infant. Exogenous lipoid pneumonia is caused by aspiration of oily products .One reason is the traditional practice of giving infants oily products [Ghee] as in our patient.

## Pneumonia, Ventilator-Associated

## prevention and control

Use of ventilator bundle to prevent ventilator associated pneumonia.

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Nizwa Hospital - Department of Anesthesia and AICU **Oman Medical Journal** 2008; 23 (2): 96-99 (10 ref.)

**Keywords:** Ventilators, Mechanical; Retrospective Studies; Prospective Studies; Outcome Assessment [Health Care]

Abstract: To determine if the knowledge and awareness of "ventilator bundle" helped in the prevention of ventilator associated pneumonia and other outcome variables in the patients admitted to our AICU. A retrospective obsevational study from a pospectively collected data. All the adult medical and surgical patients who were intubated and ventilated in our AICU from January to September in the year 2005 and 2006 were included in the study. During the period of October to December 2005 the critical care nurses and the staff were educated and made aware about the problem of VAP and the use of vrntilator bundle in helping to prevent this nososcomial infection. Patients who expired within 24 hrs of admission, who were transferred to tertiary care unit within 48hrs, and those who were diagnosed with pulmonary embolism or had gastrointestinal bleed prior to admission were excluded from this study. The concept of "ventilator bundle" was introduced after educating the nursing staff, respiratory therapists and the medical personnel through group discussions and presentations in the infection control and staff development symposia. "Ventilator bundle" is a package of evidence -based interventions that include. Elevation of patient's head of bed to 30-45 degrees. Daily sedation vacation and daily assessment of readiness to extubation. Peptic ulcer prophylaxis. Deep vein thrombosis [DVT] prophylaxis. Measurement: Demographic data was collected from the computer database. VAP was diagnosed when it met the [clinical non invasive] diagnostic criteria. Incidence of VAP was calculated in the medical and surgical patients separately. Introducing the concept of "ventilator bundle" significantly reduced the incidence of VAP by 24.2% in the surgical patients and by 12% in the medical group. It significantly reduced the incidence of upper gastrointestinal bleed. The mean age of patients who developed VAP in 2006 was significantly higher in both the medical and the surgical groups. The length of stay decreased significantly in the surgical group, while it increased in the medical group. The mean duration of ventilation was reduced by 29.1% in the medical group and by 55.12% in the surgical group in those patients who developed VAP. In patients who did not develop VAP, the decrease of 9.9% in the mean duration of ventilation was seen in the surgical group while the mean duration of ventilation increased by 14.2% in the medical group. Introducing the concept of "ventilator bundle" helped us to reduce the incidence of VAP, reduce the incidence of upper gastrointestinal bleed. It reduced the mean duration of ventilation in both the medical and surgical patients who developed VAP. The effect on decreasing the length of stay was seen in the surgical patients only.

## **Poisoning**

Pattern of acute poisoning in Al-Qassim region: a surveillance report from Saudi Arabia, 1999-2003.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1005-1010 (28 ref.)

**Keywords:** Pesticide-poisoning; Age Distribution; Vomiting-etiology; Acetaminophen-poisoning; Retrospective Studies

**Abstract:** We reviewed all registered cases of acute chemical poisoning reporting to the preventive medicine department in the Qassim Region of Saudi Arabia from 1999 to 2003. The number of cases increased from 66 to 114 during the study period. Mean age of patients was 17.7 years, and over 39% were children aged </= 5 years. Pesticides were the most common chemical involved; paracetamol and other analgesics were also frequently reported. The oral route was the most frequent, while vomiting was the commonest symptom. Nine deaths were recorded, of which 4 were due to pesticide poisoning. In line with the global trend, acute chemical poisoning is growing as a major health issue in the Qassim Region.

# Polycyclic Hydrocarbons, Aromatic

Polycyclic aromatic hydrocarbon contamination levels in collected samples from vicinity of a highway.

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 47-52 (21 ref.)

Keywords: Motor Vehicles; Vehicle Emissions; Dust; Soil; Water

**Abstract:** Tehran as the biggest city of Iran with a population of more than 10 millions has potentially high pollutant exposures of gas oil and gasoline combustion from vehicles that are commuting in the highways every day. The vehicle exhausts contain polycyclic aromatic hydrocarbons, which are produced by incomplete combustion and can be directly deposited in the environment. In the present study, the presence of polycyclic aromatic hydrocarbons contamination in the collected samples of a western highway in Tehran was investigated. The studied location was a busy highway in Tehran. High performance liquid chromatography equipped with florescence detector was used for determination of polycyclic aromatic hydrocarbons concentrations in the studied samples. Total concentration of the ten studied polycyclic aromatic hydrocarbons compounds ranged from 11107 to 24342 ng/g dry weight in the dust samples and increased from 164 to 2886 ng/g dry weight in the soil samples taken from 300 m and middle of the highway, respectively. Also the average of ? PAHs was 1759 ng/L in the water samples of pools in parks near the highway. The obtained results indicated that polycyclic aromatic hydrocarbons contamination levels were very high in the vicinity of the highway.

#### **Postnatal Care**

#### standards

A study to assess knowledge, practice and problems of baby health care among postnatal mothers in one of primary health care setting.

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Journal of the Arab Board of Medical Specializations 2009; 10 (1): 42-48 (9 ref.)

**Keywords:** Quality of Health Care; Breast Feeding-statistics and numerical data; Umbilical Cord; Eye; Jaundice, Neonatal; Health Knowledge, Attitudes, Practice; Parity; Outcome and Process Assessment [Health Care]; Awareness; Cross-Sectional Studies; Questionnaires; Delivery of Health Care; Primary Health Care

**Abstract:** In many cases there is a lack of knowledge of what is needed for optimal newborn care. This study was undertaken to assess knowledge, practice and problems of postnatal mothers relating to different aspects of baby health care and breastfeeding among group of mothers attending primary health care center in one locality in Baghdad city. A cross-sectional study was conducted in Al-Noor primary health care center [PHCC] during the period from May-August 2006, a sample of 148 mothers were selected randomly [49 primi para and 99 multi para] using a well structured questionnaire form, information related to different aspects of baby care were included in the form. Although the majority of women in the sample had visited the primary health center for antenatal care, their sources of knowledge were from their relatives and friends. A good percentage of them had bad practice regarding the care of umbilical stump and the eyes with 49% of primi para and 53.5% of multi para will use white light at home when their baby get jaundice. When breastfeeding was discussed, majority of women showed adequate knowledge and practice. There is an urgent need to assess the actual quality of postnatal care provided to women in the PHC center. Also there is a need for an awareness-raising program highlighting the availability and the quality of current postnatal care.

# **Postoperative Nausea and Vomiting**

## therapy

Comparative study of orogastric suction and dexamethasone to reduce vomiting after pediatric tonsillectomy.

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Journal of the Royal Medical Services 2009; 16 (1): 16-21 (35 ref.)

Keywords: Gastric Emptying; Dexamethasone-therapeutic use; Tonsillectomy-adverse effects; Prospective Studies

**Abstract:** To compare the effect of gastric emptying with an orogastric tube and the effect of a single dose of dexamethasone on the incidence of postoperative vomiting in children undergoing tonsillectomy. Two hundred and ten patients of both genders, aged 1.5-14 years, who were scheduled to undergo tonsillectomy with or without adenoidectomy were studied prospectively. Patients were randomized into three groups. Group I included patients who received dexamethasone 0.5 mg/kg intravenously [maximum dose 8 mg] after the induction of anesthesia and before surgery [n = 70]. Group III included patients who neither received dexamethasone nor underwent gastric

aspiration [n = 70]. Data on the number of episodes of vomiting, total volume of emesis, administration of rescue prophylactic antiemetics were recorded. The incidence of early postoperative vomiting [before discharge from recovery room] was not significantly different between the three groups. The incidence of vomiting during stay on the ward [late vomiting] was more frequent in group I and III. The mean number of episodes of vomiting in the three groups was 2.42.2 and 2.3 respectively. The mean volume of emesis for the patients who experienced postoperative vomiting was similar in the three groups [183 ml, 176 ml and 180 ml respectively]. Prophylactic antiemetic rescues were required in 13% of group I, 4% in group II and 10% in group III. The time to the first oral intake and duration of intravenous hydration was significantly shorter in the dexamethasone group than in the other two groups. Prophylactic intra operative single dose of dexamethasone decreases the incidence of postoperative vomiting, and accelerates the return to normal diet in children undergoing tonsillectomy. Aspiration of gastric contents with an orgastric tube does not decrease postoperative vomiting, mean number of vomiting episodes and the volume of emesis. Routine use of orogastric tube placement for gastric aspiration following pediatric tonsillectomy is not advisable.

# Pre-Eclampsia

## drug therapy

Loading dose of magnesium sulphate versus standard regime for prophylaxis of pre-eclampsia.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 30-33 (25 ref.)

**Keywords:** Ammonium Sulfate-administration and dosage; Ammonium Sulfate-therapeutic use; Pre-Eclampsia-prevention and control

# **Pregnancy Trimester, First**

Duration of late diastolic flow in first trimester in patients with history of recurrent first trimester pregnancy loss in comparison to normal pregnant patients.

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Medical Journal of Cairo University [The] 2009; 77 (1): 65-72 (18 ref.)

**Keywords:** Fetal Death; Enoxaparin-pharmacology; Anticoagulants; Diastole; Prospective Studies; Abortion, Spontaneous; Recurrence; Pregnancy

Abstract: The purpose of this study is to investigate the correlation between the changes in duration of the absent diastolic flow during first trimester and fetal survival during first trimester pregnancy with and without anti-coagulant treatment. A second objective is to determine the duration and dose of anticoagulant treatment needed to have best outcome in these conditions. A prospective observational study. Al Nahda hospital in cooperation with the maternity hospital in Prince Sultan militaty Hospital, Al Taief, KSA. The study was approved by the committee of study and research in Al Nahdah Hospital. All patients have consented for the plan of care of pregnant women with history of more than previous two consecutive first trimester pregnancy losses with all possible consequences. The study patients are pregnant women with a history of two or more consecutive first trimester pregnancy losses in the form of blighted ovum or sudden first trimester fetal demise. They were studied starting from 6 weeks up to 16 weeks gestaion. The patients were divided into two groups. Group A [n = 12] were managed conservatively with the routine antenatal care without additional anticoagulant treatment and group B [n = 14] were given enoxaparinl 20mg subcutaneously daily starting from the time of positive pregnancy test to end of the study at 16 weeks gestation. A third group of 100 patients with good obstetric history were examined to build up the reference values for the normal progress of the fetal circulation during this period and this group was considered as the control group [group C]. All patients were studied from the time of 6 weeks gestation and up to 16 weeks gestation by Doppler flowmetry to test for the duration of the late diastolic flow in the umbilical arteries. All patients were followed-up starting from 6 weeks gestation till 16 weeks gestations in the period between October 2007 and June 2008. Doppler flowmetry using pulsed. wave color Doppler. In each patient the duration of absent diastolic flow was measured. In group [A], there was persistent longer periods of absent diastolic flow compared to group B and C. In this group four losses happened [2 fetuses were lost at time of 8-10 weeks gestation and 2 patients had blighted ovum]. Patients who were given acetylsalicylic acid and enoxaparine had shorter periods of absent diastolic flow and got a continuous diastolic flow at 13-14 weeks gestation without any losses. The rate of change of the duration of diastolic flow showed that in the B and C groups there is a progressive persistent shortening of the duration of absent diastolic flow by an average rate of 0.0255 seconds per week till 14 weeks when a continous diastolic flow becomes established. On the other hand in group A, the rate of change is very slow [on the average 0.015 seconds per week] up to 16 weeks without a continuous diastolic blood flow. Absent diastolic flow is a normal finding during early pregnancy. Adequate flow without diastolic arrest should be reached by 13-14 weeks gestation. However, patients with history of recurrent first trimester pregnancy loss have longer periods of arrest of diastolic flow. This may be related to imbalance between the coagulation and fibrinolysis in the fetus. This needs further studies to correlate ultrasound findings with coagulation studies during first trimester.

## **Premature Birth**

## microbiology

Vaginal colonization by ureaplasma species in early pregnancy; role in preterm birth.

Al Marashly, Manal A.; Mohamad, Hanan F.; Matar, Mohamad; Tolba, Waheed Abdelall

El Galaa Teaching Hospital - Department of Clinical Pathology

Medical Journal of Cairo University [The] 2009; 77 (1): 95-99 (16 ref.)

**Keywords:** Obstetric Labor, Premature-microbiology; Ureaplasma Infections; Pregnancy Trimester, First; Polymerase Chain Reaction; Mycoplasma Infections; Pregnancy; Ureaplasma; Ureaplasma urealyticum

Abstract: Preterm birth and low birth weight are the leading causes of neonatal mortality and morbidity. Ascending genital tract infections contribute to up to 50% of premature deliveries particularly those occurring before 34 weeks of gestation. Genital mycoplasmas including ureaplasmas species have been implicated in infertility, spontaneous abortion, still birth, premature birth, low birth weight and perinatal morbidity and mortality. Was to examine the association between colonization by two newly classified species of genital ureaplasmas [ureaplasma parvum and ureaplasma urealyticum] in early pregnancy and subsequent late abortion-or preterm birth at less than 34 weeks of gestation using PCR technique. A total of 160 women with singleton pregnancies at less than eleven weeks were subjected to full history and clinical examination, sterile cotton swabs were used to obtain vaginal material from the posterior fornix and these swab specimens were examined by PCR method, all pregnant women were followed up till delivery. Ureaplasma paryum was detected in a significantly larger number of women in the preterm birth group 10/15 [66.67%] versus 68/145 [46.89%] in the control group p = [0.037]. A significantly larger number of women had a past history of preterm birth at < 37 weeks of gestation in the preterm birth group p = [0.009]. In addition, a significant larger number of women were treated with antibiotics before 22 weeks of gestation in preterm birth group than in control group p = [0.005]. Thus detection of Ureaplama parvum in the vagina, use of antibiotics for incidental inflammatory conditions before 22 weeks of gestation, and past history of preterm birth were independently associated with late abortion or early preterm birth. In conclusion, vaginal colonization with urea-plasma parvum but not ureaplasma urealyticum-is associated with early preterm birth.

# **Problem-Based Learning**

Problem-Based Learning and Medical Education Forty Years On. A Review of Its Effects on Knowledge and Clinical Performance.

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Medical Principles and Practice 2009; 18 (1): 1-9 (40 ref.)

Keywords: Education, Medical; Knowledge; Cognition

**Abstract:** Problem-based learning [PBL] has swept the world of medical education since its introduction 40 years ago, leaving a trail of unanswered or partially answered questions about its benefits. The literature is replete with systematic reviews and meta-analyses, all of which have identified some common themes; however, heterogeneity in the definition of a 'problem-based learning curriculum' and its delivery, coupled with different outcome measurements, has produced divergent opinions. Proponents and detractors continue to dispute the merits of the cognitive foundation of a PBL approach, but, despite this, there is evidence that graduates of PBL curricula demonstrate equivalent or superior professional competencies compared with graduates of more traditional curricula.

## **Propolis**

#### therapeutic use

Experimental diabetic nephropathy can be prevented by propolis: effect on metabolic disturbances and renal oxidative parameters.

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Al Azahar University - Faculty of Pharmacy - Phamacology and Toxicology Departments

Pakistan Journal of Pharmaceutical Sciences 2009: 22 (2): 205-210 (38 ref.)

**Keywords:** Propolis-administration and dosage; Diabetic Nephropathies-physiopathology; Diabetic Nephropathies-prevention and control; Antioxidants; Streptozocin; Free Radicals; Rats, Wistar; Oxidative Stress; Diabetes Mellitus, Experimental

Abstract: Oxidative stress may play a key role in the pathogenesis of diabetic nephropathy. Propolis and its extract have antioxidant properties. The effect of ethanolic extract of propolis against experimental diabetes mellitus-associated changes was examined. Diabetes was induced experimentally in rats by i.p. injection of streptozotocin [STZ] in a dose of 60 mg/kg bwt for 3 successive days. Blood urea nitrogen [BNU], creatinine, glucose, lipid profile, malondialdehyde [MDA] and urinary albumin were measured. Superoxide dimutase [SOD], glutathione [GSH], catalase [CAT] and MDA were measured in the renal tissue. The results showed decreased body weight and increased kidney weight in diabetic animals. Compared to the control normal rats, diabetic rats had higher blood glucose, BNU, creatinine, total cholesterol, triglycerides, low-density lipoprotein-cholesterol [LDL-C], MDA and urinary albumin and

lower high-density lipoprotein-cholesterol [HDL-C] levels. Moreover, renal tissue MDA was markedly increased while SOD, GSH and CAT were significantly decreased. Oral administration of propolis extract in doses of 100,200 and 300 mg/kg bwt improved the body and kidney weights, serum glucose, lipid profile, MDA and renal function tests. Renal GSH, SOD and CAT were significantly increased while MDA was markedly reduced. These results may suggest a strong antioxidant effect of propolis which can ameliorate oxidative stress and delay the occurrence of diabetic nephropathy in diabetes mellitus.

# Potential antidiabetic and hypolipidemic effects of propolis extract in streptozotocin-induced diabetic rats.

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Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 168-174 (57 ref.)

**Keywords:** Propolis-administration and dosage; Hypoglycemic Agents; Antilipemic Agents; Antioxidants; Streptozocin; Diabetes Mellitus, Experimental; Rats, Wistar; Plant Extracts

Abstract: Free radicals have been implicated in the pathogenesis of diabetes mellitus leading to various complications including atherosclerosis. Propolis was reported to have oxygen radical scavenging activity. The present study was designed to investigate the possible antidiabetic, hypolipidemic and antioxidant effects of ethanolic extract of propolis [EEP]. Type[2] diabetes was induced in rats by injection of streptozotocin [STZ] in a dose of 60 mg/kg bwt, i.p. for 3 consecutive days. After 5 weeks of STZ injection, there were an apparent reduction in the animal body weight amounting to 21% and significant increases in serum glucose [184%], triglycerides [63%], total cholesterol [43%] and low density lipoprotein-cholesterol [LDL-C] [148%] with a concomitant decrease in serum high density lipoproteincholesterol [HDL-C] [51%] as compared to the control normal group. In addition, there was significant elevation in pancreatic lipid peroxides measured as malondialdehyde [MDA] and serum nitric oxide [NO] amounting to 185% and 224%, respectively with marked reduction in serum reduced glutathione [GSH] andcatalase [CAT] [66% and 31%, respectively] and pancreatic superoxide dismutase [SOD] [54%] in STZ-treated rats. On the other hand, oral daily treatment of animals with EEP in a dose of 200mg/kg bwt for a period of 5 weeks ameliorated STZ-induced alterations in the animal body weight as well as in serum glucose, lipids, lipoproteins, NO, GSH and CAT and pancreatic MDA and SOD. In conclusion, propolis extract offers promising antidiabetic and hypolipidemic effects that may be mainly attributed to its potent antioxidant potential. Further studies will be needed in future in order to determine which one for more] of its active constituents has the main antidiabetic and hypolipidemic effects.

## **Propranolol**

## **Pharmacokinetics**

# Effect of hydrophilic natural gums in formulation of oral-controlled release matrix tablets of propranolol hydrochloride.

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Parul Institute of Pharmacy - Department of Pharmaceutics

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 211-219 (35 ref.)

**Keywords:** Delayed-Action Preparations-chemical synthesis; Polymers; Galactans; Mannans; Plant Gums; Tablets; Polysaccharides, Bacterial

Abstract: In order to develop a controlled delivery of highly water-soluble propranolol hydrochloride [PPHCl] using hydrophilic natural gums [xanthan gum [X] and locust bean gum [LBG]] as cost-effective, nontoxic, easily available. The granules of PPHCl were prepared by wet granulation method using a different ratios drug: gum ratios of X, LBG and XLBG[X and LBG in 1:1 ratios]. To increase the flowability and compressibility of the granules, and to prevent its adhesion to punch and die, magnesium stearate and talc were added to the granules in 1:2 ratios before punching. The tablets was analysed to determine hardness, friability,% assay and invitro release study was carried out. The release of PPHCl from a gelatinous swollen mass, which controls the diffusion of drug molecules through the polymeric material into aqueous medium. The XLBG matrices shows precise controlled release than the X and LBG matrices because of burst effect and fast release in case of X and LBG matrices respectively and there was no chemical interaction between drug and polymers in XLBG formulation as confirmed by FTIR studies. First pass effect of PPHCl can be avoided by these formulations. Matrices with XLBG show zero-order release via swelling, diffusion and relaxation mechanism. The XLBG matrices leads to more precise result than X and LBG alone by the utilization of synergistic interaction between two biopolymers and uniformity in the hydration layer in dissolution media. However, according to the similarity factor [f2] XLBG3 were the most similar formulation to Lol-SR as the reference standard.

### Pseudotumor Cerebri

## therapy

Idiopathic intracranial hypertension [IIH].

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Oman Medical Journal 2008; 23 (2): 70-71 (5 ref.)

Keywords: Pseudotumor Cerebri-history

**Abstract:** The first report of Idiopathic Intracranial Hypertension [IIH] was by Quinche in 1893. Throughout history it has had many names. When I was a child growing up, before we had antibiotic therapy, middle ear infections occasionally would trigger intracranial inflammation and the disease was called Otitic Hydrocephalus. Then it was called Benign Intracranial Hypertension which we now know is far from benign. In 1931 Symonds was the first to suggest that it was caused by dural sinus obstruction. Loss of vision or field is not uncommon in untreated cases. We now use the term Idiopathic Intracranial Hypertension to express our ignorance about the cause and mechanism of the disease. Some cases are related to causes that we can identify and correct. These include Vitamin A, Tetrcycline, Lithium and Corticosteroids. The mechanism of these are not fully understood but their causal relationship is historically known. Many cases still fall into the unknown cause category.

# Purpura, Thrombocytopenic, Idiopathic

# epidemiology

High incidence of idiopathic thrombocytopenic purpura in Jahra region of Kuwait.

Bahl, Sunil R.; Vurgese, Thomas A.; Fakeir, Aisha; Mapkar, Osman A.

Al Jahra Hospital - Hematology Department

Bahrain Medical Bulletin 2009; 31 (1): 21-22 (9 ref.)

Keywords: Incidence; Retrospective Studies

**Abstract:** To study the incidence of ITP in adults in Jahra region. A retrospective study of all thrombocytopenic patients admitted to adult medical wards of Al Jahra hospital was performed during two years, [2003-2004 inclusive]. Adult medical wards of Al Jahra hospital, Kuwait. Out of the total 81 patients with thrombocytopenia, 34 cases [41.2%] were found to be due to ITP. Jahra hospital is the only referral hospital in Jahra region, catering to a population of 280,000 which makes the incidence of 60 per million populations per year. Thirty ITP patients had first line medical treatment, 3 required splenectomy and one responded to second line treatment of Azathioprine. Incidence of ITP varies significantly in different parts of the world. The incidence in Kuwait is higher than that seen in other parts of the world.

