Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts

IMEMR Current Contents
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For further information contact:
World Health Organization
Regional Office for the Eastern Mediterranean
Health Publications, Production & Dissemination (HPD)
Library & Health Literature Services (LHL)
Abdul Razzak Al-Sanhouri Street,
P.O. Box 7608,
Nasr City, Cairo 11371, Egypt
http://www.emro.who.int/lin
e-mail: hpd@emro.who.int
Tel: +20 2 22765047
Fax: +20 2 22765424
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IMEMR Current Contents

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

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

Scope and Coverage
The IMEMR Current Contents is issued on a quarterly basis including the most recent articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database.

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

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

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

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

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

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

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1 Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen
Availability of photocopies
Photocopies of articles cited in IMEMR may be obtained from EMRO Library free of charge upon request.

Availability on the Internet
This issue, as well as all forthcoming issues, will appear in WHO/EMRO web site on the Internet, as part of the complete edition of the Index. Internet address is http://www.emro.who.int/HIS/VHSL/Imemr.htm

Figure (1): Sample of IMEMR citation

**Antibodies, Antinuclear**

**Main Subject Heading**

- **immunology**
  - **Subheading**
  - **Title**
  - **Author(s)**
  - **E-mail:**
  - **First author’s e-mail address**
  - **First author’s affiliation**
  - **No. of References**
  - **Journal Title**
  - **Year**
  - **Volume**
  - **Pages**

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

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

Frequency of ABO, subgroup ABO and Rh [D] blood groups in major Sudanese ethnic groups.
Hassan, Fathelrahman Mahdi
E-mail: fathmaga@yahoo.com
Sudan University of Science and Technology - College of Medical laboratory Science
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 21-23 (21 ref.)
Keywords: Rh-Hr Blood-Group System
Abstract: There are differences in the distribution of ABO, subgroup ABO and Rh [D] blood groups in different populations of the world. Relatively little information is available about blood group distributions in Sudanese population. To see the frequency of ABO, subgroup ABO and Rh [D] blood groups in major Sudanese ethnic groups [Danagla, Shitygia and Gaaleen]. Blood testing for ABO, subgroup ABO and Rh [D] typing was done over six months, in 300 unrelated individuals, from both genders. Blood samples were collected from students of the college of medical laboratory science - Sudan University