## Quality of Life

Effects of a continuous care model on perceived quality of life of spouses of haemodialysis patients.

Rahim, A.; Alhani, F.; Ahmadi, F.; Gholyaf, M.; Akhoond,, M.R.

Tarbiat Modares University - Department of Nursing

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 944-950 (18 ref.)

Keywords: Models, Nursing; Caregivers; Spouses; Renal Dialysis; Questionnaires

**Abstract:** We carried out a semi-experimental study with simple randomized sampling to study the effects of applying a continuous care model on the quality of life of 36 spouses of haemodialysis patients in Hamedan, Islamic Republic of Iran. Participants took part in group discussions and training on the continuous care approach and completed the Perceived Quality Of Life [PQOL] questionnaire before and after the intervention. Mean scores on the physical, social and cognitive dimensions, as well as happiness and total scores significantly increased after the intervention. Applying a continuous care model has positive effects on the caregivers of chronic patients.

# **Radial Artery**

#### ultrasonography

#### Ultrasound guided versus conventional radial artery cannulation.

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New Egyptian Journal of Medicine [The] 2009; 40 (1): 72-74 (5 ref.)

**Keywords:** Catheterization-methods; Catheterization-ultrasonography; Catheterization-complications

**Abstract:** This research was designed to study the values of ultrasound guidance in radial artery cannulation in comparison to conventional technique. Two groups of patients each is twenty cases for whom radial artery cannulation was indicated, first group [A] the artery were cannulated using the ultrasound guidance ,and the second group [B] the radial artery was cannulated by the conventional technique. B. oth groups were studied regarding duration of cannulation success rate, incidence of complications. The ultrasound guided radial artery cannulation technique showed more short duration, high success rate lower incidence of complications in comparison to the conventional technique of cannulation. It was concluded that the ultrasound guided technique is highly valuable in cannulation of radial artery.

# **Radiation Oncology**

Proceedings of 2nd international radiation oncology conference. Muscat, Sultanaate of Oman, 26-27 February 2009.

Oman Medical Journal 2008; 23 (2): 121-135

**Keywords:** Congresses as Topic; Breast Neoplasms; Retroperitoneal Neoplasms; Stomach Neoplasms; Hodgkin Disease; Brachytherapy; Head and Neck Neoplasms; Whole-Body Irradiation; Prostatic Neoplasms; Mouth Neoplasms; Radiotherapy; Pregnancy; Mammography

# **Reconstructive Surgical Procedures**

#### methods

Use of neck advancement techniques for reconstruction of mild to moderate neck and lower face post-burn scars.

Weshah, Samhar; Ahmad, Nasser; Al Khaledi, Jarir; Al Gdah, Najat; Haddadin, Khaldoun

King Hussein Medical Center - Division of Plastic and Reconstructive Surgery

Journal of the Royal Medical Services 2009; 16 (1): 43-50 (16 ref.)

Keywords: Burns-complications; Neck-surgery; Face-surgery; Retrospective Studies

**Abstract:** To investigate our experience with "Neck Advancement" as a useful technique in late reconstruction of some neck and lower face post-burn scars in addition to evaluate the limitations and complications of this technique. During the period between 1999-2006. A total of 110 "Neck Advancement" procedures were performed on 57 patients with mild to moderate neck and lower face scars at the Royal Jordanian Rehabilitation Center. Forty one of these 57 patients had previous scar revisions or serial excisions ranging from 1-6 procedures per patient prior to the neck advancement. The medical records, pre- and postoperative photographs of these patients were retrospectively studied in terms of age, gender, cause of burn, duration since the acute burn, previous attempts at reconstruction, indications for surgery, results, and postoperative complications. The range of neck advancements was 1-4 procedures per patient. The overall post operative improvement was good in 45 [79%] patients, satisfactory in 9 [16%] patients, and poor in only 3 [5%] patients. There were a total of 13 complications among our group of patients. Apart from simple wound problems related to this technique, the main complication was facial or neck asymmetry, a pseudo-torticollis that tends to occur with unilateral advancements. We found this technique useful in the late reconstruction of a large number of patients with mild to moderate facial and neck burns. It is easy, quick, repeatable and convenient to the patient with a low frequency of complications. It is an additional technique to the armamentarium of the reconstructive surgeon to deal with such difficult burns. It has limitations and is not suitable for the more extensive neck burns.

#### **Rectal Diseases**

## diagnosis

### Twelve-years old girl with retro-rectal mass.

Arroud, Mounir; Lamiae, Chater; Atmani, Samir; Boujraf, Said; Afifi, My Abderrahmane; Hida, Moustapha; Bouabdallah,

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University Hospital Hassan II - Department of Pediatric Surgery and Pediatrics

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 145-146 (5 ref.)

**Keywords:** Rectal Diseases-ultrasonography; Constipation-etiology; Digital Rectal Examination; Magnetic Resonance Imaging

# **Renal Dialysis**

#### Hemodialysis, plea of availability versus adequecy Gezira experience.

Elhafiz, Mohamed; El Imam, Mohamed; Omran, O.; Gabar, Alwaleed A.; Miskeen, Elhadi

Gezira Hospital for Renal Disease and Surgery - Department of Nephrology

Sudan Journal of Medical Sciences 2009; 4 (1): 7-10 (20 ref.)

Keywords: Kidney Failure, Chronic-therapy; Prospective Studies; Cross-Sectional Studies

**Abstract:** This is a prospective cross sectional study carried out in Gezira Hospital for Renal Diseases and Surgery [Sudan] to assess the adequacy of hemodialysis in 206 patients with end stage kidney disease on regular hemodialysis twice per week using. Pre and post hemodialysis blood sample were obtained from the study group, spKt/V and urea reduction ratio were calculated. Mean Kt/v was found to be 1.19 and urea reduction ratio was 59.55%. None of the patients in this study group achieved the National Kidney Foundation Dialysis Outcomes Quality Initiative [K/DOQI] recommendations for adequate hemodialyis, since it requires three hemodialyis sessions per week and our patients are receiving two sessions per week. In order to improve the situation herewith we recommended increased number of sessions from two to three times per week and \or increase the duration of hemodialysis session, increase blood flow rate and dialysate flow rate. Moreover, decrease the number of patients on regular hemodialysis by encouraging the patients to take the other renal replacement therapy [peritoneal dialysis and renal transplantations].

#### adverse effects

Changes in serum calcium, phosphate, albumin and parathyroid hormone before and after hemodialysis in sudanese patients with end-stage renal failure.

Mohamed, Aida Ali Ahmed; Ahmed, Mohamed El Imam; Elamin, Anwaar Ali; El Sabiq, M.; Khalid, Khalid Eltahir; Mohmadani, Ahmed Abdallah; Mohamed, El Gaili; Miskeen, Elhadi

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University of Gezira - Deputy Dean Faculty of Medicine - Urologist, TX Surgeon

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 23-27 (18 ref.)

**Keywords:** Calcium-blood; Phosphates-blood; Parathyroid Hormone-blood; Urea-blood; Creatinine-blood; Albumins; Kidnev Failure. Chronic: Cross-Sectional Studies

**Abstract:** To determine the concentrations of serum parathyroid hormone [PTH] and bone minerals and their association before and after hemodialysis. A cross sectional study was done on patients with end-stage renal disease [ESRD] on treatment with maintenance hemodialysis [HD]. Levels of serum calcium, phosphate, urea, creatinine, albumin, and intact parathormone [iPTH] were measured. The total number of patients studied was 50 [40 males; 10 females], the mean age was 40.3 +/- 26.5 years, and the average duration on hemodialysis [HD] was 53 months. Serum PTH level was significantly lower after hemodialysis treatment; it was 945.8 +/- 995.9pg/ml and 781.7 +/- 928.1 pg/ml before and after HD respectively, but still over the normal range. Serum phosphate concentration was remarkably differ before and after HD [5.59 +/- 1.8 mg/ml vs 4.38 +/- 1.2 mg/ml respectively]. In contrast, the mean value of serum calcium concentration was changed significantly after HD [6.7 +/- 1.5 mg/dl] compared with the level before HD [5.6 +/- 6.7 mg/dl]. PTH correlated positively with phosphate [r = 0.30, p = 0.03], and negatively with calcium [r = -0.299, p = 0.04] levels. A significant decrease in serum urea and creatinine levels was reported after HD. Serum albumin showed no significant difference before and after HD. PTH was remarkably decreased post dialysis in our patients with definite increased serum Ca[+]. There is no significant difference between PTH and patient's age, sex and duration in HD Sudanese patients.

# **Research Design**

#### How to prepare a research proposal.

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Ministry of Health, Muscat - aDirectorate General of Planning

Oman Medical Journal 2008; 23 (2): 66-69 (11 ref.)

Keywords: Medicine

**Abstract:** Health research, medical education and clinical practice form the three pillars of modern day medical practice. As one authority rightly put it: "Health research is not a luxury, but an essential need that no nation can afford to ignore". Health research can and should be pursued by a broad range of people. Even if they do not conduct research themselves, they need to grasp the principles of the scientific method to understand the value and limitations of science and to be able to assess and evaluate results of research before applying them. This review paper aims to highlight the essential concepts to the students and beginning researchers and sensitize and motivate the readers to access the vast literature available on research methodologies.

# Respiratory Syncytial Virus, Human

# Frequency and detection of respiratory syncytial virus pneumonia in children by nested reverse transcriptase polymerase chain reaction.

Helal, Soheir; Hussein, Gehan; Gaafar, Maha; Aly, Azza Ahmad

Cairo University - Faculty of Medicine - Department of Clinical and Chemical Pathology

Medical Journal of Cairo University [The] 2009; 77 (1): 41-46 (16 ref.)

**Keywords:** Reverse Transcriptase Polymerase Chain Reaction; Child; Pneumonia; Bronchopneumonia; Prevalence; Electrophoresis, Agar Gel; Respiratory Syncytial Virus Infections-diagnosis

Abstract: Respiratory syncytial virus [RSV] is one of major causes of viral respiratory tract disease in young children and infants. We aimed to study the frequency of respiratory syncytial virus and its subtypes in pneumonia and bronchopneumonia in pediatric patients less than two years old tested by nested polymerase chain reaction with the evaluation of routinely used methods of diagnosis which are clinical manifestations and chest X-ray. The study included 70 patients exhibited lower respiratory tract symptoms in the form of pneumonia and bronchopneumonia. Their age ranged from two months to eighteen months. All participants were subjected to clinical examination, chest X-ray examination, nasopha-ryngeal aspirate [NPA] samples for microbiological examination and nested reverse transcriptase polymerase chain reaction for diagnosis of respiratory syncytial virus. RSV was highly prevalent infection in our studied patients, as 60 patients [86%] out of 70 were positive. Children from 2-3 months were highly affected [43.3%] and rate of infection decreases with increase of age. RSV infection was statistically significant with some clinical findings and radiological findings. RSV is the most important etiological agent causing pneumonia and bronchopneumonia in infancy. Na-sopharyngeal aspirate is a sensitive method in detecting viral infection during infancy. Nested reverse transcriptase polymerase chain reaction which is rapid and reliable technique may provide important diagnostic information in establishing the etiology and improving management of the patients.

# **Respiratory Tract Infections**

# drug therapy

Primary care physicians' knowledge and attitude towards prescribing medication for acute respiratory infection.

Al Gelban, Khalid S.: Al Khaldi, Yahia M.: Diab, Mohammed M.: Al Asmari, Ali S.: Elamin, Salah Eldeen M.

College of Medicine - Department of Family and Community Medicine

Bahrain Medical Bulletin 2009; 31 (1): 23-26 (26 ref.)

**Keywords:** Physicians, Family; Health Knowledge, Attitudes, Practice; Drug Prescriptions; Acute Disease; Cross-Sectional Studies

**Abstract:** This study was performed to assess primary care physicians' knowledge and attitude towards prescribing medications for acute respiratory infections [ARIs]. Aseer Region Primary Care Physicians. Cross sectional study. A cross sectional study using a self-administered, questionnaire carried out during March and April 2004, among all primary care physicians. Out of 320, 268 questionnaires were returned [response rate = 83.75%]. The mean rank of score in knowledge on ARIs was 16 [SD = 2.0] out of 21. More than 80% of respondents have heard about the National Protocol for ARIs [NP-ARIS]. One-third has attended a training course on the protocol, while a third did not want to attend such type of training. Of the 153 physicians who had copies of the protocol, 145 read it. However, only 85 physicians of those who read it comply with it. Physicians with experience more than 5 years in primary health care centres attended more training courses on the NP-ARIS [44% vs 20%, p = 0.01], had a positive attitude towards it [70% vs 60%, p = 0.04]. Those who were trained on the protocol, prescribed ant histamines and vitamin c less frequently [38% vs 60%, p = 0.04] and [38% vs 61%, p = 0.04] respectively. Over-prescribing for acute respiratory infections is a common behaviour among primary care physicians, despite their good knowledge of the health problem.

### Retinoblastoma

# epidemiology

Retinoblastoma: Current Concept.

Chaudhry, Imtiaz A.

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King Khaled Eye Specialist Hospital - Oculoplastic and Orbit Division Saudi Journal of Ophthalmology 2009; 23 (1): 1-2 (16 ref.)

Keywords: Retinoblastoma-gnentics; Retinoblastoma-diagnosis; Retinoblastoma-classification; Retinoblastoma-

therapy; Orbital Implants

### therapy

Pearls in the management of children with retinoblastoma.

Shields, Carol L.; Shields, Jerry A.

E-mail:carol.shields@shieldsoncology.com

Thomas Jefferson University - Wills Eye Institute - Oncology Sievice

Saudi Journal of Ophthalmology 2009; 23 (1): 43-50 (27 ref.)

**Keywords:** Antineoplastic Combined Chemotherapy Protocols-therapeutic use; Eye Enucleation-methods; Retinal Neoplasms; Child; Disease Management

**Abstract:** The management of retinoblastoma has gradually evolved over the past years from enucleation to radiotherapy to current techniques of chemotherapy. Eyes with massive retinoblastoma filling the globe are still managed with enucleation, whereas those with small, medium, or even large tumors can be managed with chemoreduction followed by tumor consolidation with thermotherapy or cryotherapy. Despite multiple or large tumors, visual acuity can reach 20/40 or better in many cases, particularly those eyes with extramacular tumors. Previous complications of dry eye, cataract, retinopathy, and facial deformity that were found following external beam radiotherapy are not anticipated following chemoreduction. Recurrence from subretinal and vitreous seeds can be problematic. Long-term follow up for second cancers is advised.

# Root Canal Therapy

Proven strategies to improve endodontic success and promote natural tooth retention.

Mounce, Richard E.

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Smile Dental Journal 2009; 4 (1): 16-20 (29 ref.)

Keywords: Root Canal Obturation; Irrigation; Treatment Outcome

**Abstract:** A series of clinically relevant steps to enhance the clinical success of endodontic therapy is presented. Emphasis has been placed on use of the surgical operating microscope, straight line access, patency, copious irrigation, frequent recapitulation, passive rotary nickel titanium file use, bonded obturation and placement of an early coronal seal.

# Sarcoma, Myeloid

## diagnosis

## Myeloid sarcoma of the kidney preceding acute myeloid leukemia.

Awamleh, Ahlam A.; Abu Al Samen, Ahmad A.; Al Haliq, Abdel Rahman A.

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Queen Alia Military Hospital - Department of Laboratory Medicine

Journal of the Royal Medical Services 2009; 16 (1): 55-57 (12 ref.)

Keywords: Leukemia, Myeloid, Acute

**Abstract:** Myeloid Sarcoma is a rare extramedullary tumor, consisting of primitive granulocytic precursor cells. We report the case of a 50-year-old man, who presented with a renal mass. After nephrectomy, histological examination revealed a myeloid sarcoma in association with a renal cell carcinoma. Seven weeks after nephrectomy the patient developed acute myeloid leukemia.

#### **Schistosomiasis**

# prevention and control

## Challenges in prevention and control of schistosomiasis in the Sudan.

Amin, Mutamad A.; Elhussin, Durria Mansour

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Ahfad University for Women - Biomedical Research Laboratory **Sudan Journal of Medical Sciences** 2009; 4 (1): 79-82 (30 ref.)

Keywords: Schistosomiasis-epidemiology; Prevalence

## Smoking

### Correlates of ever-smoking habit among adolescents in Tabuk, Saudi Arabia.

Abdalla, A.M.; Saeed, A.A.; Abdulrahman, B.M.; Al Kaabba, A.F.; Raat, H.

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King Fahad Medical City - Faculty of Medicine - Department of Clinical Sciences

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 983-992 (30 ref.)

Keywords: Cross-Sectional Studies; Questionnaires; Schools; Sex Distribution; Culture; Parents; Students

**Abstract:** A cross-sectional questionnaire study of the correlates of ever-smoking among adolescents was made in Tabuk government schools in Saudi Arabia. Of 1505 students aged 12-19 years, 657 [43.7%] were ever-smokers [i.e. ever tried cigarette smoking, even 1 or 2 puffs]; 65.0% of males and 23.1% of females. In logistic regression analysis significant predictors for ever-smoking were: male sex, belief that smoking helps people feel comfortable in social situations, owning something with a cigarette logo, having pocket money >/= 20 riyals/day, poor school performance and having friends or parents who smoked.

### epidemiology

#### Comparison of smoking behaviour among medical and other college students in Rawalpindi.

Mumtaz, Babar; Chaudhary, Ishtiaq Ahmed; Arshad, Muhammad; Samiullah

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Foundation University Medical College - Department of Community Medicine

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (1): 7-10 (18 ref.)

Keywords: Students, Medical; Students; Cross-Sectional Studies; Behavior

## Prevalence of cigarette smoking in the Rafsanjan urban population.

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Rafsanjan University of Medical Sciences and Health Services - Medical School - Department of Internal Medicine

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 1032-1035 (10 ref.)

Keywords: Prevalence; Urban Population; Sex Distribution; Cross-Sectional Studies; Questionnaires

**Abstract:** This study determined the smoking rate in the urban population of Rafsanjan, Islamic Republic of Iran, in a random community sample of 491 adults [247 males and 244 females] aged > 20 years. The overall prevalence of current smoking [1+ cigarettes per day] was 24.2%; 38.5% in males and 9.8% in females. The mean number of cigarettes consumed per day was 12.1 [standard deviation [SD 8.6]]; 13.6 [SD 8.9] in men and 6.5 [SD 4.5] in women. The prevalence and mean number of cigarettes smoked per day increased significantly in older age groups.

# Sodium-Potassium-Exchanging AT Pase

## analysis

Changes in chloride cell abundance, NA[+], K[+]-atpase immunolocalization and activity in the gills of golden grey mullet, liza aurata, fry during adaptation to differend salinities.

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Tarbiat Modares University - Faculty of Marine Sciences

Yakhteh Medical Journal 2009; 11 (1): 49-54 (40 ref.)

**Keywords:** Chlorides-analysis; Microscopy, Fluorescence; Salinity; Fishes-physiology; Water-Electrolyte Balance-

physiology; Smegmamorpha

Abstract: Changes in chloride cell abundance, Na[+], K[+]-ATPase immunolocalization and activity were investigated in the gills of the golden grey mullet, Liza aurata, fry acclimated to freshwater [FW] and different salinities [12%, 36% and 46%]. Na[+], K[+]-ATPase localization was performed through immunofluorescence light microscopy using a mouse monoclonal antibody IgG alpha 5. Quantitive analysis of Na[+], K+-ATPase intensity was analyzed using Optima's version 6.51 image analysis software [Media Cybernetics, Silver Spring, MD, USA]. In FW, the fluorescent cells [chloride cells] were observed on the epithelia of filaments [mainly in inter-lamellar regions] and on the lamellae. Following transfer to 12%. salinity, the abundance of Na[+], K[+]-ATPase immunofluorescence cells on the filaments decreased 1.7-fold, and no immunofluorescence cells were detected on the lamellae. Samples from 36% and 46%. salinity showed a high density of chloride cells on the epithelia of filaments, and a few cells on the lamellae. Na[+], K[+]-ATPase intensity did not change significantly with an increase in salinity from 36% to 46% but it was significantly higher [p > 0.05] in the FW compared to 12% salinity. There was no significant difference between gill Na[+], K[+]-ATPase activity in FW and 12% salinity, but it was significantly higher [p > 0.05] in the fish acclimated to 36' and 46% salinity [3.3- and 5.1-fold] compared to 12%. The capability of L. aurata fry to change the number and size of gill chloride cells, as well as their activities indicate the high degree of adaptability of this fish to a wide range of salinity.

# Spirochaetales Infections

## therapy

Intestinal spirochetosis: do we always treat it or is it a self-limiting disease?

Sinha, Apurva; Mak, Tony; Petkar, Shabina; Allan Arthur

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Good Hope Hospital - Department of Colorectal Surgery

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 139-141 (5 ref.)

**Keywords:** Spirochaetales Infections-microbiology; Spirochaetales Infections-diagnosis; Intestinal Diseases-diagnosis; Sigmoidoscopy; Biopsy; Polymerase Chain Reaction

## **Sputum**

## microbiology

# Does sputum culture affect the management and/or outcome of community-acquired pneumonia?

Shariatzadeh, M.R.; Marrie, T.J.

Sari University of Medical Sciences - Department of Infectious Diseases

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 792-799 (14 ref.)

**Keywords:** Culture Media; Pneumonia-drug therapy; Prospective Studies; Community-Acquired Infections;

Pneumonia-diagnosis; Treatment Outcome

**Abstract:** This prospective study was conducted in 6 hospitals in Edmonton, Canada to determine the factors associated with obtaining sputum for culture and the effect of sputum culture on the management of patients with community-acquired pneumonia [CAP]. Participants were 1362 adults who were hospitalized with CAP. Sputum was obtained from 539 [39.6%] patients, of which 507 [94.1%] were good quality, acceptable for culture; 171 [33.7%] of these had a positive sputum culture. Levofloxacin, cefuroxime and azithromycin were the most common antibiotics prescribed for the groups with positive sputum culture and no sputum collection. Positive sputum culture was demonstrated in only a small number of patients with CAP; this did not affect antimicrobial therapy or mortality.

## **Stomach Neoplasms**

## diagnosis

## Bony metastasis of gastric adenocarcinoma.

Devkaran, Bhavesh; Jhobta, R.; Verma, D.K <u>E-mail:devkaranbhavesh@yahoo.co.in</u>

Indira Gandhi Medical College - Department of Surgery

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 137-138 (4 ref.)

**Keywords:** Stomach Neoplasms-pathology; Stomach Neoplasms-radiotherapy; Neoplasm Metastasis-diagnosis; Endoscopy, Gastrointestinal; Tomography, X-Ray Computed; Biopsy; Fractures, Spontaneous-etiology; Survival Rate; Fractures, Spontaneous-radionuclide imaging; Bone Neoplasms-secondary; Adenocarcinoma

#### Gastric cancer in Khartoum; presentation and management.

Elmahi, Self I.M.; Elsamani, Mohamed El.; Ahmed, Mohamed E.

University of Khartoum - Faculty of Medicine - Department of Surgery

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 54-59 (20 ref.)

**Keywords:** Stomach Neoplasms-pathology; Stomach Neoplasms-surgery; Mortality; Patient Satisfaction; Treatment Outcome; Lymph Nodes; Endoscopy, Gastrointestinal; Survival Rate; Prospective Studies; Disease Management

**Abstract:** Gastric cancer is a dreadful killer worldwide. There is enormous variation in the occurrence of the disease throughout the world. Only scarce data is available about the features and the prognosis of the disease in Africa. This study was conducted to determine clinicopathological characteristics, and the treatment outcome of patients with gastric malignancy in Sudan. A prospective descriptive study of 105 patients presented with gastric cancer over 2 year period in a general surgical unit in Khartoum Teaching Hospital [KTH]. The mean age at presentation was 57 years [range 23-78 years], and most of patients were males [80%]. The most frequent mode of presentation was epigastric pain [90%], loss of weight [90%] and anorexia [70%]. Upper gastric tumor location accounted for 42%. Histologically; carcinoma accounted for 100 cases, lymphoma in 3 and lelomyosarcoma in 2 cases. Adenocarcinoma was the most frequent [94%], well differentiated adenocarcinoma and intestinal type were also commonest varieties [31%] and [17%] respectively. Most of the patients had blood group O[+] [50%]. Palliative resection was attempted in 48 patients [45%] with a survival duration of 14 months compared with 5 month for those who had no resection [n = 20]. Morbidity rate was significantly higher in the resection group compared with non-resection group, [18.8%] and [4.2%] respectively, while the mortality rate showed no difference, [15.9%] and [14.6%] respectively. Patients satisfaction was significantly better in the resection group. Gastric cancer is a disease affecting younger males presenting very late where palliative resection is an option in 45% of patients with satisfactory outcome and a mean of 14 months survival.

## **Subdural Effusion**

## epidemiology

Contralateral subdural effusion secondary to decompressive craniectomy performed in patients with severe traumatic brain injury: incidence, clinical presentations, treatment and outcome.

Yang, X.F.; Wen, L.; Li, G.; Zhan, R.Y.; Ma, L.; Liu, W.G.

Zhejiang University - College of Medicine, and institute of Brain Medicine - Department of Neurosurgery

Medical Principles and Practice 2009; 18 (1): 16-20 (19 ref.)

**Keywords:** Subdural Effusion-diagnosis; Subdural Effusion-therapy; Decompression, Surgical; Brain Injuries-surgery; Craniotomy-adverse effects; Incidence; Treatment Outcome; Craniocerebral Trauma-surgery; Tomography, X-Ray Computed

**Abstract:** This study was performed to better understandpostoperative contralateral subdural effusion, an uncommon but serious complication secondary to decompressive craniectomy in patients with head trauma. Data from medical records of 169 patients who underwent decompressive craniectomy after head trauma between 2003 and 2006 were collected. The data included demographics, clinical presentations, treatment and outcome. Of the 169 patients, etc., 16.5%] had contralateral subdural effusion. On the average, this complication was found 14 days after decompressive craniectomy. Of the 11 patients, conservative treatment was effective in 7 with a gradual resolution which lasted 52.7 days on average. The effusion in the remaining 4 patients led to progressive deterioration of clinical presentation, and surgical intervention was necessary: subduroperitoneal shunting in 3 cases and burr hole drainage in the remaining 1 case. Our findings confirmed that postoperative contralateral subdural effusion was not an uncommon complication secondary to decompressive craniectomy. Most contralateral subdural effusions resolved spontaneously after conservative management, but surgical management may be necessary if the patients develop deteriorating clinical manifestations or the subdural effusion has an apparent mass effect.

# **Surgical Wound Infection**

## epidemiology

Postoperative infection after surgical removal of impacted mandibular third molars: An analysis of 110 consecutive procedures.

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Kuwait University - Faculty of Dentistry - Department of Surgical Sciences

Medical Principles and Practice 2009; 18 (1): 48-52 (25 ref.)

**Keywords:** Tooth, Impacted-surgery; Molar, Third; Mandible; Tooth Extraction-adverse effects; Dry Socket; Pain; Mandibular Nerve-physiopathology

**Abstract:** The aim of this study was to evaluate the rate of postoperative infection and other complications after the surgical removal of impacted mandibular third molars. Medical records of 110 consecutive patients with 130 consecutive surgical extractions of impacted lower third molar teeth performed under local anesthetic using strict aseptic techniques were reviewed and analyzed. No systemic antibiotics were administered or prescribed after the surgery. The rates of postoperative infection and other complications were evaluated clinically. Of the 130 surgical removals, 110 in 90 patients met the inclusion criterion of nonuse of antibiotics. Fifty-nine were female and the remaining 31 were male. Average age was 25.2 years. Of the 110 surgeries, postoperative infection occurred in 6 [5.5%]. Other complications were alveolar osteitis [n = 9, 8.2%], pain lasting more than 1 week [n = 5, 4.3%] and sensory dysfunction of the inferior alveolar nerve [n = 2, 0.8%]. The low rates of postoperative infection and other complications observed in this study encouraged us to continue surgical removal of impacted mandibular third molars without routine prescription of antibiotics unless indicated for other medical reasons.

## Synovial Cyst

## complications

Synovial cysts and compression neuropathies: a case report.

Guirgis, Marianne; Nissanka, Thilaka; Al Mashaleh, Manal; Manolios, Nicholas

Department of Rheumatology

Journal of the Royal Medical Services 2009; 16 (1): 62-64 (9 ref.)

**Keywords:** Nerve Compression Syndrome-etiology; Ulnar Nerve Compression Syndromes; Arthritis, Rheumatoid-complications

**Abstract:** Synovial cysts may arise from any joint affected with an inflammatory arthropathy and can cause compression of adjacent structures. The commonest joint affected is the knee. Synovial cysts arising from other joints are uncommon and those arising from the elbow joint are a rarity. Here we describe a patient with rheumatoid arthritis who presented with right ulnar nerve palsy due to a large synovial cyst arising from the elbow joint and extended into the forearm. In addition to the description of the case a literature review of compression neuropathies secondary to synovial cysts has been performed.

# Tachycardia, Supraventricular

### diagnosis

Paroxysmal supraventricular tachycardia in the rural setting- case reports and review.

Ashok, Thiraviam P.; Sharma, Sanjay; Jain, Mahesh

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Ibra Hospital - Department of Child Health

Oman Medical Journal 2008; 23 (2): 104-107 (9 ref.)

**Keywords:** Tachycardia, Paroxysmal; Tachycardia, Supraventricular-drug threrapy; Adenosine-therapeutic use; Rural Health Services; Review Literature as Topic; Disease Management

**Abstract:** A case report of three Omani children age ranging from one month to ten years managed in a district hospital. All three children reverted to normal sinus rhythm after I.V. adenosine and are under follow up. A detailed review of management of Paroxysmal Supraventricular Tachycardia is discussed. Treatment options include no treatment, vagal manoeuvres, long term drug therapy, radiofrequency catheter ablation, and surgery. Recurrence may occur and patients have to be educated about home management and when to seek medical help.

#### Testis

## **Injuries**

# Effects of heat on testicular tissue with protective role of cyancobalamin [vitamin B12] in albino rats.

Kumar, Hemant: Nagvi, Anium

Basic Medical Sciences Institute - Department of Anatomy

Medical Forum Monthly 2009; 20 (2): 19-22 (15 ref.)

**Keywords:** Testis-anatomy and histology; Hot Temperature-adverse effects; Vitamin B 12-administration and dosage; Vitamin B 12-therapeutic use; Testis-drug effects; Rats; Protective Agents

**Abstract:** The effects of heat on all tissues of the body are very well known but enough literature is not available on the effects of heat on testicular tissue. So this study was undertaken to see the effects of heat on testicular tissue with protection provided by Cyanocobalamin [vitamin B12]. Anatomy department BMSI, JPMC, Karachi. October 2008 to November 2008. This experimental study was done at Anatomy department, Basic Medical Sciences Institute, Jinnah Postgraduate Medical Centre, Karachi. Thirty male healthy Albino rats of 90-120 days of age and 200-250 grams of weight were selected and divided into three groups comprising of ten rats each. Group A served as control. Group B was given heat of 40-45 °C for six hours daily for six weeks with room heater and maintained on room thermometer. Group C received heat and Cyanocobalamin, at a dose of 1.4 mcg / 100 g body weight. At the end of six weeks, weight of all animals, gross changes of testes and weight of testes were recorded. Group B showed decrease in weights of all animals, gross changes in testicular tissue [i.e. dilatation of blood vessels and bleeding spots] and reduction in testicular weight. Group C which was protected with Cyanocobalamin, showed increase in body weight, slight dilatation of blood vessels and increase in testicular weight as compared to Group B. Present study concluded that Cyanocobalamin [vitamin B12] reduced the damaging effects of heat on testicular tissue.

# **Theophylline**

## pharmacokinetics

# Theophylline loaded gastroretentive floating tablets based on hydrophilic polymers: preparation and in vitro evaluation.

khan, Ferdous; Ibn Razzak, Shaikhul Millat; khan, Ziaur Rahman; Azad, Mohammad Abul Kalam; Chowdhury, Jakir Ahmed; Reza, Selim

University of Dhaka - Faculty of Pharmacy - Department of Pharmaceutical Technology

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 155-161 (20 ref.)

**Keywords:** Drug Carriers-chemical synthesis; Drug Carriers-pharmacokinetics; Gastrointestinal Transit; Dosage Forms; Polymers-chemical synthesis; Tablets

Abstract: This investigation describes the preparation and in vitro evaluation of gastroretentive floating tablet of theophylline. Two hydrophilic cellulose derivatives, Methocel K100M and Methocel K15MCR were evaluated for their gel forming and release controlling properties. Sodium bicarbonate and citric acid were incorporated as gas generating agents. The effects of soluble components [sodium bicarbonate and citric acid], gel forming agents and amount variation of theophylline on drug release profile and floating properties were investigated. Tablets were prepared by direct compression technique. Formulations were evaluated for in vitro buoyancy and drug release study was evaluated for eight hours using USP XXII paddle-type dissolution apparatus using 0.1N HCl as dissolution medium. The release mechanisms were explored and explained with zero order, first order, Higuchi and Korsmeyer equations. The release rate, extent and mechanisms were found to be governed by polymer and floating agent content. The content of active ingredient was also a vital factor in controlling drug release pattern. It was found that polymer content and amount of floating agent significantly affected the mean dissolution time, percentage drug release after 8 hours, release rate constant and diffusion exponent.

#### **Thiazines**

## pharmacokinetics

## Bioequivalence studies of two brands of meloxicam tablets in healthy Pakistani volunteers.

Hasan, Syed Muhammad Farid; Shoaib, Muhammad Harris; Hassan, Fouzia; Inam-Ur-Rehman

University of Karachi - Faculty of Pharmacy - Department of Pharmaceutics

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 199-204 (18 ref.)

**Keywords:** Anti-Inflammatory Agents, Non-Steroidal; Therapeutic Equivalency; Chromatography, High Pressure Liquid; Analgesics; Thiazines-pharmacokinetics; Tablets

**Abstract:** The pharmacokinetic parameters of two oral formulations of meloxicam tablets were compared in a randomized, single oral dose; two treatments cross over design in 12 healthy male volunteers belonging to Pakistan under fasting conditions. After an overnight fast, the volunteers received 30 mg meloxicam and the blood samples were collected up to 96 hours and drug concentrations were determined by a validated HPLC method. Various pharmacokinetic parameters were determined from the plasma concentration-time curves of both formulations. The 90% confidence intervals obtained by analysis of variance were 87-94% for Cmax and 88-97% for AUC0-t, that fell well

within the acceptance range of 80-125%. Also, no significant difference [beta = 0.05, Wilcoxon Signed rank test] were detected between Tmax of both formulations. The two formulations were well tolerated and no adverse effect was reported during the study.

# Thromboangiitis Obliterans

## therapy

Autologous bone marrow-derived stem cell therapy in patients with Buerger's disease.

Peyrovi, Habibolah; Shahgasempour, Shapour; Tofigh, Arash Mohammadi; Fathi, A.; Ahmadzade, E.; Bakhtiari, A. Shahid Beheshti University /MC - Taleghani Hospital - Tissue Engineering and Nanomedicine Research Center **Endovascular Journal** 2009; 2 (1): 18-22 (20 ref.)

**Keywords:** Thromboangiitis Obliterans-complications; Stem Cell Transplantation; Bone Marrow; Transplantation, Autologous; Endothelial Cells-pathology; Amputation; Granulocyte Colony-Stimulating Factor; Angiogenesis Inducing Agents; Thrombosis

Abstract: Patients suffering from Thromboangiitis Obliterans [TAO] or Buerger's disease have endothelial cell dysfunction and the severity of the disease lies in the need for amputation in more than a quarter of all sufferers. The aim of present study was to determine whether granulocyte colony-stimulating factor mobilized autologous bone-marrow derived mononuclear cells transplantation improves endothelial dysfunction in these patients. Circulating mononuclear cells containing endothelial progenitor cells were obtained from patients following bone-marrow mobilization with granulocyte colony stimulating factor. Mononuclear cells and CD34+ cells were enumerated prior to intranuscular injection into the affected limbs. In this pilot study, autologous bone-marrow derived mononuclear cell therapy collected from peripheral blood following granulocytes colony stimulating factor [G-CSF] mobilization was effective, safe and resulted in sustained clinical results for patients with severe peripheral occlusive arterial diseases.

# **Ticlopidine**

# analogs and derivatives

Timing of coronary artery bypass grafting in patients on clopidogrel therapy, a review.

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University of Arizona Sarver Heart Center - The Southern Arizona VA health Care system

Endovascular Journal 2009; 2 (1): 3-4 (24 ref.)

**Keywords:** Ticlopidine-therapeutic use; Ticlopidine-adverse effects; Coronary Artery Bypass; Aspirin-therapeutic use; Aspirin-adverse effects; Coronary Artery Bypass-therapy; Stents; Preoperative Care; Cardiac Surgical Procedures; Postoperative Hemorrhage; Platelet Aggregation Inhibitors; Anticoagulants

**Abstract:** Clopidogrel in addition to aspirin is important pharmacological treatment of patients with severe coronary artery disease or recent coronary artery stenting. However, due to fear for preoperative bleeding, cardiac surgeons routinely tend to hold clopidogrel before cardiac surgery. The goal of this manuscript is to review current literature on this issue.

## **Tobacco**

Tobacco education in medical schools: survey among primary care physicians in Bahrain.

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Ministry of Health - Chronic Diseases Unit

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 969-975 (19 ref.)

**Keywords:** Cross-Sectional Studies; Schools, Medical; Physicians, Family; Questionnaires; Education, Medical; Smoking; Smoking Cessation

**Abstract:** This cross-sectional study assessed the extent of tobacco education and intervention skills training among primary care physicians in Bahrain. Out of 217 family physicians in the country, 120 [55%] answered a self-administered questionnaire. A total of 24% were current smokers and 10% were ex-smokers. Inadequate education at medical school about tobacco use and interventions was reported by the majority of physicians. The subject of smoking-related diseases, psychology of tobacco use and management of tobacco dependence were inadequately covered in medical schools. Training in smoking cessation was particularly neglected, with only 4% of physicians receiving training about tobacco cessation interventions.

### genetics

Transformation and expression of Na+/H+antiporter vacuolar [AtNHX1] gene in tobacco plants under salt stress.

Soliman, Mohamed H.; Omar, Hanaa S.; El Awady, Mohamed A.; Al Assal, Sallah; Gamal El Din, Abd Alkader Y. Cairo University - Faculty of Agriculture - Department of Genetics

Arab Journal of Biotechnology 2009; 12 (1): 99-107 (20 ref.)

**Keywords:** Plant Leaves; Salts; Polymerase Chain Reaction; Plants, Genetically Modified; Sodium-Hydrogen Antiporter

Abstract: Saline soil is a serious problem worldwide, and it is necessary to improve the salt tolerance of plants to avoid the progressive deterioration of saline soil. Agrobacterium based system was employed to transfer a vacuolar Na[+]/H[+] antiporter [AtNHX1] gene into tobacco leaf discs. Hundred thirty putative transgenic tobacco plants were obtained. The leaf painting assay was applied to select the transformants containing the bar gene [basta herbicide resistance]. In addition, the stable integration of the AtNHX1 gene was confirmed by PCR analysis. The expression of encoding sequence AtNHX1 gene was detected by the accumulation of salt in the transgenic tobacco plants under the salt stress conditions. Transgenic tobacco plants expressing the AtNHX1gene were able to grow in the presence of 150 to 300 mM NaCl and accumulated significantly at high concentrations of sodium ions in the leaves. However, the wild type plants could not tolerate a concentration up to 150 mM NaCl. This remarkable high salt tolerance in transgenic tobacco plants can be helpful in the future for applying important phytoremdiation plants in high saline

# **Tocopherols**

## therapeutic use

Role of vitamin-E on rat liver-amiodarone: an ultrastructural study.

Zaki, Mohamed Samir A.; Eid, Refaat A.

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King Khalid University - Faculty of Medicine - Departments of Anatomy and Pathology [Electron Microscopy Unit]

Saudi Journal of Gastroenterology [The] 2009; 15 (2): 104-110 (28 ref.)

**Keywords:** Amiodarone-adverse effects; Amiodarone-therapeutic use; Amiodarone-pharmacokinetics; Arrhythmias, Cardiac; Tocopherols-pharmacokinetics; Hepatitis, Toxic-etiology; Hepatocytes-ultrastructure; Electron Microscopy tomography; rats; Liver-drug effects

Abstract: Amiodarone, a class III antiarrhythmic drug, has been found to be effective in the management of patients with life-threatening ventricular arrhythmias. The aim of this study was to test whether the co administration of vitamin-E with amiodarone can reduce amiodarone-induced liver damage. Twelve male albino rats were divided into three groups [ml vegetable oil/day by oral gavages daily for 2 weeks and were used as control group. The rats of the second group received 5.4 mg amiodarone/100 gm rat dissolved in vegetable oil daily by oral gavages for 2 weeks. In the third group, the rats received 5.4 mg amiodarone and 5 mg vitamin-E/100 gram rat dissolved in 2 ml vegetable oil by oral gavages daily for 2 weeks. Two weeks after treatment, the rats were sacrificed and liver specimens were immediately taken and processed for transmission electron microscopic examinations. Sections from the rat liver receiving amiodarone examined by electron microscopy showed disrupted hepatocytes with increased vacuolations. Degenerated organelles and disrupted nuclei were observed. The microvilli of bile canaliculi were disrupted and the hepatocytes showed increased lipid contents. Both endothelial cells and Kupffer cells were damaged. Phospholipids inside the mitochondria showed a loss of cristae. Sections from the liver of rats received amiodarone and vitamin-E showed lesser effects, especially in depositions of phospholipids in the mitochondria and the whole organelles and the nucleus showed minor damage in comparison to the previous group. Milder hepatotoxic effects are seen in rats administered amiodarone and vitamin E simultaneously suggesting that vitamin-E may play a role in amelioration of the effects of amiodarone.

# **Trabeculectomy**

Outcome of trabeculectomy surgery in primary open angle glaucoma.

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Rustaq Hospital - Department of Ophthalmology

Oman Medical Journal 2008; 23 (2): 86-89 (17 ref.)

Keywords: Glaucoma, Open-Angle-surgery; Treatment Outcome; Retrospective Studies; Intraocular Pressure

Abstract: Retrospective study to evaluate the short term outcome and contributing prognostic factors of trabeculectomy in terms of intraocular pressure in Omani patients of South Batinah region with primary open-angle glaucoma. This study involved retrospective evaluation of 18 patients [22 eyes] with primary open angle glaucoma who underwent primary trabeculectomy between February 2005 and February 2008. All patients were aged over 40 years and were Omani. Follow-up for all subjects lasted at least 6 months or more [Average follow up 388 days with standard deviation of 182]. Successful control of Intraocular pressure [IOP] was defined as achieving IOP of 21 mmHg or less without medication [complete success]. The results are presented with particular emphasis being placed only on intraocular pressure [IOP] control. The tonometric success rate of trabeculectomy in controlling the IOP at 21mmHg or less without any medication was 46% [complete successes], 18% had qualified success [Post operative IOP 21 mm Hg or less with one topical medication], while 36% trabeculectomies failed to show desired results. The results of this retrospective study underline that the procedure of trabeculectomy has moderate success in controlling the intra ocular pressure in the study population. The procedure failed to show the desired result in almost one third of the patients [36%] and topical medical treatment was reinstated in these patients with either two or three drugs. However these results lead to the following question: Should trabeculectomy be the therapy of first choice in the early stage of glaucoma?

#### Trachoma

## epidemiology

Trachoma, is it history?

Taylor, Hugh R.

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University of Melbourne - Melbourne School of Population Health **Saudi Journal of Ophthalmology** 2009; 23 (1): 37-42 (46 ref.)

**Keywords:** Trachoma-immunology; Trachoma-diagnosis; Trachoma-prevention and control; Trachoma-drug therapy; Azithromycin-therapeutic use; Chlamydia trachomatis; Blindness

**Abstract:** Chlamydia have co-evolved with humans and cause blinding trachoma when communities are stressed and families cannot maintain good hygiene. This permits repeated episodes of reinfection that produce a prolonged and intense immune-mediated inflammatory reaction [active trachoma] and leads to scatting and trichiasis. The promotion of clean faces and periodic antibiotic distribution [azithromycin] reduce the transmission of infection and are combined with trichiasis surgery and environmental improvement in the SAFE Strategy. This strategy has already eliminated trachoma from several countries and WHO aims to eliminate blinding trachoma worldwide by 2020.

# **Trigonella**

# toxicity

Toxicity of trigonella foenum graecum [fenugreek] in bone marrow cell proliferation in rat.

Araee, M.; Norouzi, M.; Habibi, G.; Sheikhvatan, M.

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Islamic Azad University - Department of biology

Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 126-130 (22 ref.)

**Keywords:** Bone Marrow Examination; Fetal Development-drug effects; Hematopoiesis-drug effects; Herbal Medicine; Bone Marrow Cells-drug effects; Cell Proliferation-drug effects; Rats, Wistar

**Abstract:** Fenugreek has a wide range of medical applications and its medicinal use has been clear in several studies, however, few studies are available on effects on haematopoietic stem cell of bone marrow. The goal of the present study was to investigate the effect of Fenugreek on fetal macroscopic diameters and microscopic bone marrow cell histological changes in its teratogenic dosages. Fenugreek decoction was dissolved in 1.5 milliliter distilled water and injected intraperitoneumly in three dosages of 0.8 g/kg, 1.6 g/kg, and 3.2 g/kg for three groups of Wistar female rats mated by Wistar male. For another group [as control group] only 1.5 milliliter distilled water was injected. Bone marrow tissue was prepared from rat fetus and was cut using a microtome and stained with hematoxylin and eosin. Sections were evaluated for changes using light microscope. LD50 for the measurement of teratogenic dosage of fenugreek was 4.1 and 3.5 g/kg in female and male rat, respectively. There was a positive relation between the injected drug dosage and fetal mortality rate. Among all fetal diameters, ear to ear diameter was decreased in groups received Fenugreek decoction. The severity of stem cell histological changes caused by 3.2 g/kg drug injection was lower than distilled water injection and in evaluation of other cells, differences in the severity of histological changes across three groups with different drug dosages and control group was detected. Fenugreek in teratogenic dosages can decrease the severity of bone marrow cell proliferation and increase fetal mortality rate.

#### Triticum

## Effect of exogenous ascorbic acid on wheat tolerance to salinity stress conditions.

Zeid, Farghal A.; El Shihy, Osama M.; Ghallab, Abdel Rahman M.; Ibrahim, Fatma El Zahraa A. Cairo University - Faculty of Agriculture - Department of Agricultural Botany, Plant Physiology Division

Arab Journal of Biotechnology 2009; 12 (1): 149-173 (94 ref.)

**Keywords:** Sodium Chloride; Ascorbic Acid; Plant Components; Oxidative Stress; Protective Agents; Seawater; Salinity

Abstract: In vitro experiments were performed to determine responses of wheat calli to ascorbic acid [AsA] concentrations [0, 250, 500, 1000 and 2000 ppm] under different levels of sea water [0, 15, 30 and 45%] and to determine suitable concentrations of AsA for exogenous treatments to enhance wheat tolerance to salinity. Results of this study indicated that AsA of [500, 1000 and 2000 ppm] concentrations improved tolerance of wheat calli to salinity. Two pot experiments were conducted during the two successive seasons 2004-2005 and 2005-2006 to determine the effect of exogenous AsA of 0, 500, 1000 and 2000 ppm concentrations at 45 and 75 days after sowing on growth, chemical composition and yield of wheat plants cv. Giza 168 [salt sensitive] irrigated with different levels of sea water [0, 15, 30 and 45%] in comparison with plants of cv. Sids 1 [partially salttolerant]. The obtained results in this study clearly proved the role of AsA in increasing tolerance of wheat plants to salt stress. Exogenous AsA enhanced plant growth, chemical composition and consequently the productivity of wheat plants under salinity stress conditions. These effects may be attributed to the protective role of AsA in plant cells from the oxidative stress induced by salinity. It could be concluded that exogenous AsA of 1000 ppm concentration at 45 and 75 days after sowing is the most effective treatment to increase wheat tolerance to salinity.

#### **Tuberculosis**

## diagnosis

# Distinguishing tuberculosis and crohn's disease in developing countries: How certain can you be of the diagnosis?

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Saudi Journal of Gastroenterology [The] 2009; 15 (2): 142-144 (21 ref.)

**Keywords:** Tuberculosis-pathology; Tuberculosis-radiography; Crohn Disease-diagnosis; Crohn Disease-pathology; Crohn Disease-radiography; Abdominal Pain-etiology; Diarrhea-etiology; Colonoscopy; Antibiotics, Antitubercular-economics; Polymerase Chain Reaction; Developing Countries

**Abstract:** Distinguishing tuberculosis and Crohn's disease in patients presenting with chronic abdominal pain and diarrhea is a huge diagnostic challenge, particularly in tuberculosis endemic countries. A large number of patients with Crohn's disease are initially misclassified as having Intestinal tuberculosis in places where tuberculosis is endemic before they are treated for Crohn's disease. Although a variety of endoscopic, radiological and histological criteria have been recommended for the differentiation, it often proves difficult in routine clinical practice. Future prospective studies are required in patients with granulomatous colitis to prevent unnecessary inappropriate anti tuberculous therapy for patients with Crohn's disease and appropriate early treatment for a patient with tuberculosis.

## Optimizing double repetitive PCR for molecular typing of mycobacterium tuberculosis.

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National Commission for Biotechnology

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 7-12 (17 ref.)

**Keywords:** Mycobacterium tuberculosis-isolation and purification; Polymerase Chain Reaction; Tuberculosis, Multidrug-Resistant

**Abstract:** Establishing a simple, cost effective and efficient method for the molecular epidemiologic examination of Mycobacterium tuberculosis based on double repetitive element polymerase chain reaction technique. Fourteen isolated and characterized Mycobacterium tuberculosis provided genomic samples for the amplification using the double repetitive element polymerase chain reaction method, the resulting DNA fragments were stained using silver staining and results were compared with the original detection method. The introduction of relatively simple modifications improved significantly the efficiency of isolate stain discrimination, without rendering the method more costly. The proposed improved method can be expected to better serve as a molecular epidemiologic technique for the fight against the widespread mounting threat of tuberculosis in developing countries.

## **Turner Syndrome**

#### Bone mineralization and body composition in turner syndrome.

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National Research Centre - Medical Research Division - Department of Clinical Genetics

Medical Journal of Cairo University [The] 2009; 77 (1): 5-10 (19 ref.)

**Keywords:** Bone Density; Bone Diseases, Metabolic; Body Composition; Body Weight; Body Height; Cytogenetic Analysis; Chromosome Aberrations; Anthropometry

Abstract: Females with Turner syndrome are at risk for decreased bone density from ovarian failure and possibly from haploin-sufficiency for bone-related X-chromosome genes. We studied the relation between bone density, anthropometry, body composition and chromosomal abnormalities in Turner syndrome. The study included 18 females with Turner syndrome. They were divided in two groups. Group A consisted of 12 cases with 45, X karyotype [classic Turner syndrome] and their mean age of 13.5 +/- 5.5 years. Group B included 6 cases with mosaic karyotype and their mean age of 16.3 +/- 4.2 years. Bone mineral density [BMD] was determined using dual energy X-ray absorptiometry scans [DEXA]. BMD was measured in the femoral neck [FN], lumber spine [LS], and forearm [FA]. Body composition was assessed using RJL body fat analyzer. Anthropometry was carried out for each case. Seventy-two percent of females investigated had osteope-nia. When BMD was expressed as z-scores (individual values compared to normal reference data matched for age and weight] for all cases at it was 0.587 +/- 0.10 at FN and was 0.630 +/- 0.17 at LS. In group A bone mineral density was decreased [osteope-nia] by 66.7% in FN, and 25% in LS. In group B bone mineral density was decreased by 66.7% in FN, and 50% in LS. When comparing females in group A with those of group B, there was no statistical difference in BMD at femur and spine. The ostopenia found in patients of group A and B was not related to type of X-chromosomal aberrations. Group A showed significant increase in TBW and Corinic index SDS as compared to group B. Body fat and lean percentages are similar in the two studied groups. Also, no correlation was found between BMD and body weight, body height, body fat or percentage body fat. Body composition changes seem to be more impressive in classic Turner patients, while BMD changes are similar in the two groups. Achieving optimal bone density is of critical importance for fracture prevention in TS.

# **Tympanic Membrane Perforation**

The effect of tympanic membrane perforation on real-ear to coupler difference acoustic transform function.

Ghannoum, Mohamed Tarek; El Dabae, Mohamed El Badr; El Abd, Shereen Mohamed; Dabbous, Abeir Osman; Fadel, Hanaa Ahmad

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Medical Journal of Cairo University [The] 2009; 77 (1): 79-87 (33 ref.)

Keywords: Hearing Loss, Conductive; Audiometry, Pure-Tone; Audiometry, Speech

Abstract: Real-Ear-to Coupler Difference [RECD] is the difference in decibels, as a function of frequency, between the SPL at a specified measurement point in the ear canal and the SPL in a 2cc coupler, for a specified input signal. We investigated the effects of tympanic membrane perforation on the RECD. RECD was obtained using an insertion gain analyzer for 24 adult patients with dry tympanic membrane perforation [group 1] [31 ears] and 20 healthy adult control subjects [group 2] [40 ears]. Cases showed moderate conductive hearing loss in their mean hearing threshold level. There was no statistically significant difference between both anterior and posterior locations as regards the degree of hearing loss or as regards the RECD. There was a statistically significant difference of RECD at frequencies 250Hz, 500Hz and 750Hz, between both groups. The RECD was 3 to 6dB lower in group 1 than in group 2. There was a statistically significant difference on comparing RECD at frequencies 250Hz, 500Hz, 750Hz and I000Hz in right ears, and at frequencies: 250Hz and 500Hz and 750Hz in the left ears of both groups. In group 1, there was no statistically significant difference of RECD values at different frequencies between right and left sided perforations and there was no statistically significant difference of RECD values at different frequencies between both genders except at 1500Hz. There was no statistically significant correlation between the RECD and the age of the patients or their air-bone gap. RECD in patients with tympanic membrane perforation is lower than normal at frequencies [250Hz-750Hz]. We recommend that this discrepancy should be compensated for if average normal RECD are used in the preselection of target and gain to avoid under-amplification at lower frequencies. However, the large inter-subject variation strongly suggests the need for individual RECD measurements whenever possible in fitting aids for patients having tympanic membrane perforations.

## **Ulna Fractures**

## surgery

Flexible intramedullary fixation of pediatric forearm fractures - report on twenty-one patients.

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Salmaniya Medical Complex - Orthopedic Department

Bahrain Medical Bulletin 2009; 31 (1): 13-16 (21 ref.)

**Keywords:** Radius Fractures-surgery; Fracture Fixation, Intramedullary-methods; Foream; Pediatrics; Retrospective Studies

**Abstract:** The aim of the study is to assess the outcome of treating pediatric forearm fractures with flexible intramedullary nails. Orthopedic Department, Salmaniya Medical Complex, Kingdom of Bahrain. Retrospective study. Between May 2004 and April 2006, twenty one pediatric patients with displaced forearm fractures were treated with flexible intramedullary nails at SMC. The study group included 19 boys and 2 girls aged 6 and 14 years [mean 9.3]. Closed reduction and percutaneous introduction of nails was tried in all patients; failure to do so, a mini incision was performed to facilitate the procedure. Closed reduction and percutaneous introduction of the nails was possible in 9 patients. In 8 patients, a mini incision was needed for either the radius or the ulna. In 4 patients, both the radius and ulna needed exposure through mini incision. The patients were followed-up for a period between 6.7 to 35.7 weeks [mean 18.7 weeks]. All fractures were united in acceptable alignment and nails were removed at a mean interval of 18.7 weeks. Nine pediatric patients had closed forearm fracture reduction and twelve patients needed mini incision; there were few minor complications and the outcome was satisfactory.

## **Urethral Obstruction**

#### diagnosis

Evaluation of renal transit time [RTT] in children with MR urography.

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New Egyptian Journal of Medicine [The] 2009; 40 (1): 19-33 (31 ref.)

**Keywords:** Urethral Obstruction-radiography; Urography; Magnetic Resonance Imaging; Contrast Media; Child; Retrospective Studies; Hydronephrosis-diagnosis; Hydronephrosis-etiology; Hydronephrosis-radiography

**Abstract:** To evaluate use of dynamic contrast material-enhanced.magnetic resonance [MR] urdgraphy for measurement, of renal transit time [RTT of a contrast agent through the kidney and collecting system so as to identify obstructive uropathy in children. One hundred twenty-six children suspected of having hydronephrosis were hydrated prior to undergoing both conventional and dynamic contrast-enhanced MR urography of the kidneys and urinary tract. A three-dimensional sequence was used to track passage of contrast agent through the kidneys. Time between the appearance of contrast material in the kidney and its appearance in the ureter at or below the level of the lower pole of

the kidney was defined as RTT. Bland-Altman plots were used to quantify intraand interobserver performance. In 30 children, a nuclear medicine renogram was also obtained, and the half-life of renal signal decay after furosemide administration was derived and compared with the MR imaging RTT by using receiver operating characteristic curves. On the basis of RTT, kidneys were classified as normal [RTT </= 245 seconds], equivocal [245 seconds > RTT </= 490 seconds], or obstructed [RTT > 490 seconds]. Receiver operating characteristic analysis for comparison of results of MR imaging and diuretic renal scintigraphy showed good agreement between the modalities, with a mean area under the curve of 0.90. When used in conjunction with morphologic images obtained in the same, examination, RTT generally allowed normal kidneys to be differentiated from obstructed and partially obstructed kidneys.

# **Uterine Cervical Neoplasms**

## epidemiology

Knowledge, attitudes, and practice related to cervical cancer screening among Kuwaiti Women.

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Medical Principles and Practice 2009; 18 (1): 35-42 (35 ref.)

Keywords: Health Knowledge, Attitudes, Practice; Mass Screening; Vaginal Smears

**Abstract:** To assess the knowledge, attitude, and practice regarding cervical cancer screening among Kuwaiti women. A total of 300 married Kuwaiti women were randomly selected from those who visited the clinics irrespective of reason[s] for the visit. A structured questionnaire covering sociodemographic characteristics, knowledge, attitude, and practice related to cervical cancer screening was administered. Of the 300 women, complete information was collected from 281 [93.7%], the knowledge about the test was adequate in 147 [52.3%] women, while 86 [30.6%] had adequate attitude towards the test and only 67 [23.8%] had an adequate practice. The main reason given for not having had a Papanicolaou smear was that it was not suggested by the doctor. Among all the respondents 220 [78.7%] would prefer a female doctor to conduct the test. The level of education was the only significant factor independently associated with inadequate knowledge and attitude towards Papanicolaou smear test [p = 0.006 and p = 0.001, respectively] when adjusted for the effect of other factors in multivariate logistic regression analysis. However, age [p < 0.001], level of education [p = 0.028], and number of years since last visit with a gynaecologist [p = 0.005] were significant factors independently associated with inadequate practice of the test. Our findings showed that a well-designed health education programme on cervical cancer and benefits of screening would increase the awareness among Kuwaiti women.

## prevention and control

Cervical cancer prevention in Bahrain: Review.

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Bahrain Medical Bulletin 2009; 31 (1): 27-33 (61 ref.)

**Keywords:** Uterine Cervical Neoplasms-history; Uterine Cervical Neoplasms-pathology; Mass Screening; Cytology; Uterine Cervical Neoplasms-epidemiology

Abstract: Cervical cancer is estimated as the second most common cause of death worldwide from cancer in women. Approximately 650 women die from this cancer every day; half-million are diagnosed each year. Until recently, the few available reports on the prevalence of cancer from the Arabian Gulf Council States [GCC] were suggestive that the incidence of uterine cancer in general was less common compared with those reported from western country. Cancer registries in the GCC States in the last five years indicate that uterine cancer has moved to the third on the list of leading causes of cancer in the region. Among a population of 1,025, 000 in the kingdom of Bahrain, it is estimated that 10-15 new cases of cervical cancer are diagnosed each year [2001-2007], and approximately 4-6 deaths from this disease per annum. There is an evidence of a gradual increase in the incidence of cervical cancer compared with the figures two decades ago. The ratio of endometrial compared with cervical cancer was 1:2 but the two incidences are presently reversed. Cytology screening for uterine cancer was started in Bahrain in 1971, which soon was integrated in postnatal and in gynecological clinics. Recently successful program of public health screening was introduced against breast cancer in Bahrain; it is imperative that a similar program of national screening against uterine and cervical cancer combined with a national campaign for immunization of adolescent girls against human papilloma virus be integrated in the program and thus reducing the mortality from these two leading causes of cancer death among women. In this article a review of definitions, prevalence and history of cervical cytology service in Bahrain will be presented. Contemporary concepts of cervical cytology, new standard of care and current practice guidelines in screening and prevention will be reviewed. Finally, a discussion on the ways and means of improving the existing cytology and prevention programs in Bahrain will be discussed.

#### Varicocele

#### surgery

#### Embolization of testicular vein for treatment of recurrent varicocele.

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Journal of the Royal Medical Services 2009; 16 (1): 22-25 (8 ref.)

**Keywords:** Spermatic Cord-surgery; Infertility, Male-surgery; Embolization, Therapeutic; Recurrence; Treatment Outcome

**Abstract:** To assess the efficacy of embolization of testicular vein for the treatment of recurrent varicocele. Between January 2002 and December 2005, a total of 64 patients with a mean age of 28 [18-40 years] were treated by embolization of testicular vein for management of recurrent varicocele at Prince Hussein Bin Abdullah II Center in King Hussein Medical Center. Indication for treatment was as either infertility or presence of dragging pain in the left testicle. Embolization was accomplished successfully in 53 patients [82.8%], whereas it was difficult in eleven patients because of venous spasm and anomalous collaterals which could not be cannulated. One patient required transfusion of blood due to bleeding from the internal spermatic vein. Embolization technique for internal spermatic vein for treatment of recurrent varicocele is a safe technique with low morbidity. It is also minimally invasive with high success rate.

## Varicocelectomy for scrotal pain. when and how?

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New Egyptian Journal of Medicine [The] 2009; 40 (1): 67-71 (9 ref.)

Keywords: Scrotum; Pain; Pain Measurement; Postoperative Complications; Treatment Outcome

**Abstract:** The aim of the present study was to assess and compare pre-and postoperative scrotal pain in patients with vasicocele who underwent varicocelectomy with different approaches. The study included 72 consecutive patients with left-sided varicocele who had left scrotal pain for more than 3 months. All patients underwent varicocele ligation using either a subinguinal or inguinal approach with or without external spermatic vein ligation. The intensity of Scrotal Pain was assessed both before and after the surgery. 60 patients have attended the follow-up. Of the 60 patients available for follow up, the surgery was successful in 50 [83.4%],[37. [61.1%] patients reported the complete resolution of pain while 13 patients [22.3%] reported partial resolution. Symptoms worsened in a single case and pain persisted postoperatively in 9 cases [15.7%]. There were no statistically significant differences in the characteristics of the pain and grade of varicocele between postoperative groups. A significant difference was observed in postoperative success between patients who had external spermatic vein ligation and those who did not, regardless of the surgical approach [inguinal or subinguinal]. Varicocelectomy using either inguinal or subinguinal approaches is an effective and reasonable treatment option in this patient group and should include external spermatic vein ligation for a satisfactory outcome.

#### **Violence**

## statistics and numerical data

#### Physical violence against school children.

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Journal of the Arab Board of Medical Specializations 2009; 10 (1): 34-41 (30 ref.)

**Keywords:** Child Abuse-statistics and numerical data; Parent-Child Relation; Students; Prevalence; Parents; Cross-Sectional Studies; Child; Schools

**Abstract:** To find out the prevalence of violence against children in Iraq through a sample of primary school children, and to throw light on some of the associated factors. Sixty primary schools were surveyed. A total of 4528 students [2396 boys and 2132 girls age between 8-11 years] were interviewed to collect information about age, gender, number of sisters and brothers, father's and mother's occupation, in addition to information about exposure to violence [source, frequency, reasons for violence, sequel of violence, reaction and feeling of the child towards violence]. The results showed that 64% of the sample children were exposed to violence. The main source was the mother [62.5%] followed by the father [59.2%]. Quarrels were the main reason for violence [74.9%]. Regarding gender; 75.5% of the boys and 52.5% of the girls were exposed to violence. The most common reaction of the child was silence 38.6%, crying 33.6% and violence 14.1%. While 44.7% agreed that violence was not good, 29.3% take it as a natural norm. The results also showed that 93% of children living in families with domestic violence were exposed to violence. Two thirds of the children are subjected to violence at home, school, or street. The perpetrators are mainly the parents. Some of children tolerate violence and consider it as normal. There is a link between domestic violence against women and that against children. There was a highly significant association between large family size and violence.

#### Vitamin B 12

#### blood

High frequency of low serum levels of vitamin B[12] among patients attending Jordan University Hospital.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 853-860 (22 ref.)

**Keywords:** Hospitals, University; Questionnaires; Vitamin B 12 Deficiency-epidemiology; Vitamin B 12 Deficiency-etiology; Vitamin B 12 Deficiency-complications

**Abstract:** This study aimed to estimate the status of serum vitamin B[12] level in patients attending Jordan University Hospital in Amman, and to examine the relationship with demographic data, chronic illness, dietary habits, haematological parameters and symptoms related to vitamin B[12] levels. A total of 838 patients completed a questionnaire and gave blood samples; 44.6% were vitamin B[12] deficient [< 180 pg/mL] and 34.2% had hypovitaminosis [180-300 pg/mL]. Vitamin B[12] deficiency was associated with memory impairment, low meat intake and strict vegetarian [vegan] diets. The high frequency of low vitamin B[12] warrants the development of a strategy to correct this problem in Jordan.

#### Waist Circumference

## Cut point of waist circumference in Egyptian diabetic patients.

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Internal medicine national institute of diabetes and endocrinology

New Egyptian Journal of Medicine [The] 2009; 40 (1): 51-57 (17 ref.)

**Keywords:** Diabetes Mellitus; Risk Factors; Obesity; Body Mass Index; Body Constitution; Mass Screening; Cholesterol; Triglycerides; Sensitivity and Specificity; Cardiovascular Diseases-etiology

**Abstract:** Abdominal obesity is increasingly recognized as a major] risk factor for cardiovascular disease [CVD]. Compared with body mass index [BMI], waist circumference appear to be more strongly associated with metabolic risk factors.there are contradictor about the cut point of waist circumference in different ethnic group. Our aim therefore was to measure waist circumference and other criteria of the metabolic syndrome in Egyptian diabetic patients to determine Egyptian cut point for waist. 2651 diabetic patients with different duration of diabetes participated in this study. There is ethnic variation as regard waist circumference in diabetic Egyptian patients, mean WC [M = 102cm. F = 109cm]. It is clear that female waist is bigger than male and this is Egyptian variation- So cut point for metabolic syndrome must be changed due to ethnic variation. By using receiver-operating characteristic curves [ROC] the best point was [M = 94cm, F = 98cm] for waist cut point to determine metabolic syndrome and 30kg/m2 for body mass index. Correlation analysis proof that waist is better than BMI as a tool to detect diabetic complications like retinopathy and IHD. And regression analysis show that in diabetic female patient's glycaemic state is linked to BMI.

#### Waist Circumference in recently diagnosed type 2 diabetics.

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National Institute of Diabetes and Endocrinology - Internal Medicine

New Egyptian Journal of Medicine [The] 2009; 40 (1): 34-39 (17 ref.)

**Keywords:** Diabetes Mellitus, Type 2-diagnosis; Body Constitution; Body Mass Index; Cholesterol; Triglycerides; Metabolic Syndrome X; Waist-Hip Ratio; Obesity-diagnosis

Abstract: Body mass index [BMI] is often used to reflect total body fat amount [general obesity] whereas waist circumference [WC], waist-to-hip ratio or waist-to height ratio is used as a surrogate of body fat centralization [central obesity]. The clustering of cardiovascular risk factors in association with disturbance of glucose and lipid metabolism is referred to as metabolic syndrome. Men and women who have waist circumference > 94cm and 80 cm respectively, are considered to be at increased risk for cardio metabolic disease. The relation between waist circumference and clinical outcome is consistently strong for diabetes risk, and waist circumference is a stronger predictor of diabetes than BMI. Our study is the first study to measure waist circumference in newly diagnosed Egyptian diabetic patients. We found that, 56% of newly diagnosed Egyptians diabetic patients have metabolic syndrome. At the same time we found a statistically significant difference as regard metabolic syndrome components between low waist and high waist groups but the difference was statistically insignificant when we compared low BMI with high BMI groups in newly diagnosed diabetics. This means that waist circumference is a simple tool to predict diabetes and metabolic syndrome better than other measures.

# Waist circumference: a better index of fat location than WHR for predicting lipid profile in overweight/obese Iranian women.

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EMHJ - Eastern Mediterranean Health Journal 2009; 15 (4): 899-905 (26 ref.)

**Keywords:** Waist-Hip Ratio; Cross-Sectional Studies; Overweight; Obesity; Body Mass Index; Lipids-blood; Anthropometry; Cholesterol-blood; Triglycerides-blood; Cholesterol, LDL

**Abstract:** We carried out a clinical cross-sectional study on 728 overweight and obese women aged 20-60 years during July 2005-May 2006 in Sistan and Baluchestan, Islamic Republic of Iran. Body mass index [BMI] and waist circumference [WC] showed significant correlation with total cholesterol [TC], triglycerides [TG] and low-density lipoprotein cholesterol. After adjustment for age and BMI, this was also true for WC with TC and TG. There was no such correlation between waist-to-hip ratio [WHR] and lipid profile. Hence, WC was a better anthropometric index of fat location than WHR to estimate lipid profile in overweight and obese adult women.

# Waste Disposal, Fluid

Optimization of bacteriological quality of biosolids by lime addition.

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Iran University of Medical Sciences - School of Health - Department of Environmental Health Engineering Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 29-34 (17 ref.)

Keywords: Bacteria; Oxides; Cadmium Compounds; Hydrogen-Ion Concentration

**Abstract:** Lack of well-stabilized biosolids is a basic problem for many municipal wastewater treatment plants in Iran. Disposed biosolids from west Ahvaz wastewater treatment plant were generally used for agricultural activities. Initial evidence showed that these biosolids were untreated and had the potential to transmit many pollutants to the environment and create hazards for public health, although anaerobic digester was selected for this wastewater treatment plant. The main objective of this research was to evaluate and optimize the bacteriological quality of biosolids by lime addition in west Ahvaz wastewater treatment plant. The stability and reuse potential of biosolids from existing anaerobic digester and lime added biosolids were investigated. Lime addition to biosolids was performed in the reactor with 30 L capacity. Averge amounts of fecal coliforms and viable helminthes ova in disposal biosolids from enaerobic digester were 1.3'1015 MPN / g of dry solids and 314 ova / 4 g of dry solids, respectively. By lime addition with the ratio about 0.265 g Ca [OH]2 per g of dry solids, pH was not dropped under 12 and growth of fecal coliform was not detected after 30 days. In this regard, discharged biosolids from this plant was unstable and very dangerous for reuse or disposal. Lime addition could stabilize the biosolids and reduce fecal coliforms more than 99.99% and had concordance with class B of United State Environmental Protection Agency criteria. Lime-stabilized biosolids could hence be well used for reconditioning the poor soil and for covering of solid waste landfill-sites.

#### Performance evaluation of waste water stabilization ponds in Arak-Iran.

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Tehran University of Medical Sciences - School of Public Health - Department of Environmental Health Engineering Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 41-46 (17 ref.) Keywords: Climate

Abstract: Arak waste stabilization pond facilities consist of two stabilization pond systems, module 1 and module 2. The existing facilities have had several problems in their operation. The objectives of this research were to evaluate the performance of stabilization ponds in wastewater treatment of the city of Arak, because of several problems in their operation, and to prepare a scheme of its upgrading, if necessary. Within the period of May to September 2007, analyses were carried out for both raw and treated wastewaters. Results of these investigations showed that the average effluent concentrations of BOD5, COD and SS taken from primary and secondary facultative ponds of module 1 were 91.5, 169, 114; and 70, 160, 123 mg/L, respectively. These results indicated that the effluent of the primary facultative ponds of module 1 were complied with the Iranian treated wastewater standards for agricultural reuse in terms of BOD5 and COD concentrations; hence the secondary facultative ponds could be changed to other primary facultative ponds in order to increase the capacity of wastewater treatment plant. For module 2, BOD5, COD, and SS average concentrations of treated wastewater for the secondary and tertiary facultative ponds were obtained as 69, 101, 77; and 76, 127, 78 mg/L, respectively. Thus the effluent of the secondary facultative pond was complied with the considered standards in terms of all studied parameters. Consequently, the tertiary facultative pond could be changed to other secondary facultative pond to upgrade both the quality and the quantity of treated wastewater.

# **Water Microbiology**

Rapid monitoring of indicator coliforms in drinking water by an enzymatic assay.

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 7-10 (19 ref.)

**Keywords:** Enterobacteriaceae-enzymology; Water; Fermentation; Escherichia coli-enzymology; Water Pollutants; Chlorine

**Abstract:** Coliform group has been extensively used as an indicator of drinking water quality and historically led to the public health protection concept. Multiple tube fermentation technique has been currently used for assessment of the microbial quality of drinking water. This method, however, has limitations. Enzymatic assay constitute an alternative approach for detecting indicator bacteria, namely total coliforms and E.coli in various aquatic environments. This study compared the performance of LMX broth as an enzymatic assay with the standard methods multiple tube fermentation

technique and presence-absence test, for the detection of indicator coliforms in drinking water samples. In addition, the potential effect of water quality on the microbial detection method was assayed through measurement of some physicochemical parameters. From the 50 drinking water samples tested, 8 [16%] and 7 [14%] contained total coliforms and E.coli as indicated by all three techniques. Although on average the LMX recovered more total coliforms and E.Coli numbers comparing to multiple tube fermentation, but there was no significant difference. A significant difference existed between the level of residual chlorine for positive and negative samples. In conclusion, enzymatic assay showed a rapid and less labor method, allowing the simultaneous detection of total coliforms and E.coli. The method is particularly useful in the early warning of fecal pollution of drinking water.

# Yoghurt

The effect of natamycin on keeping quality and organoleptic characters of yoghurt.

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Omar El Mokhtar University - Faculty of Veterinary Medicine **Arab Journal of Biotechnology** 2009; 12 (1): 41-47 (16 ref.)

Keywords: Natamycin-pharmacology; Hydrogen-Ion Concentration; Antifungal Agents; Sensation

**Abstract:** This study was planned to evaluate the shelf life and the changes occurring in the organoleptic characters of yoghurt supplemented with natamycin during the storage period. Yoghurt samples were prepared and divided into two groups; natamycin was added to the first group at the levels of 10 and 20 mg / kg, while the second group of yoghurt was prepared without natamycin and kept as a control. Yoghurt cups were stored all over the experimental period [35 days] at 4 +/- 1°C. Organoleptic examinations, estimation of pH and titertable acidity as well as enumeration of total moulds and yeasts were done on both treated and control yoghurts. The yoghurts were examined at the 3[rd] and 7[th] days, then weekly till the end of storage period. The treated group of yoghurt showed acceptable degree of organoleptic examination, while yeasts and moulds were not detected till the end of the storage time. On the other hand, control samples of yoghurt showed unacceptable degrees of examination and contamination with moulds and yeasts. Natamycin was proved to be a suitable and effective antifungal agent which increases the shelf life of yoghurt without changing in the normal characters of the products.

### **Zinc**

# chemistry

Equilibrium modelling and spectroscopic studies for the biosorption of ZN[+2] ions from aqueous solution using immobilized spirulina platensis.

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Iranian Journal of Environmental Health Science and Engineering 2009; 6 (1): 1-6 (14 ref.)

**Keywords:** Spirulina; Spectrum Analysis; Biomass; Spectroscopy, Fourier Transform Infrared; Hydrogen-Ion Concentration

Abstract: Biosorption equilibrium of zinc ions to Spirulina platensis both in free and immobilized forms were studied in batch system with respect to pH, metal ion concentration, algal dosages and time. The maximum adsorption was observed at pH = 8, optimum metal ion concentration and algal dose were 100 mg/L and 1g/100mL, respectively. Biosorption equilibrium was established in 90 minutes. The maximum attainable biosorption was found to be 97.1% for Spirulina platensis. The equilibrium adsorption capacities of adsorbents used for zinc ions were measured and extrapolated using Langmuir and Freundlich isotherms models. Langmuir model was found to be in better correlation with experimental data. The maximum Langmuir constants Q [mg/g] and b were 92.93 and 0.0012, respectively for Spirulina platensis embedded in calcium alginate matrix. The immobilized Spirulina platensis in calcium of alginate matrix was the best biosorbent. 0.1 M EDTA was used as an eluant, which allowed the reuse of biomass in three biosorption-desorption cycles without considerable loss in biosorption capacity. 89-95% zinc ions were desorbed with EDTA. The functional groups involved in zinc biosorption were identified by using Fourier Transform Infra Red spectroscopy. Spectroscopic analysis of algae revealed the presence of carboxyl, hydroxyl, amino, amide and imine groups, which were responsible for biosorption of zinc ions.

## deficiency

Zinc deficiency and supplementation in ovariectomized rats: their effect on serum estrogen and progesterone levels and their relation to calcium and phosphorus.

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Pakistan Journal of Pharmaceutical Sciences 2009; 22 (2): 150-154 (23 ref.)

**Keywords:** Zinc-metabolism; Ovariectomy; Estrogens-blood; Progesterone-blood; Calcium-blood; Phosphorus-blood; Rats, Sprague-Dawley

**Abstract:** The aim of this study is to examine how zinc deficiency or supplementation affects estrogen and progesterone and calcium and phosphorus levels in the serum. The study was carried out on 40 adult female rats of Spraque-Dawley species. The rats were allocated to four groups: Group 1: Control, Group 2: Ovariectomized [OVX]

control. Group 3: OVX-Zinc-supplemented. Group 4: OVX-Zinc-deficient. Blood samples were taken from the experimental animals by decapitation method and analyzed in terms of estrogen, progesterone, calcium, phosphorus, magnesium and zinc levels. Group 1 had the highest estrogen levels [p < 0.05]. Estrogen levels in group 3 were higher than those in groups 2 and 4 [p < 0.05]. The lowest estrogen levels were found in group 4 [p < 0.05]. Progesterone levels were higher in group 1 than in groups 2, 3 and 4 and the same parameter in group 3 was higher than those in groups 2 and 4. The highest calcium and phosphorus levels were obtained in groups 1 and 3 [p < 0.05]. Calcium and phosphorus levels in group 2 were higher than those in group 4 [p < 0.05]. There was no difference among groups with regard to magnesium levels. Group 3 had the highest serum zinc levels [p < 0.05]. Zinc levels in group 1 were higher than those in groups 2 and 4 and the levels in group 2 were higher than those in group 4. Findings of the study show that zinc deficiency causes a significant decrease in calcium and phosphorus levels and that zinc supplementation prevents these adversities in ovariectomized rats.

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El Messery, Lobna O.

ARTHRITIS, RHEUMATOID (genetics)

El Mirghani, Ahmed

FIBROMATOSIS, AGGRESSIVE (diagnosis)

El Moatasem, Emad M.

PANCREATITIS (diagnosis)

El Nadeef, M.A.I.

**ORAL HEALTH** 

El Nakib, M.

HEALTH KNOWLEDGE, ATTITUDES,

PRACTICE

El Sabiq, M.

RENAL DIALYSIS (adverse effects)

El Saved. El Saved M.

PROPOLIS (therapeutic use)

El Sayed, Enas

MENINGOMYELOCELE (complications)

El Sayed, Naglaa M.

HYDROCEPHALUS, NORMAL PRESSURE

(diagnosis)

El Shahawy, Yaser Mohamad PREGNANCY TRIMESTER, FIRST

El Shamaa, A.

DIABETIC NEPHROPATHIES (immunology)

El Shamy, K.A.I.

LIPID PEROXIDATION

El Sharkasy, Mohamad Hamed

ANESTHESIA, GENERAL

El Shebini, Yehya H.

KIDNEY CALCULI (therapy)

El Shihy, Osama M. TRITICUM

El Tahir, M.A.

ENDOSCOPY, GASTROINTESTINAL

El Imam, Mohamed

RENAL DIALYSIS

Elamin, Anwaar Ali

RENAL DIALYSIS (adverse effects)

Elamin, Salah Eldeen M.

RESPIRATORY TRACT INFECTIONS (drug therapy)

Elewa, Gamal

INFERTILITY, FEMALE

Elfaki, Elbagir Ali A.

GENERAL SURGERY (standards)

Elgorashi, Abubakr S.

HALOPERIDOL (administration and dosage)

Elhafiz, Mohamed

RENAL DIALYSIS

Elhilu. Abdulkhaliq Hussain

GENERAL SURGERY (standards)

Elhussin, Durria Mansour

SCHISTOSOMIASIS (prevention and control)

Elmahi, Self I.M.

STOMACH NEOPLASMS (diagnosis)

Elnima, Maha

PERICARDIAL EFFUSION (etiology)

Elsamani, Mohamed El.

STOMACH NEOPLASMS (diagnosis)

Elshal, Sahar

ANESTHESIA, CAUDAL

Eltaybe, N.H.

ENDOSCOPY, GASTROINTESTINAL

Elwan, Amany E.

LUPUS ERYTHEMATOSUS, SYSTEMIC (blood)

Emara, Ibraheim

WAIST CIRCUMFERENCE

Emara, Ibrahem

DIABETES MELLITUS (complications)

Ergene, Neyhan

ZINC (deficiency)

Ersanli, Dilaver

BLINDNESS, CORTICAL (chemically induced)

Eshak, Mariam G.

PLANT OILS (toxicity)

Eshraghyan, Mohamad Reza

MELATONIN (therapeutic use)

Eslambolchi, Azadeh

CORONARY ANGIOGRAPHY (methods)

Eslaminejad, Mohamadreza Baghaban

MESENCHYMAL STEM CELLS (drug effects)

Essali, Mohamed Adib

BIOMEDICAL RESEARCH (methods)

Fadel, Hanaa Ahmad

TYMPANIC MEMBRANE PERFORATION

Fadhil, I.

**TOBACCO** 

Fakeir, Aisha

PURPURA, THROMBOCYTOPENIC,

IDIOPATHIC (epidemiology)

Fallahi, Gholam Hossein

INTESTINAL POLYPS (epidemiology)

Farag, A.

DENTAL RESTORATION, PERMANENT

Farag, Ibrahim M. PLANT OILS (toxicity)

Farahmand, Fatemeh

INTESTINAL POLYPS (epidemiology)

Farahmandm, Siamak

**HEART** 

Fard, Leila Miralizadeh

CORÓNARY ANGIOGRAPHY (methods)

Farzadkia, M.

WASTE DISPOSAL, FLUID

Fathi. A.

THROMBOANGIITIS OBLITERANS (therapy)

Fedorowicz, Zbys

**PLAGIARISM** 

Feizi, Farideh

DIABETES MELLITUS, EXPERIMENTAL (pathology)

Feldman, Arthur M.

CARDIOVASCULAR DISEASES (diagnosis)

Fida, Mubassar

MALOCCLUSION, ANGLE CLASS II

Forouzandeh Moghadam, Mehdi

**BONE MORPHOGENETIC PROTEINS 4** (pharmacology)

Fouda, Ghada Said

ENTERAL NUTRITION

Freije, Afnan Mahmood

LEAD (blood)

Frenck Jr, R.W.

BRUCELLOSIS (complications)

Frencken, J.E.

DENTAL RÉSTORATION, PERMANENT

Frustaci, Andrea

CARDIOVASCULAR DISEASES (diagnosis)

Furtado, Sharon

OFLOXACIN (administration and dosage)

Gaafar, Maha

RESPIRATORY SYNCYTIAL VIRUS, HUMAN

Gaballah, Inasse Ibrahim

BREAST NEOPLASMS (diagnosis)

Gabar, Alwaleed A.

RENAL DIALYSIS

Gadour, Mohammed Osman El Hassan

MYASTHÉNIA GRAVIS

Gajra, B.

KETOPROFEN (administration and dosage)

Gamal El Din, Abd Alkader Y.

TOBACCO (genetics)

Gamal El Din, Sheref

PHACOEMULSIFICATION (methods)

Gamer, N.M.

ENDOSCOPY, GASTROINTESTINAL

Ganesh, K. Sankar

CHROMIUM (toxicity)

Garjani, A.

**PHARMACISTS** 

Garjani, Af. PHARMACISTS

Gaur, N.

ZINC (chemistry)

George, Sara Mathew

DYSENTERY, AMEBIC (diagnosis)

Ghafouri, Hamed Basir

BONE SUBSTITUTES (chemicalsynthesis)

Ghafourian, T. PHARMACISTS

Ghahramani, Farhad

ANUS, IMPERFORATE (diagnosis)

Ghaidari, Mohammed E.

ATRIAL FIBRILLATION (complications)
FIBROMUSCULAR DYSPLASIA (complications)

Ghallab, Abdel Rahman M.

TRITICUM

Ghanem, Kadry Z.

PLANT OILS (toxicity)

Ghanizadeh, F.

POLYCYCLIC HYDROCARBONS, AROMATIC

**Ghannoum, Mohamed Tarek** 

TYMPANIC MEMBRANE PERFORATION

Ghasemi, Massoud

CORONARY ANGIOGRAPHY (methods)
IDIOPATHIC PULMONARY FIBROSIS (therapy)

Ghazi khansari, Mahmoud

MELATONIN (therapeutic use)

Ghazzawi, Imad

GASTROINTESTINAL HEMORRHAGE (diagnosis)

Gheith, Rasha

ARTHRITIS, RHEUMATOID (genetics)

Gholyaf, M.

QUALITY OF LIFE

Ghonaim, Mabrouk M.

PROPOLIS (therapeutic use)

Ghraiz, S.M.

VITAMIN B 12 (blood)

Gojwari, Tariq A.

PANCREATIC PSEUDOCYST (diagnosis)

Gokak, Varadaraj P.

HEPATITIS, TOXIC (etiology)

Gokhale, Uday

LIPOMA (diagnosis)

Gondal, Khalid Masud

GALLBLADDER NEOPLASMS (diagnosis)

Goraya, Azimallah Asif

LYMPHATIC DISEASES (etiology)

Gorjipour, Fazel

BONE SUBSTITUTES (chemicalsynthesis)

Gowda, D.V.

PROPRANOLOL (Pharmacokinetics)

Guirgis, Marianne

SYNOVIAL CYST (complications)

Gul, Husamettin

HEMORRHOIDS (drug therapy)

Gulec, Mahir

HEMORRHOIDS (drug therapy)

Gumus, Tuna

BLINDNESS, CORTICAL (chemically induced)

Habib Ur Rahman

CORONARY ARTERY DISEASE (drug therapy)

Habib, Enmar I.

KIDNEY CALCULI (therapy)

Habibi, G.

TRIGONELLA (toxicity)

Haddadi, Gholam Hasan

MELATONIN (therapeutic use)

Haddadin, Khaldoun

RECONSTRUCTIVE SURGICAL PROCEDURES (methods)

Haddadin, Rania

JERVELL-LANGE NIELSEN SYNDROME

(diagnosis)

Hadi, Jamaledin

CORONARY ANGIOGRAPHY (methods)

Haider, Saida

NIGELLA SATIVA (chemistry)

Hakim, Fakhri

JERVELL-LANGE NIELSEN SYNDROME

(diagnosis)

Halasa, Y.

HEALTH PERSONNEL

Halaseh, L.J.

VITAMIN B 12 (blood)

Haldar, Premashish J.

JAUNDICE, OBSTRUCTIVE (etiology)

Haleem, Darakhshan Jabeen NIGELLA SATIVA (chemistry)

NIGELLA SATIVA (CHEINISH)

Hallak, Joelle A.

ASTIGMATISM (therapy)

Hamad, Abdel Salam Mohamed

NEOPLASMS (epidemiology)

Hamdy, Mona

BETA-THALASSEMIA (complications)

Hamid, A.

EYE INJURIES (complications)

Hammouri, Qasem M.

BLINDNESS (etiology)

Han, Mon He

ARTÉRIOVENOUS FISTULA (therapy)

Hanafy, Aahmed

LUPUS ERYTHEMATOSUS, SYSTEMIC (blood)

Harfoushi, Kassab

GASTROINTESTINAL HEMORRHAGE

(diagnosis)

Hariga, Ines

PARANASAL SINUS DISEASES (surgery)

Harisa, Gamal Eldin I.

PROPOLIS (therapeutic use)

Harmal, Nabil S.

PLASMODIUM FALCIPARUM (drug effects)

Hasan, Syed Muhammad Farid

THIAZINES (pharmacokinetics)

Hashemi, H.

**COLORING AGENTS** 

Hassab, H.

ORAL HEALTH

Hassan Bitar, S.

CESAREAN SECTION (statistics and numerical data)

Hassan, Fouzia

THIAZINES (pharmacokinetics)

Hassan, H.A.

CUCUMOVIRUS (Genetics)

Hassan, Hussam Z.

BACILLUS (genetics)
CORYNEBACTERIUM (genetics)

Hassan, Khaled Fawzy Zaky

BREAST NEOPLASMS (diagnosis)

Hassan, Nahed

ASTHMA (epidemiology)

Hassan, Nahed S.

LUPUS ERYTHEMATOSUS, SYSTEMIC (blood)

Hassanvand, M.S.

WASTE DISPOSAL, FLUID

Hassoon, Abbas Fadhel

DIARRHEA, INFANTILE (therapy)

Haweleh, Abdelfatah

JERVELL-LANGE NIELSEN SYNDROME

(diagnosis)

Hdaib, Maha

ANESTHESIA, EPIDURAL

Heidari, M.

WASTE DISPOSAL, FLUID

Heidarnazhad, H.

HEALTH KNOWLEDGE, ATTITUDES,

PRACTICE

Hejazi, Issa

JERVELL-LANGE NIELSEN SYNDROME

(diagnosis)

Helal, Soheir

RESPIRATORY SYNCYTIAL VIRUS, HUMAN

Helmy, Amr

ENTERAL NUTRITION

ANESTHESIA. GENERAL

Hiari, Moh'd

POSTOPERATIVE NAUSEA AND VOMITING

(therapy)

Hida, Moustapha

RECTAL DISEASES (diagnosis)

Hijazi, Manaf

ANTIPHOSPHOLIPID SYNDROME (diagnosis)

Hill, A.G.

DOMESTIC VIOLENCE

Honar, Behzad Nemati

**HEART** 

Hosseini, Seyed M.V.

ANUS, IMPERFORATE (diagnosis)

Hsu, Ping I.

HELICOBACTER INFECTIONS (diagnosis)

Hummieda, Sami

LABOR, INDUCED

Hussain, Aamir

EXERCISÉ TEST

Hussain, Nawed

APPENDICITIS (diagnosis)

Hussain, Wajid MYCOSES (diagnosis)

Hussein, Abeer M.R.

CYCLOSPORINE (toxicity)

Hussein, Gehan

MITRAL VALVE PROLAPSE

RESPIRATORY SYNCYTIAL VIRUS, HUMAN

Hussein, Hany

LUPUS ERYTHEMATOSUS, SYSTEMIC (blood)

Hussein, Ibtessam M.R.

BETA-THALASSEMIA (complications)

Hussein, Mohammed Omer

ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE (analysis)

Hussein, Mona H.

CARCINOMA, EHRLICH TUMOR (drug therapy)

Hussein, Nawfal R.

HELICOBACTER PYLORI

Ibn Razzak, Shaikhul Millat

THEOPHYLLINE (pharmacokinetics)

Ibrahim, Fatma El Zahraa A.

TRITICUM

Ibrahim, Hamdy M.

KIDNEY CALCULI (therapy)

Ibrahim, Ibrahim Shabaan

ANESTHESIA, GENERAL

Ibrahim, Maged I.

CARCINOMA, EHRLICH TUMOR (drug therapy)

Ibrahim, S.Z.

ENDOSCOPY, GASTROINTESTINAL

Ibrahim, Salwa

KIDNEY FAILURE, CHRONIC

Idamat, Asma

EPINEPHRINE (therapeutic use)

Idris, Saadeldin A.

APPENDICITIS (diagnosis)

Idris, Tomadir A.

APPENDICITIS (diagnosis)

Ihde, Stefan

DENTAL IMPLANTS

Ikram, Aamer

MYCOSES (diagnosis)

Inam-Ur-Rehman

THIAZINES (pharmacokinetics)

Iqbal, Munazza

GALLBLADDER NEOPLASMS (diagnosis)

Ismaeel, S.A.

PERICARDIAL EFFUSION (etiology)

Issa, Abdulla Ali

UTERINE CERVICAL NEOPLASMS (prevention and control)

Jaafarzadeh, N.

WASTE DISPOSAL, FLUID

Jabri, Ali A.

BETA-LACTAMASES (drug effects)

Jacob, Beena

HERBAL MEDICINE

Jafar, A.

SMOKING (epidemiology)

Jaffer, Najla

ASTHMA (epidemiology)

Jain, Mahesh

TACHYCARDIA, SUPRAVENTRICULAR (diagnosis)

Jalali, M.

WATER MICROBIOLOGY

Jamali, A.R.

HIP DISLOCATION, CONGENITAL (surgery)

Jamsheer, Huda

UTERINE CERVICAL NEOPLASMS (prevention and control)

Jang, Tae An

ARTERIOVENOUS FISTULA (therapy)

Janho, Kristy

ANESTHESIA, EPIDURAL

Jarjees, Mohamed T.T.

ALKALINE PHOSPHATASE

Javed, Iffat

PRE-ECLAMPSIA (drug therapy)

Jebreen, Sami

DENTAL EQUIPMENT (utilization)

Jessup, Mariell

CARDIOVASCULAR DISEASES (diagnosis)

Jha, Amitabhj

KIDNEY FAILURE, ACUTE (diagnosis)

Jhobta, R.

STOMACH NEOPLASMS (diagnosis)

Junaid, Ayesha

CORONARY ARTERY DISEASE (drug therapy)

Junaid, Mariam

DYSENTERY, AMEBIC (diagnosis)

Juniua, Bashir Ahmad

CEREBELLAR CORTEX (anatomy and histology)

Jurjus, A.R.

HEALTH KNOWLEDGE, ATTITUDES,

**PRACTICE** 

Kaabneh, Awad

VARICOCELE (surgery)

Kaboli, Afsoon IDIOPATHIC PULMONARY FIBROSIS (therapy)

Kahhaleh, J.G.

HEALTH KNOWLEDGE, ATTITUDES,

PRACTICE

Kamal, Karim

ANESTHESIA, CAUDAL

Kamath, Dinesh

JAUNDICE, OBSTRUCTIVE (etiology)

Kamel, L.

DIABETIC NEPHROPATHIES (immunology)

Kanwal, Sumera

NIGELLA SATIVA (chemistry)

Kanzi, Khalafalla

FIBROMATOSIS, AGGRESSIVE (diagnosis)

Karamian, Hamid

INTESTINAL POLYPS (epidemiology)

Karim, Enas T.A.

POSTNATAL CARE (standards)

Karoum, A.O.

ANEMIA (diagnosis)

Karvandi, Mersedeh

ATRIAL FIBRILLATION (complications) CORONARY ANGIOGRAPHY (methods) **HEART** 

Kasaee, N. WASTE DISPOSAL, FLUID

Kashif, Muhammad

APPENDICITIS (diagnosis)

Kaya, Ali O.

ACUTE CORONARY SYNDROME (chemically

induced)

Keilani, Mohamed

ANESTHESIA, EPIDURAL

Khader, Maher

ICHTHYOSIS, LAMELLAR (complications)

Khadr, M.E.

LIPID PEROXIDATION

Khalid, Ayesha

CORONARY ARTERY DISEASE (drug therapy)

Khalid, Khalid Eltahir

RENAL DIALYSIS (adverse effects)

Khalid, Mohsen

WAIST CIRCUMFERENCE

DIABETES MELLITUS (complications)

Khalil, Mohammad

KIDNEY FAILURE, ACUTE (diagnosis)

Khalil, Siddiq Ibrahim

CORONARY CARE UNITS (organization and administration)

Khalil, Wagdy K.B.

PLANT OILS (toxicity)

Khalilian, A.R.

HEPATITIS C, CHRONIC (drug therapy)

Khamassi, Khaled

PARANASAL SINUS DISEASES (surgery)

Khan, A.A.

MOUTH DISEASES

Khan, Arif O.

GLAUCOMA (etiology)

khan, Ferdous

THEOPHYLLINE (pharmacokinetics)

Khan, Mohammad Daud

ORBITAL CELLULITIS (epidemiology)

Khan, Mohammad Naeem

ORBITAL CELLULITIS (epidemiology)

Khan, Muhammad Younas

CEREBELLAR CORTEX (anatomy and histology)

Khan, Saba

PRE-ECLAMPSIA (drug therapy)

Khan, Shamraiz

KIDNEY DISEASES (diagnosis)

khan, Ziaur Rahman

THEOPHYLLINE (pharmacokinetics)

Khasawneh, Ibraheem ANESTHESIA EPIDURAL

Khatami, Gholam Reza

INTESTINAL POLYPS (epidemiology)

Khereba, A.H.

**CUCUMOVIRUS** (Genetics)

Khodabandeh, Saber

SODIUM-POTASSIUM-EXCHANGING AT PASE (analysis)

Khodadad, Ahmad

INTESTINAL POLYPS (epidemiology)

Khori, Firas

VARICOCELE (surgery)

Khouri, Antwan

DENTAL EQUIPMENT (utilization)

Khoursheed, Mousa

DIVERTICULUM, COLON (diagnosis)

Khreisat, Imad

JERVELL-LANGE NIELSEN SYNDROME

(diagnosis)

Komurcu, Ferhan

PARANEOPLASTIC SYNDROMES (diagnosis)

Kon, Ba Ju

ARTÉRIOVENOUS FISTULA (therapy)

Korkmaz, Ahmet

HEMORRHOIDS (drug therapy)

Korkonikitas, P.

IDIOPATHIC PULMONARY FIBROSIS

(physiopathology)

Kouris, N.

**IDIOPATHIC PULMONARY FIBROSIS** 

(physiopathology)

Kuhl, Uwe

CARDIOVASCULAR DISEASES (diagnosis)

Kumar, Hemant

TESTIS (Injuries)

Kuzhan, Okan

PARANEOPLASTIC SYNDROMES (diagnosis)

Lafta, Riyadh K.

VIOLENCE (statistics and numerical data)

Laghari, Naeem Ahmed

MULTIPLE MYELOMA (diagnosis)

Lahmouz, F.

HYPERTENSION (etiology)

Lai, Kwok Hung

HELICOBACTER INFECTIONS (diagnosis)

Lamiae, Chater

RECTAL DISEASES (diagnosis)

Lanzer, Peter

AORTA, THORACIC (abnormalities)

Lestringant, Gilles G.

ACNE VULGARIS (drug therapy)

Levin, Glenn N.

CARDIOVASCULAR DISEASES (diagnosis)

Lewis, S.

DRUG DELIVERY SYSTEMS (methods)

SUBDURAL EFFUSION (epidemiology)

Liu, W.G.

SUBDURAL EFFUSION (epidemiology)

Lo, Gin Ho

HELICOBACTER INFECTIONS (diagnosis)

Loothar, B. A.

EUPHORBIA

Lotfy, Wael

MITRAL VALVE PROLAPSE

Louca, Nadia A.

OSTEITIS DEFORMANS (therapy)

SUBDURAL EFFUSION (epidemiology)

Madani, Awni

JERVELL-LANGE NIELSEN SYNDROME (diagnosis)

Madhavan, V.

OFLOXACIN (administration and dosage)

Madkour, Magdy M.

LYCOPERSICON ESCULENTUM (genetics)

Mafouz, Mohamed H.

WAIST CIRCUMFERENCE

Mahdavi, Seied Rabie

MELATONIN (therapeutic use)

Mahdy, K.A.

LIPID PEROXIDATION

Maher, Menerya

BIOMPHLARIA (analysis)

Maheshwari, Gaurav

JAUNDICE, OBSTRUCTIVE (etiology)

Mahjoub, Fatemeh

INTESTINAL POLYPS (epidemiology)

Mahmood, Asad

PERITONITIS (diagnosis)

Mahmood, Qaiser

DIARRHEA, INFANTILE (etiology)

Mahmoud, Atef Mahmoud

ANEMIA, IRON-DEFICIENCY

Mahmoud, Fadia

MITRAL VALVE PROLAPSE

Mak, Tony

SPIROCHAETALES INFECTIONS (therapy)

Makhelouf, A.

CLIMATE

Makoolati, Zohreh

BONE MORPHOGENETIC PROTEINS 4 (pharmacology)

Maleki, N.

PHARMACISTS

Malik, Imran Bashir

PERITONITIS (diagnosis)

Mallick, Nadeem Hayat

EXERCISE TEST

Manolios, Nicholas

SYNOVIAL CYST (complications)

Mansour, A.M.

BRUCELLOSIS (complications)

Mansour, Ahmed M.

PROPOLIS (therapeutic use)

Mansour, Magdy

URETHRAL OBSTRUCTION (diagnosis)

Mansour, Nadia M.

DIABETES MELLITUS, TYPE 2

Mapkar, Osman A.

PURPURA, THROMBOCYTOPENIC,

IDIOPATHIC (epidemiology)

Marrie, T.J.

SPUTUM (microbiology)

Masud, Hannan

ONCHOCERCIASIS (drug therapy)

Masud, Khawaja Usman

LYMPHATIC DISEASES (etiology)

Matar, Mohamad

PREMATURE BIRTH (microbiology)

Mazhar, Atta Ullah

FARBER LIPOGRANULOMATOSIS (diagnosis)

Mbarek, Chiraz

PARANASAL SINUS DISEASES (surgery)

Mdanat, Ayman S.

BLINDNESS (etiology)

Mediouni. Azza

PARANASAL SINUS DISEASES (surgery)

Mehboob, Ghulam

HIP DISLOCATION, CONGENITAL (surgery)

Mehdi, Sabih Salih

DIARRHEA, INFANTILE (therapy)

Mehraein, Fereshteh

AMIODARONE (toxicity)

Mehranjani, Malek Soleimani

MESENCHYMAL STEM CELLS (drug effects)

Mehrdadi, N.

HALOGENATION

Mermigkis, C.

IDIOPATHIC PULMONARY FIBROSIS

(physiopathology)

Mermigkis, D.

IDIOPATHIC PULMONARY FIBROSIS

(physiopathology)

Mikki, N.

CESAREAN SECTION (statistics and numerical data)

uaia)

Minhas, Brig Lipat Ali

CEREBELLAR CORTEX (anatomy and histology)

Mir, Iqbal Saleem

CHOLECYSTECTOMY, LAPAROSCOPIC

Mir, Mohammed F.

PANCREATIC PSEUDOCYST (diagnosis)

Miskeen, Elhadi

RENAL DIALYSIS (adverse effects)

RENAL DIALYSIS

Mitnala, Sasikala

HEPATITIS, TOXIC (etiology)

Moazzam, M.

POISONING

Moghaddam, M.R. Alavi

COLORING AGENTS

Moghaddam, Mohsen Shahriari

SODIUM-POTASSIUM-EXCHANGING AT PASE

(analysis)

Mogheib, Reda A.

CARCINOMA, EHRLICH TUMOR (drug therapy)

Mogulkoc, Rasim

ZINC (deficiency)

Mohamad, Hanan F.

PREMATURE BIRTH (microbiology)

Mohamed, A.S.A.

PHYLLODES TUMOR (surgery)

Mohamed, Aida Ali Ahmed

RENAL DIALYSIS (adverse effects)

Mohamed, B.A.

ANEMIA (diagnosis)

Mohamed, El Gaili

RENAL DIALYSIS (adverse effects)

Mohamed, Farida A.

UTERINE CERVICAL NEOPLASMS (epidemiology)

Mohamed, Mahassen A.

CUCUMOVIRUS (Genetics)

Mohammad, Ali I.

DIVERTICULUM, COLON (diagnosis)

Mohammad, Ehab

KIDNEY FAILURE, ACUTE (diagnosis)

Mohammed, A.J.

**GROWTH** 

Mohammed, Haider

ULNA FRACTURES (surgery)

Moheb, Khadija

DYSENTERY, AMEBIC (diagnosis)

Mohmadani, Ahmed Abdallah

RENAL DIALYSIS (adverse effects)

Mohsin, Nabil

KIDNEY FAILURE, ACUTE (diagnosis)

Momani, Jafar

ANTIPHOSPHOLIPID SYNDROME (diagnosis)

Monajemzadeh, Maryam

INTESTINAL POLYPS (epidemiology)

Morsy, A.

DIABETIC NEPHROPATHIES (immunology)

Mostofi, S.

WASTE DISPOSAL, FLUID

Motamed, Farzaneh

INTESTINAL POLYPS (epidemiology)

Mounce, Richard E.

ROOT CANAL THERAPY

Mousa, Somaia M.

BETA-THALASSEMIA (complications)

Movahed, Mohammad Reza

TICLOPIDINE (analogs and derivatives)

Movahedin, Mansoureh

BONE MORPHOGENETIC PROTEINS 4 (pharmacology)

(pnarmacology)

Mowafy, Doaa Abdel Rahman

PHACOEMULSIFICATION (methods)

Mrayat, Zakaria

GASTROINTESTINAL HEMORRHAGE (diagnosis)

Mubark, Heba A.E.

CYCLOSPORINE (toxicity)

Mudawi, H.M.Y.

ENDOSCOPY, GASTROINTESTINAL

Muhajer, Tahseen

CHOLECYSTECTOMY, LAPAROSCOPIC (adverse effects)

Muhammad, Niaz

LYMPHATIC DISEASES (etiology)

Mukherjee, Swarupananda

ITRACONAZOLE

Mukhopadhyay, Madhumita

ASCARIASIS (epidemiology)

Mumtaz, Babar

SMOKING (epidemiology)

Munir, S.M.

DENGUE (diagnosis)

Murphy, Erin H.

AORTIC ANEURYSM, ABDOMINAL (surgery)

Murtaza, Badar

PERITONITIS (diagnosis)

Murugan, A.

CHROMIUM (toxicity)

Muthu, M. S.

KETOPROFEN (administration and dosage)

Muttair, Riyad

ICHTHYOSIS, LAMELLAR (complications)

Nabil, Abeer

ARTHRITIS, RHEUMATOID (genetics)

Nabizadeh, N.

WASTE DISPOSAL, FLUID

Nabulsi, Basem

EPINEPHRINE (therapeutic use)

Naddafi, K.

WASTE DISPOSAL, FLUID

Nafees, Muhammad

KIDNEY DISEASES (diagnosis)

Naguib, M.

POISONING

Nair, G.R.

OSTEOCHONDROMA (diagnosis)

Najaflzadeh, Katayoon

IDIOPATHIC PULMONARY FIBROSIS (therapy)

Nakhla, I.I.

BRUCELLOSIS (complications)

Nandakumar, A.K.

HEALTH PERSONNEL

Napaki, Sarbar M.

HELICOBACTER PYLORI

Nagshvar, F.

HEPATITIS C, CHRONIC (drug therapy)

Naqvi, Anjum

BONE DEVELOPMENT (radiation effects)

TESTIS (Injuries)

Narang, Sangeet

PNEUMONIA, VENTILATOR-ASSOCIATED

(prevention and control)

Narayanan, M.

METALS, HEAVY (pharmacology)

Narbat, Mehdi Kazemzadeh

BONE SUBSTITUTES (chemicalsynthesis)

Narin, Yavuz

BLINDNESS, CORTICAL (chemically induced)

Narula, Jagat

CARDIOVASCULAR DISEASES (diagnosis)

Nassef, Aya

ARTHRITIS, RHEUMATOID (genetics)

Navaneethan, Udayakumar

TUBERCULOSIS (diagnosis)

Nazir, Pervez

PANCREATIC PSEUDOCYST (diagnosis)

Neville, Alan J. PROBLEM-BASED LEARNING

Nikaeen. M.

WATER MICROBIOLOGY

Nissanka, Thilaka

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Nobahar, Monir

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Noeman, Ahmed

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Nosseir, Tarek A. INTRA-AORTIC BALLOON PUMPING (adverse

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Obeidat, Walid

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Olagundoye, O.

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Omar, Belal

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Omar, Hanaa S.

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Omera, Magdy Aly

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Ozet, Ahmet

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Ozkan, Sezai

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Oztekin, Kemal

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Ozturk, Bekir

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Padaki, Nagaraj Rao

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Pakyarra, Abbas

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Panahi, Marzieh

DIABETÉS MELLITUS, EXPERIMENTAL (pathology)

BRAIN ISCHEMIA (pathology)

Panwhar, Abdul Latif

BONE DEVELOPMENT (radiation effects)

Park, Sung Ba

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Pejhan, A.

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Peng, Nan Jing

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Perveen, Tahira

NIGELLA SATIVA (chemistry)

Petkar, Shabina

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Peyrovi, Habibolah

THROMBOANGIITIS OBLITERANS (therapy)

Pillai, G. Rajasekharan

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Piranfar, Mohammad A.

ATRIAL FIBRILLATION (complications)

Piryani, Rano Mal

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Polychronopoulos, V.

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(physiopathology)

Pordal, Amir Hamzeh

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Pourabdi, Ladan

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Prabhu, Rajesh

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Pujahari, Aswini K.

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Rafaat, Bassem Mohamad

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Rahimi, Mehrzad

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Rahmo, Abdulkader

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Raj, Shetal M. CATARACT (therapy)

Rajab, Khalil E.

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Rajesh, K.S.

PROPRANOLOL (Pharmacokinetics)

Rajindrajith, Shaman

HELICOBACTER PYLORI

Rajkapoor, B.

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Ramzy, Fatem

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Rashed, Laila

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Rashid, Laila

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Rashid, Muhammad Ammar

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Rasool, Sheikh Ajaz

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Razmi, Tannaz

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Reddy, D. Nageshwar

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Reddy, KVR

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(genetics)

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APPENDICITIS (diagnosis)

Reza, Selim

THEOPHYLLINE (pharmacokinetics)

Rezaeian, M.

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Rezk, Nabil Nassif

METHANOL (toxicity)

Riaz UI Haq, Muhammad

APPENDICITIS (diagnosis)

Rikabi, A.

LIVER DISEASES (virology)

Rizk, Amal

BETA-THALASSEMIA (complications)

Roudbari, M.

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Saarinen, Kari

ACNE VULGARIS (drug therapy)

Sabaghi, Fatemeh

BLOOD GROUP ANTIGENS

Sabir, Shazia

BREAST (abnormalities)

Saeed, A.A.

SMOKING

Saeed, Saira

PERITONITIS (diagnosis)

Saffar, H.

HEPATITIS C, CHRONIC (drug therapy)

Saffar, M.J.

HEPATITIS C, CHRONIC (drug therapy)

Sahin, Fahri

ESTROGEN REPLACEMENT THERAPY

Sahin, Giray
ACUTE CORONARY SYNDROME (chemically

induced)

Said, T.T.

VITAMIN B 12 (blood)

Saif-ur-Rehman

MULTIPLE MYELOMA (diagnosis)

Saki, Mohammad

BONE SUBSTITUTES (chemicalsynthesis)

Salah El Din, Yehia M.

PHACOEMULSIFICATION (methods)

Salah, Maged

INTRA-AORTIC BALLOON PUMPING (adverse effects)

Salahi, Ali

CORONARY ANGIOGRAPHY (methods)

Salam, A.

EYE INJURIES (complications)

Salami, Farimah

MESENCHYMAL STEM CELLS (drug effects)

Salem, R.M.

YOGHURT

DAIRY PRODUCTS (microbiology)

EGGS

Salimi, Mona

BCG VACCINE (chemistry)

Salimnejad, M.

PHARMACISTS

Salloom, Fareed

ULNA FRACTURES (surgery)

Samadikuchaksaraei, Ali

BONE SUBSTITUTES (chemicalsynthesis)

Samaei, Afshin

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Samarsinghe, D.

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Samimi, S.V.

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Samiullah

SMOKING (epidemiology)

Samo, Khursheed Ahmed

BREAST (abnormalities)

Sani, Mehri Najafi

INTESTINAL POLYPS (epidemiology)

Sara, Fulden

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Sarhan, Reda S.M.

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Sarhan, Reda Sayed Mohamad

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Sari, Saziye

COMPOMERS

Sarrayra, Majed

EPINEPHRINE (therapeutic use)

Satti, M. Luqman

MYCOSES (diagnosis)

Sawair, Faleh A.

ANTI-BACTERIAL AGENTS

Sawalha, Walid

MYOCARDIAL INFARCTION (surgery)

Sayaili, Fusun

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Schachat, Andrew P.

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Senol, Mehmet G.

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Shah, Mumtaz Ali

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Shaheen, Feroze

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Shaheen, Noha

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Shahgasempour, Shapour

THROMBOANGIITIS OBLITERANS (therapy)

Shahraki, M.

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Shahraki, T.

WAIST CIRCUMFERENCE

Shaju, Alphonsa

ALPHA-THALASSEMIA (epidemiology)

Shalayel, Mohammed H.

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Shallaly, Gamal E.H.

PHYSICAL EXAMINATION

Shamim, M. Shahid

BREAST (abnormalities)

Shams, Alireza

AMIODARONE (toxicity)

Shamsaeefar, Alireza ANUS, IMPERFORATE (diagnosis)

Shamsmohammadi, M.

PHARMACISTS

Shankar, P. Ravi

EDUCATION, MEDICAL

Sharaf, Ahmed. N.

ORYZA SATIVA (genetics)

Sharaf, Eman

DISASTER PLANNING

Sharara, Abdel Monem

ANTIPHOSPHOLIPID SYNDROME (diagnosis)

Shariatzadeh, M.R.

SPUTUM (microbiology)

Sharif, Karam Kamal Y.

INTESTINAL VOLVULUS (diagnosis)

Sharif, Muhammad Ashraf

PERITONITIS (diagnosis)

Sharifi, Zohreh

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Sharma, Sanjay

TACHYCARDIA, SUPRAVENTRICULAR (diagnosis)

Shawagfa, Zuhair

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(diagnosis)

Shawakfeh, Nabil

POSTOPERATIVE NAUSEA AND VOMITING

(therapy)

Sheba, Hala F.

BETA-THALASSEMIA (complications)

Sheek Hussein, M.

CHICKENPOX (epidemiology)

Shehab, Marwa I.

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Sheikh, F.

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Sheikh, Qurban Hussain

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Sheikhvatan, M.

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Shekaari, Majid Asadi

BRAIN ISCHEMIA (pathology)

Shekholeslami, N.Z.

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Sherif, Mai

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Shields, Carol L.

RETINOBLASTOMA (therapy)

Shields, Jerry A.

RETINOBLASTOMA (therapy)

Shirazi, Alireza

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Shirvandehi, Noshin

CORONARY ANGIOGRAPHY (methods)

Shivathirthan, Nairuthya

JAUNDICE, OBSTRUCTIVE (etiology)

Shoaib, Muhammad Harris

THIAZINES (pharmacokinetics)

Shoaib, Tabassum

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Shooshtari, Mahmoud Mahmoudian

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Shwyat, Rami

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Siddig, M.F.

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Siddique, Nasreen

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Silverman, J.G.

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Singh, Manjeet

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Singh, S.

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Sobhani, Maryam

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Soliman, Mohamed H.

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Sonrnez, Isil Saroglu

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Starling, Randal C.

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Suleiman, Mohammed A. APPENDICITIS (diagnosis)

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ENDOSCOPY, GASTROINTESTINAL

Sultan, Soad

ENERGY INTAKE DIABETES MELLITUS, TYPE 2 (blood)

Sultan, Y.A.

BRUCELLOSIS (complications)

Sunar, Fusun

ZINC (deficiency)

Sundaramoorthy, P.

CHROMIUM (toxicity)

Tabatabaie, Seyed Alireza

CORONARY ANGIOGRAPHY (methods)

Tabriz, Hedieh Moradi

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Tacoy, Gulten

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induced)

Takdastan, A.

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Takiddin, Ahmed H.

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Talafeeh, Abtan

GASTROINTESTINAL HEMORRHAGE (diagnosis)

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Taneri, Suphi

ASTIGMATISM (therapy)

Tardieu, Philippe

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Tavasoli, S.

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Tawfik, Sherif

MITRAL VALVE PROLAPSE

Tayeh, Osama

MITRAL VALVE PROLAPSE

Taylor, Hugh R.

TRACHOMA (epidemiology)

Tayyab, Muhammad

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Tazi, M.A.

HYPERTENSION (etiology)

Teleb. Zakaria A.

CARCINOMA, EHRLICH TUMOR (drug therapy)

Telmesani, Abdul Wahab M.A.

HELICOBACTER PYLORI

Thakur, RS

ITRACONAZOLE

Tobaigy, Faisal M.

CORNEAL NEOVASCULARIZATION (etiology)

Tofigh, Arash Mohammadi

THROMBOANGIITIS OBLITERANS (therapy) HEART

Tolba, Waheed Abdelall

PREMATURE BIRTH (microbiology)

Topal, Salih

ACUTE CORONARY SYNDROME (chemically induced)

Torabian, A.

**HALOGENATION** 

Towbin, Jeffrey
CARDIOVASCULAR DISEASES (diagnosis)

Traboulsi, Elisa I.

OPTIC DISK (abnormalities)

Trad, O.

CHICKENPOX (epidemiology)

Treef, Walid

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Tuzun, Mehmet

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U dupa, N.

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Uduman, S.A.

CHICKENPOX (epidemiology)

Uppal, Fayyaz

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Usmani, Ambreen

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Uzair, M.

**EUPHORBIA** 

Uzun, Gunalp

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Vafaei, Abbas A.

EPILEPSY (drug therapy)

Vaghefi, Seyed Hassan Eftekhar

BRAIN ISCHEMIA (pathology)

Vaigan, A.A.

COLORING AGENTS

Varghese, R.V.

LIPOMA (diagnosis)

Vasavada, Abhay R.

CATARACT (therapy)

Vaziri, Maryam Zaman

**BLOOD GROUP ANTIGENS** 

Venkataraiu, M.P.

PROPRANOLOL (Pharmacokinetics)

Venkataraman, Jayanthi

TUBERCULOSIS (diagnosis)

Venugopal, Suresh

ALPHA-THALASSEMIA (epidemiology)

Verma, D.K

STOMACH NEOPLASMS (diagnosis)

Vinodhini, R.

METALS, HEAVY (pharmacology)

Virmani, Renu

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Vurgese, Thomas A.

PURPURA, THROMBOCYTOPENIC, IDIOPATHIC (epidemiology)

Walsh, Thomas J.

PSEUDOTUMOR CEREBRI (therapy)

Wen, L.

SUBDURAL EFFUSION (epidemiology)

Weshah, Samhar

RECONSTRUCTIVE SURGICAL PROCEDURES (methods)

CESAREAN SECTION (statistics and numerical

William, Samia

BIOMPHLARIA (analysis)

Wiqar, M. Amin

MYCOSES (diagnosis)

Yaman, Emel

ACUTE CORONARY SYNDROME (chemically induced)

Yang, X.F.

SUBDURAL EFFUSION (epidemiology)

Yari, Fatemeh

**BLOOD GROUP ANTIGENS** 

Yildiz, Ramazan

ACUTE CORONARY SYNDROME (chemically induced)

Yildiz, Senol

BLINDNESS, CORTICAL (chemically induced)

Yilmaz, Candeger

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Younes, N.A.

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Zadeh, Ali Aboli Dokht Noughi

BRAIN ISCHEMIA (pathology)

Zai, Arsalan Saeed

BACTERIOCINS (biosynthesis)

Zaidi, Shahida

OVARY (ultrasonography)

Zakeri, Maryam

BCG VACCINE (chemistry)

Zaki, Mohamed Samir A.

TOCOPHEROLS (therapeutic use)

Zaki, Moshera E.

BETA-THALASSEMIA (complications)

Zaki, Moushira E.

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Zaman, Mir

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Zarenezhad, Mohammad

ANUS, IMPERFORATE (diagnosis)

Zeb, Amir

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Zeid, Farghal A.

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Zein, H.S.

CUCUMOVIRUS (Genetics)

Zhan, R.Y.

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Zoughbie, D.E.

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Zribi. Sara

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Health Services Journal of the Eastern Mediterranean Region *	1014-9899
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Journal of the Egyptian Medical Association [The] *	0013-2411
Journal of the Egyptian National Cancer Institute	1110-0362
Journal of the Egyptian Public Health Association [The]	N/A
Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	N/A
Journal of the Egyptian Society of Obstetrics and Gynecology [The] *	0258-3216
Journal of the Egyptian Society of Parasitology	1110-0583
Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The] *	N/A
Journal of the Egyptian Society of Toxicology	1110-127X
Journal of the Medical Research Institute - Alexandria University *	1110-0133
JPC - Journal of Pediatric Club	N/A
Kasr El Aini Journal of Surgery	N/A
Kidney Forum *	1369-3050
Mansoura Journal of Pharmaceutical Sciences	1110-1318
Mansoura Medical Journal	1110-211X
Medical Journal of Ahmed Maher Teaching Hospital [The] *	N/A
Medical Journal of Cairo University [The]	0045-3803
Medical Journal of Teaching Hospitals and Institutes [The] *	1110-2039
Minoufia Medical Journal	1110-2098
MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology *	1110-5437
National Cancer Institute Journal	0027-8874
Neonatology *	1687-0492
New Egyptian Journal of Medicine [The]	1110-1946
Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912

	Population Researches and Studies	N/A
	Population Sciences *	N/A
	Population Studies *	1110-1342
	PUJ - Parasitologists United Journal	1687-7942
	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The] *	1110-2381
	Scientific Medical Journal	1110-5607
	South Valley Medical Journal	1110-7529
	Suez Canal University Medical Journal	1110-6999
	Tanta Medical Journal *	1110-1415
	Tanta Medical Sciences Journal	1687-5788
	Veterinary Medical Journal	1110-1423
	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
	Zagazig Journal of Pharmaceutical Sciences *	1110-5089
	Zagazig Medical Association Journal *	1110-2322
	Zagazig University Medical Journal *	1110-1431
IR	AQ (29)	
	Al-Kindy College Medical Journal	1810-9543
	Almustansiriya Journal of Pharmaceutical Sciences *	1815-0993
	Annals of the College of Medicine - Mosul *	0027-1446
	Basrah Journal of Surgery *	N/A
	Bulletin of Endemic Diseases - Baghdad *	0007-4845
	DMJ - Dohuk Medical Journal	N/A
	IMJ - Iraqi Medical Journal	0304-4564
	IOJ - Iraqi Orthodontic Journal	1816-0581
	IPMJ - Iraqi Postgraduate Medical Journal *	1608-8360
	Iraqi Army Medical Journal *	N/A
	Iraqi Journal of Biotechnology *	N/A
	Iraqi Journal of Community Medicine *	1684-5382
	Iraqi Journal of Medical Sciences *	1681-6579
	Iraqi Journal of Microbiology *	N/A
	Iraqi Journal of Pharmaceutical Sciences *	N/A
	Iraqi Journal of Tropical Disease Researches *	1814-0823
	Journal of Basic and Medical Sciences *	1608-6015
	Journal of Community Medicine *	N/A
	Journal of Dohuk University *	1812-7568
	Journal of Karbala University *	1813-0410
	Journal of the College of Dentistry - Baghdad *	N/A
	Journal of the Faculty of Medicine - Baghdad	0041-9419

Kufa Medical Journal *	N/A
Medical Journal of Basrah University [The]	0253-0759
Medical Journal of Tikrit University [The] *	N/A
New Iraqi Journal of Medicine [The]	1917-5562
Risafa Medical Journal *	N/A
Scientific Nursing Journal	N/A
Zanco Journal for Medical Sciences *	N/A
ISLAMIC REPUBLIC OF IRAN (129)	
Acta Medica Iranica	0044-6025
Advances in Cognitives Sciences *	1561-4174
Archives of Iranian Medicine	1029-2977
Armaghane-danesh	1728-6506
ARYA Atherosclerosis Journal	1735-3955
Audiology	1735-1936
Bina Journal of Ophthalmology	1026-6399
Blood	1027-9520
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences	1560-8115
DENA - Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450
Dental Journal - Shahid Beheshti University of Medical Sciences	0011-8745
DRJ - Dental Research Journal	1735-3327
Endovascular Journal	2008-1812
Faculty of Nursing and Midwifery Quarterly - Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
Govaresh	1560-7186
HAKIM Research Journal	1561-252X
HAYAT - The Journal of Faculty of Nursing and Midwifery	1735-2215
Health Information Management	1735-1847
Hepatitis Monthly	1735-143X
Homa-ye-Salamat	2008-2002
Hormozgan Medical Journal	1735-2223
IBJ - Iranian Biomedical Journal	1028-852X
IEJ - Iranian Endodontic Journal	1735-7497
IJCN - Iranian Journal of Child Neurology	1735-4668
IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844
IJHOBMT - International Journal of Hematology-Oncology and Bone Marrow Transplantation*	1735-1243
IJI - Iranian Journal of Immunology	1735-1383
IJKD - Iranian Journal of Kidney Diseases	1735-8582
IJME - Iranian Journal of Medical Education *	1608-9359
IJMS - Iranian Journal of Medical Sciences	0253-0716

IJO - Iranian Journal of Orthodontics	1735-5087
IJPR - Iranian Journal of Pharmaceutical Research *	1735-0328
International Journal of Endocrinology and Metabolism	1726-9148
International Journal of Environmental Research	1735-6865
International Journal of Environmental Science and Technology	1735-1472
Iran Journal of Nursing	1025-0581
Iranian Cardiovascular Research Journal	1735-885X
Iranian Journal of Allergy, Asthma and Immunology	1735-1502
Iranian Journal of Arthropod-Borne Diseases	1735-7179
Iranian Journal of Basic Medical Sciences	1608-6015
Iranian Journal of Biotechnology	1728-3043
Iranian Journal of Cancer Prevention	2008-2398
Iranian Journal of Clinical Infectious Diseases	N/A
Iranian Journal of Dermatology	0021-082X
Iranian Journal of Diabetes and Lipid Disorders	1726-7544
Iranian Journal of Environmental Health Science and Engineering	1735-1979
Iranian Journal of Epidemiology	1735-7489
Iranian Journal of Fertility and Sterility	1735-8094
Iranian Journal of Health and Environment	2008-2029
Iranian Journal of Medical Microbiology	1735-8612
Iranian Journal of Nuclear Medicine	1681-2824
Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
Iranian Journal of Obstetric, Gynecology and Infertility [The]	N/A
Iranian Journal of Ophthalmology	1735-4153
Iranian Journal of Otorhinolaryngology	1560-1293
Iranian Journal of Parasitology	1735-7020
Iranian Journal of Pediatrics	1018-4406
Iranian Journal of Psychiatry	1735-4587
Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
Iranian Journal of Psychiatry and Clinical Psychology (ANDEESHEH VA RAFTAR)	1024-0047
Iranian Journal of Public Health	0304-4556
Iranian Journal of Radiation Research	1728-4554
Iranian Journal of Radiology	1735-1065
Iranian Journal of Reproductive Medicine	N/A
Iranian Journal of Veterinary Research	1728-1997
Iranian Rehabilitation Journal	1735-3602
JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150
JMR - Journal of Medical Research *	1728-1962

Journal of Arak University of Medical Sciences - Rahavard Danesh	N/A
Journal of Babol University of Medical Sciences	1561-4107
Journal of Dental Research, Dental Clinics, Dental Prospects	N/A
Journal of Dental Medicine - Tehran University of Medical Sciences	1024-641X
Journal of Dentistry - Shiraz University of Medical Sciences	1728-3426
Journal of Fundamentals of Mental Health	1028-6918
Journal of Gorgan University of Medical Sciences	1562-4765
Journal of Health Administration	N/A
Journal of Hygiene and Health	1735-2363
Journal of Isfahan Dental School	1735-255X
Journal of Isfahan Medical School	1027-7595
Journal of Islamic Dental Association of Iran [The]	1024-6428
Journal of Kerman University of Medical Sciences	1023-9510
Journal of Mashad Dental School	1560-9286
Journal of Mazandaran University of Medical Sciences	1561-4123
Journal of Medical Council of Islamic Republic of Iran	1562-1073
Journal of Medical Education	N/A
Journal of Medicinal Plants	1684-0240
Journal of Ophthalmic and Vision Research	2008-2010
Journal of Qazvin University of Medical Sciences and Health Services [The]	1561-3666
Journal of Rafsanjan University of Medical Sciences	1735-3165
Journal of Rehabilitation	1607-2960
Journal of Research in Health Sciences (JRHS)	1682-2765
Journal of Research in Medical Sciences	1735-5311
Journal of Sabzevar School of Medical Sciences	1606-7487
Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
Journal of Shahrekord University of Medical Sciences	1735-1448
Journal of Tehran University Heart Center [The]	1735-8620
Journal of Veterinary Research	1022-646X
Journal of Zahedan University of Medical Sciences	1735-076X
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
Jundishapur Journal of Microbiology (JJM)	N/A
JRMS - Journal of Research in Medical Sciences	1735-1995
KOOMESH - Journal of Semnan University of Medical Sciences	1608-7046
Medical Journal of Mashad University of Medical Sciences	N/A
Medical Journal of Reproduction and Infertility	1726-7536
Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
Medical Journal of the Islamic Republic of Iran *	1016-1430
Medical Sciences Journal of Islamic Azad University	1023-5922

	Modares Journal of Medical Sciences	1562-9554
	Nursing and Midwifery Research	1753-5001
	Ofogh-E-Danesh New	1735-1855
	Payesh - Health Monitor	1680-7626
	Pejouhandeh: Bimonthly Research Journal	1735-1022
	Qom University of Medical Sciences	1735-7799
	Quarterly Journal of Medical Ethics	N/A
	Salmand: Iranian Journal of Aging	1735-806X
	Scientific and Research Journal of Army University of Medical Sciences - J.A.U.M.S	1727-1789
	Scientific Journal of Forensic Medicine	1027-1457
	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
	Scientific Journal of School of Public Health and Institute of Public Health Research	1735-7586
	SHAMS - Journal of Medical Sciences	N/A
	Social Welfare Quarterly	N/A
	Strides in Development of Medical Education	1735-4242
	Tanaffos	1735-0344
	Tehran University Medical Journal [TUMJ]	1735-7322
	Toloo-e-Behdasht	1728-5127
	Urology Journal	1735-1308
	Yafteh Journal	1563-0773
	Yakhteh Medical Journal	1561-4921
JOF	RDAN (9)	
	Arab Journal of Psychiatry [The]	1016-8923
	Dirasat	1026-3772
	Jordan Journal of Pharmaceutical Sciences New	1995-7157
	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
	Smile Dental Journal (New)	2072-473X
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
LER	BANON (9)	
	ACES - Actualites Cliniques et Scientifiques	1683-8068
	AJU - Arab Journal of Urology	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 (6)	
DMJ - Derna Medical Journal New	N/A
Garyounis Medical Journal *	0254-7198
JMJ - Jamahiriya Medical Journal	N/A
Libyan Journal of Infectious Diseases [The]	N/A
LJM - Libyan Journal of Medicine	1819-6357
Tabib Attifil Alarabi *	N/A
MOROCCO (6)	
Bulletin Epidemiologique *	0851-8238
Journal du Practicien *	1113-5667
Maroc Medical	0025-4053
Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
Revue Marocaine de Medecine et de Sante	0251-0758
Revue Marocaine des Maladies de L'Enfant *	N/A
OMAN (3)	
Oman Journal of Ophthalmology	0974-620X
Oman Medical Journal	N/A
SQUMJ - Sultan Qaboos University Medical Journal	1029-4066
PAKISTAN (66)	
Anaesthesia, Pain and Intensive Care New	1607-8322
Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
Annals of Jinnah Postgraduate Medical Centre - Karachi *	N/A
Annals of King Edward Medical College	1684-6680
Bahria Journal of Professional Psychology	1816-0840
Biomedica	N/A
Challenge - Quarterly [The] *	0528-7944
Community Medicine *	0301-7265
Diabetes Digest	1369-7501
GJMS - Gomal Journal of Medical Sciences	1819-7973
Hamdard Medicus	0250-7188
Infectious Disease Journal of Pakistan	1027-0299
International Journal of Pathology	1810-0155

JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589
JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X
JDUHS - Journal of the Dow University of Health Sciences	1995-2198
JLUMHS - Journal of the Liaquat University of Medical Health Sciences	1729-0341
JMS - Journal of Medical Sciences	N/A
JOPDAK - Journal of the Pakistan Dental Association Karachi *	N/A
Journal of Basic and Applied Sciences	N/A
Journal of Medical Sciences	1682-4474
Journal of Nephrology Urology and Transplantation *	N/A
Journal of Surgery [The] *	1681-4517
JPAD - Journal of Pakistan Association of Dermatologists	1560-9014
JPDA - Journal of the Pakistan Dental Association	1680-2292
JPIMS - Journal of Pakistan Institute of Medical Sciences *	1683-6928
JPMA - Journal of Pakistan Medical Association	0030-9982
JPMI - Journal of Postgraduate Medicale Institute	1013-5472
JPPS - Journal of Pakistan Psychiatric Society	1726-8710
JSP - Journal of Surgery Pakistan International	1817-0242
Lahore Journal of Public Health *	N/A
Medical Channel	1681-5491
Medical Forum Monthly	1029-385X
Medical Spectrum [The] *	0254-8534
Medicine Today	1813-9876
Mother and Child *	0379-2617
PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648
Pakistan Heart Journal *	0048-2706
Pakistan Journal of Biochemistry *	0300-8185
Pakistan Journal of Chest Medicine	N/A
Pakistan Journal of Clinical Psychology	1019-438X
Pakistan Journal of Community Medicine [The] *	N/A
Pakistan Journal of Health *	N/A
Pakistan Journal of Medical and Health Services	1996-7195
Pakistan Journal of Medical Sciences	1682-024X
Pakistan Journal of Neurology *	N/A
Pakistan Journal of Obstetrics and Gynaecology	N/A
Pakistan Journal of Ophthalmology	0886-3067
Pakistan Journal of Orthodontics, Pediatric and Community Dentistry *	1608-134X
Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985
Pakistan Journal of Pathology	N/A
Pakistan Journal of Pharmaceutical Sciences	1011-601X

Pakistan Journal of Pharmacology	0255-7088
Pakistan Journal of Physiology	1819-270X
Pakistan Journal of Psychology	0030-9869
Pakistan Journal of Scientific and Industrial Research *	0030-9885
Pakistan Medical Journal *	0031-000X
Pakistan Ophthalmology *	0259-3661
Pakistan Oral and Dental Journal	1012-8700
Pakistan Paediatric Journal	0304-4904
PJC - Pakistan Journal of Cardiology	1016-1244
PJMR - Pakistan Journal of Medical Research	0030-9842
PJS - Pakistan Journal of Surgery	0258-8552
Proceedings	N/A
Professional Medical Journal - Quarterly [The]	1024-8919
RMJ - Rawal Medical Journal	0303-5212
PALESTINE (3)	
Al-Quds Medical Journal *	N/A
Annals of Alquds Medicine	1815-2643
PMJ - Palestinian Medical Journal	N/A
QATAR (4)	
Gulf Journal of Dermatology and Venereology [The] *	N/A
Heart Views	1995-705X
JEMTAC - Journal of Emergency Medicine, Trauma & Acute Care	1995-4522
Qatar Medical Journal	0253-8253
SAUDI ARABIA (25)	
Annals of Saudi Medicine	0256-4947
Annals of Thoracic Medicine	1817-1737
Hematology, Oncology and stem Cell Therapy	1658-3876
Joint Centre for Research in Prosthetics and Orthotics [The] *	N/A
Journal of Family and Community Medicine	1319-1683
Journal of Infection and Public Health	1876-0341
Journal of Taibah University Medical Sciences	1658-3612
Journal of King Abdulaziz University - Medical Sciences *	1319-1004
Journal of the Saudi Heart Association	1319-9218
MEJO - Middle East Journal of Ophthalmolgy *	N/A
Neurosciences	N/A
Pan Arab Journal of Neurosurgery	1319-6995
Rehabilitation International *	N/A
Research Centre Bulletin *	1019-5335
Saudi Epidemiology Bulletin	1319-3965
Jaudi Epidemiology Bulletin	1319-3905

	Saudi Heart Journal *	1018-077X
	Saudi Journal of Disability and Rehabilitation *	1319-6499
	Saudi Journal of Gastroenterology [The]	1319-3767
	Saudi Journal of Ophthalmology	1319-4534
	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The] *	1319-8491
	Saudi Journal of Sports Medicine [The] *	1319-6308
	Saudi Medical Journal	0379-5284
	SDJ - Saudi Dental Journal [The]	1013-9052
	SGH Medical Journal	1658-2489
	SPJ - Saudi Pharmaceutical Journal	1319-0164
SU	IDAN (9)	
Т	Gezira Journal of Health Sciences	N/A
	JMJ - Juba Medical Journal *	N/A
	Khartoum Pharmacy Journal *	N/A
	Omdurman Journal of Pharmaceutical Sciences	N/A
	Sudan Journal of Medical Sciences	N/A
	Sudan Medical Journal *	0491-4481
	Sudan Medical Monitor	1858-5000
	Sudanese Journal of Dermatology	N/A
	Sudanese Journal of Public Health	N/A
SY	RIAN ARAB REPUBLIC (9)	
	Al-Majallah Al-Tibbiya Al-Arabiayh *	N/A
	Arab Journal of Pharmaceutical Sciences	1683-0369
	Arabic Journal of Forensic Medicine and Criminal Science	N/A
	Damascus University Journal for Health Sciences	N/A
	JISHIM - Journal of the International Society for the History of Islamic Medicine	1303-667X
	Journal of Clinical Laboratory [The]	N/A
	Journal of the Arab Board of Medical Specializations	1561-0217
	Journal of the Arab Dentist *	N/A
	Research Journal of Aleppo University - Medical Sciences Series	N/A
TU	INISIA (9)	
	Archives de l'Institut Pasteur de Tunis	0020-2509
	Cahier Medicaux de Tunisie *	0300-5291
	IDEES - Revue de Perfectionnement Medical et Paramedical *	N/A
	Maghreb Medical	0330-258X
	Revue Maghrebine de Pediatrie [La]	0330-7611
	Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La] *	N/A
	Revue Tunisienne d'Infectiologie	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	1606-7754
IRCMJ - Iranian Red Crescent Medical Journal	1561-4395
YEMEN (7)	
Journal of Tropical Nephro-Urology	N/A
Sana'a University Medical Journal *	N/A
University of Aden Journal of Natural and Applied Sciences	1606-8947
Yemeni Journal for Medical Sciences [The] *	N/A
YHMRJ - Yemeni Health and Medical Research Journal	N/A
YJMHR-Yemeni Journal of Medical and Health Research *	N/A
YMJ - Yemen Medical Journal *	N/A

<sup>\*</sup> No issues received since 2005

Last update December 2009

## Appendix IV

## List of EMR Journals Indexed in IMEMR

(by title)

No.	Journal Title	ISSN
1	AAMJ - Al-Azhar Assiut Medical Journal *	1687-1693
2	ACES - Actualites Cliniques et Scientifiques	1683-8068
3	Acta Medica Iranica	0044-6025
4	Advances in Cognitives Sciences *	1561-4174
5	African Journal of Urology	1110-5704
6	Afro - Arab Liver Journal	1687-224X
7	Ain-Shams Journal of Forensic Medicine and Clinical Toxicology*	1687-1030
8	Ain-Shams Medical Journal	0002-2144
9	AJAIC - Alexandria Journal of Anaesthesia and Insentive Care	N/A
10	AJU - Arab Journal of Urology	N/A
11	Al Azhar Medical Journal	1110-0400
12	Al-Azhar Journal of Dental Science *	N/A
13	Alexandria Dental Journal *	1110-015X
14	Alexandria Journal of Food Science and Technology	N/A
15	Alexandria Journal of Pediatrics	N/A
16	Alexandria Journal of Pharmaceutical Sciences *	1110-1792
17	Alexandria Journal of Veterinary Science *	1110-2047
18	Alexandria Medical Journal [The] *	0516-5849
19	Al-Kindy College Medical Journal	1810-9543
20	Al-Majallah Al-Tibbiya Al-Arabiayh *	N/A
21	Almustansiriya Journal of Pharmaceutical Sciences *	1815-0993
22	Al-Quds Medical Journal *	N/A
23	Anaesthesia, Pain and Intensive Care New	1607-8322
24	Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
25	Annals of Alquds Medicine	1815-2643
26	Annals of Jinnah Postgraduate Medical Centre - Karachi *	N/A
27	Annals of King Edward Medical College	1684-6680
28	Annals of Pediatric Surgery	1687-4137
29	Annals of Saudi Medicine	0256-4947
30	Annals of the College of Medicine - Mosul *	0027-1446
31	Annals of Thoracic Medicine	1817-1737
32	Applied Endocrinology in Egypt	1110-1776
33	Arab Dental Journal *	N/A
34	Arab Journal for Food and Nutrition	1608-8352
35	Arab Journal of Biotechnology	1110-6875
36	Arab Journal of Laboratory Medicine [The]	1110-1822
37	Arab Journal of Pharmaceutical Sciences	1683-0369
38	Arab Journal of Psychiatry [The]	1016-8923

No.	Journal Title	ISSN
39	Arabic Journal of Forensic Medicine and Criminal Science	N/A
40	Archives de l'Institut Pasteur de Tunis	0020-2509
41	Archives of Iranian Medicine	1029-2977
42	Armaghane-danesh	1728-6506
43	ARYA Atherosclerosis Journal	1735-3955
44	ASJOG - Ain Shams Journal of Obstetrics and Gynecology *	1687-2193
45	ASNJ - Alexandria Scientific Nursing Journal	N/A
46	Assiut Medical Journal	1110-0494
47	Assiut University Bulletin for Environmental Researches	1110-6107
48	Audiology	1735-1936
49	Bahrain Medical Bulletin	1012-8298
50	Bahria Journal of Professional Psychology	1816-0840
51	Basrah Journal of Surgery *	N/A
52	Benha Medical Journal	1110-208X
53	Bina Journal of Ophthalmology	1026-6399
54	Biomedica	N/A
55	Blood	1027-9520
56	Bulletin Epidemiologique *	0851-8238
57	Bulletin of Alexandria Faculty of Medicine	1110-0834
58	Bulletin of Alexandria Thoracic Association *	N/A
59	Bulletin of Endemic Diseases - Baghdad *	0007-4845
60	Bulletin of Faculty of Pharmacy - Cairo University	1110-0931
61	Bulletin of Faculty of Physical Therapy - Cairo University	1110-6611
62	Bulletin of High Institute of Public Health	1110-0036
63	Bulletin of Pharmaceutical Sciences - Assiut University	1110-0052
64	Bulletin of the Faculty of Science - University of Alexandria *	0568-9619
65	Bulletin of the Kuwait Institute for Medical Specialization	N/A
66	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
67	Bulletin of the National Research Centre	1110-0591
68	Bulletin of the Ophthalmological Society of Egypt *	1110-0982
69	Cahier Medicaux de Tunisie *	0300-5291
70	Challenge - Quarterly [The] *	0528-7944
71	Childhood and Development Quarterly *	1110-8681
72	Clinical Diabetes	0891-8929
73	Community Medicine *	0301-7265
74	Damascus University Journal for Health Sciences	N/A
75	DARU - Journal of Faculty of Pharmacy Tehran University of Medical	1560-8115
76	Sciences DENA - Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450

No.	Journal Title	ISSN
77	Dental Journal - Shahid Beheshti University of Medical Sciences	0011-8745
78	Diabetes Digest	1369-7501
79	Dirasat	1026-3772
80	DMJ - Derna Medical Journal New	N/A
81	DMJ - Dohuk Medical Journal	N/A
82	DRJ - Dental Research Journal	1735-3327
83	Eastern Mediterranean Region Drugs Digest	1040-2312
84	Eastern Mediterranean Region Epidemiological Bulletin	1014-2347
85	EDJ - Egyptian Dental Journal	0070-9484
86	Egyptian Heart Journal [The]	1110-2608
87	Egyptian Journal of Anatomy [The] *	1110-2144
88	Egyptian Journal of Biomedical Engineering *	1012-5558
89	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
90	Egyptian Journal of Bronchology [The]	1687-8426
91	Egyptian Journal of Chemistry	0449-2285
92	Egyptian Journal of Community Medicine	1110-1865
93	Egyptian Journal of Dermatology and Andrology *	1110-7650
94	Egyptian Journal of Diabetes [The]	N/A
95	Egyptian Journal of Food Science	1110-0613
96	Egyptian Journal of Genetics and Cytology *	N/A
97	Egyptian Journal of Histology [The]	1110-0559
98	Egyptian Journal of Hospital Medicine [The]	1687-2002
99	Egyptian Journal of Medical Human Genetics [The]	1110-8630
100	Egyptian Journal of Medical Laboratory Sciences	1110-5593
101	Egyptian Journal of Medical Microbiology *	1110-2179
102	Egyptian Journal of Microbiology	0022-2704
103	Egyptian Journal of Neonatology [The] *	N/A
104	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
105	Egyptian Journal of Nutrition	N/A
106	Egyptian Journal of Nutrition and Health	N/A
107	Egyptian Journal of Occupational Medicine *	1110-1881
108	Egyptian Journal of Otolaryngology [The] New	1012-5574
109	Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642
110	Egyptian Journal of Pharmaceutical Sciences [The]	0301-5068
111	Egyptian Journal of Physiological Sciences *	0301-8660
112	Egyptian Journal of Psychiatry [The] *	1110-1105
113	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
114	Egyptian Journal of Surgery [The]	1110-1121

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115	Egyptian Journal of Urology *	1110-5712
116	Egyptian Journal of Veterinary Science	1110-0222
117	Egyptian Medical Journal of the National Research Center *	1687-1278
118	Egyptian Orthodontic Journal *	N/A
119	Egyptian Orthopaedic Journal [The]	1110-1148
120	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
121	Egyptian Population and Family Planning Review [The]	N/A
122	Egyptian Rheumatology and Rehabilitation	1110-161X
123	Egyptian Science Magazine [The]	1687-3815
124	EJB - Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
125	EJENTAS - Egyptian Journal of ENT and Allied Sciences *	2090-0740
126	El-Minia Medical Bulletin *	1110-2446
127	EMHJ - Eastern Mediterranean Health Journal	1020-3397
128	Emirates Medical Journal	0250-6882
129	EMJ - Egyptian Medical Journal [The]	1110-0095
130	Endovascular Journal	2008-1812
131	Faculty of Nursing and Midwifery Quarterly - Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
132	Garyounis Medical Journal *	0254-7198
133	Gazette of the Egyptian Paediatric Association [The] *	1110-6638
134	Gezira Journal of Health Sciences	N/A
135	GJMS - Gomal Journal of Medical Sciences	1819-7973
136	Govaresh	1560-7186
137	Gulf Journal of Dermatology and Venereology [The] *	N/A
138	HAKIM Research Journal	1561-252X
139	Hamdard Medicus	0250-7188
140	HAYAT - The Journal of Faculty of Nursing and Midwifery	1735-2215
141	Health Information Management	1735-1847
142	Health Services Journal of the Eastern Mediterranean Region *	1014-9899
143	Heart Views	1995-705X
144	Hematology, Oncology and stem Cell Therapy	1658-3876
145	Hepatitis Monthly	1735-143X
146	Homa-ye-Salamat	2008-2002
147	Hormozgan Medical Journal	1735-2223
148	IBJ - Iranian Biomedical Journal	1028-852X
149	IDEES - Revue de Perfectionnement Medical et Paramedical *	N/A
150	IEJ - Iranian Endodontic Journal	1735-7497
151	IJCN - Iranian Journal of Child Neurology	1735-4668
152	IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844

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153	IJHOBMT - International Journal of Hematology-Oncology and Bone Marrow	1735-1243
154	Transplantation * IJI - Iranian Journal of Immunology	1735-1383
155	IJKD - Iranian Journal of Kidney Diseases	1735-8582
156	IJME - Iranian Journal of Medical Education *	1608-9359
157	IJMS - Iranian Journal of Medical Sciences	0253-0716
158	IJO - Iranian Journal of Orthodontics	1735-5087
159	IJPR - Iranian Journal of Pharmaceutical Research *	1735-0328
160	IMJ - Iraqi Medical Journal	0304-4564
161	Infectious Disease Journal of Pakistan	1027-0299
162	International Journal of Diabetes and Metabolism	1606-7754
163	International Journal of Endocrinology and Metabolism	1726-9148
164	International Journal of Environmental Research	1735-6865
165	International Journal of Environmental Science and Technology	1735-1472
166	International Journal of Pathology	1810-0155
167	IOJ - Iraqi Orthodontic Journal	1816-0581
168	IPMJ - Iraqi Postgraduate Medical Journal *	1608-8360
169	Iran Journal of Nursing	1025-0581
170	Iranian Cardiovascular Research Journal	1735-885X
171	Iranian Journal of Allergy, Asthma and Immunology	1735-1502
172	Iranian Journal of Arthropod-Borne Diseases	1735-7179
173	Iranian Journal of Basic Medical Sciences	1608-6015
174	Iranian Journal of Biotechnology	1728-3043
175	Iranian Journal of Cancer Prevention	2008-2398
176	Iranian Journal of Clinical Infectious Diseases	N/A
177	Iranian Journal of Dermatology	0021-082X
178	Iranian Journal of Diabetes and Lipid Disorders	1726-7544
179	Iranian Journal of Environmental Health Science and Engineering	1735-1979
180	Iranian Journal of Epidemiology	1735-7489
181	Iranian Journal of Fertility and Sterility	1735-8094
182	Iranian Journal of Health and Environment	2008-2029
183	Iranian Journal of Medical Microbiology	1735-8612
184	Iranian Journal of Nuclear Medicine	1681-2824
185	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
186	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
187	Iranian Journal of Obstetric, Gynecology and Infertility [The]	N/A
188	Iranian Journal of Ophthalmology	1735-4153
189	Iranian Journal of Otorhinolaryngology	1560-1293
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192	Iranian Journal of Psychiatry	1735-4587
193	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
194	Iranian Journal of Psychiatry and Clinical Psychology (ANDEESHEH VA RAFTAR)	1024-0047
195	Iranian Journal of Public Health	0304-4556
196	Iranian Journal of Radiation Research	1728-4554
197	Iranian Journal of Radiology	1735-1065
198	Iranian Journal of Reproductive Medicine	N/A
199	Iranian Journal of Veterinary Research	1728-1997
200	Iranian Rehabilitation Journal	1735-3602
201	Iraqi Army Medical Journal *	N/A
202	Iraqi Journal of Biotechnology *	N/A
203	Iraqi Journal of Community Medicine *	1684-5382
204	Iraqi Journal of Medical Sciences *	1681-6579
205	Iraqi Journal of Microbiology *	N/A
206	Iraqi Journal of Pharmaceutical Sciences *	N/A
207	Iraqi Journal of Tropical Disease Researches *	1814-0823
208	IRCMJ - Iranian Red Crescent Medical Journal	1561-4395
209	JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589
210	JBMS - Journal of the Bahrain Medical Society	1015-6321
211	JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X
212	JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150
213	JDUHS - Journal of the Dow University of Health Sciences	1995-2198
214	JESN - Journal of the Egyptian Society of Nephrology	N/A
215	JISHIM - Journal of the International Society for the History of Islamic Medicine	1303-667X
216	JLDA - Journal of the Lebanese Dental Association	1810-9632
217	JLUMHS - Journal of the Liaquat University of Medical Health Sciences	1729-0341
218	JMJ - Jamahiriya Medical Journal	N/A
219	JMJ - Juba Medical Journal *	N/A
220	JMR - Journal of Medical Research *	1728-1962
221	JMS - Journal of Medical Sciences	N/A
222	Joint Centre for Research in Prosthetics and Orthotics [The] *	N/A
223	JOPDAK - Journal of the Pakistan Dental Association Karachi *	N/A
225	Jordan Journal of Pharmaceutical Sciences New	1995-7157
224	Jordan Medical Journal	0446-9283
226	Journal du Practicien *	1113-5667
227	Journal of Arak University of Medical Sciences - Rahavard Danesh	N/A
228	Journal of Babol University of Medical Sciences	1561-4107

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276	Journal of the College of Dentistry - Baghdad *	N/A
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279	Journal of the Egyptian Public Health Association [The]	N/A
280	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	N/A
281	Journal of the Egyptian Society of Obstetrics and Gynecology [The] *	0258-3216
282	Journal of the Egyptian Society of Parasitology	1110-0583
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293	Jundishapur Journal of Microbiology (JJM)	N/A
294	JPAD - Journal of Pakistan Association of Dermatologists	1560-9014
295	JPC - Journal of Pediatric Club	N/A
296	JPDA - Journal of the Pakistan Dental Association	1680-2292
297	JPIMS - Journal of Pakistan Institute of Medical Sciences *	1683-6928
298	JPMA - Journal of Pakistan Medical Association	0030-9982
299	JPMI - Journal of Postgraduate Medicale Institute	1013-5472
300	JPPS - Journal of Pakistan Psychiatric Society	1726-8710
301	JRMS - Journal of Research in Medical Sciences	1735-1995
302	JSP - Journal of Surgery Pakistan International	1817-0242
303	Kasr El Aini Journal of Surgery	N/A
304	Khartoum Pharmacy Journal *	N/A

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308	Kufa Medical Journal *	N/A
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310	Lebanese Science Journal	1561-3410
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315	Mansoura Journal of Pharmaceutical Sciences	1110-1318
316	Mansoura Medical Journal	1110-211X
317	Maroc Medical	0025-4053
318	Medical Arabization	N/A
319	Medical Channel	1681-5491
320	Medical Forum Monthly	1029-385X
321	Medical Journal of Ahmed Maher Teaching Hospital [The] *	N/A
322	Medical Journal of Basrah University [The]	0253-0759
323	Medical Journal of Cairo University [The]	0045-3803
324	Medical Journal of Islamic World Academy of Sciences	1016-3360
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327	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
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329	Medical Journal of the Islamic Republic of Iran *	1016-1430
330	Medical Journal of Tikrit University [The] *	N/A
331	Medical Principles and Practice	1011-7571
332	Medical Sciences Journal of Islamic Azad University	1023-5922
333	Medical Spectrum [The] *	0254-8534
334	Medicine Today	1813-9876
335	MEJO - Middle East Journal of Ophthalmolgy *	N/A
336	Middle East Journal of Anesthesiology	0544-0440
337	JEMTAC - Journal of Emergency Medicine, Trauma & Acute Care	1995-4522
338	Middle East Journal of Family Medicine	N/A
339	Minoufiya Medical Journal	1110-2098
340	MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology *	1110-5437
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346	New Egyptian Journal of Medicine [The]	1110-1946
347	New Iraqi Journal of Medicine [The]	1917-5562
348	Nursing and Midwifery Research	1753-5001
349	Ofogh-E-Danesh New	1735-1855
350	Oman Journal of Ophthalmology	0974-620X
351	Oman Medical Journal	N/A
352	Omdurman Journal of Pharmaceutical Sciences	N/A
353	PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648
354	Pakistan Heart Journal *	0048-2706
355	Pakistan Journal of Biochemistry *	0300-8185
356	Pakistan Journal of Chest Medicine	N/A
357	Pakistan Journal of Clinical Psychology	1019-438X
358	Pakistan Journal of Community Medicine [The] *	N/A
359	Pakistan Journal of Health *	N/A
360	Pakistan Journal of Medical and Health Services	1996-7195
361	Pakistan Journal of Medical Sciences	1682-024X
362	Pakistan Journal of Neurology *	N/A
363	Pakistan Journal of Obstetrics and Gynaecology	N/A
364	Pakistan Journal of Ophthalmology	0886-3067
365	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry *	1608-134X
366	Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985
367	Pakistan Journal of Pathology	N/A
368	Pakistan Journal of Pharmaceutical Sciences	1011-601X
369	Pakistan Journal of Pharmacology	0255-7088
370	Pakistan Journal of Physiology	1819-270X
371	Pakistan Journal of Psychology	0030-9869
372	Pakistan Journal of Scientific and Industrial Research *	0030-9885
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377	Pan Arab Journal of Neurosurgery	1319-6995
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382	PJC - Pakistan Journal of Cardiology	1016-1244
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385	PMJ - Palestinian Medical Journal	N/A
386	Population Bulletin of ESCWA *	0258-1914
387	Population Researches and Studies	N/A
388	Population Sciences *	N/A
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393	Qatar Medical Journal	0253-8253
394	Qom University of Medical Sciences	1735-7799
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396	Rehabilitation International *	N/A
397	Research Centre Bulletin *	1019-5335
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399	Revue Maghrebine de Pediatrie [La]	0330-7611
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401	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
402	Revue Marocaine de Medecine et de Sante	0251-0758
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406	RMJ - Rawal Medical Journal	0303-5212
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408	Sana'a University Medical Journal *	N/A
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424	SDJ - Saudi Dental Journal [The]	1013-9052
425	SGH Medical Journal	1658-2489
426	SHAMS - Journal of Medical Sciences	N/A
427	Smile Dental Journal New	2072-473X
428	Social Welfare Quarterly	N/A
429	South Valley Medical Journal	1110-7529
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431	SQUMJ - Sultan Qaboos University Medical Journal	1029-4066
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433	Strides in Development of Medical Education	1735-4242
434	Sudan Journal of Medical Sciences	N/A
435	Sudan Medical Journal *	0491-4481
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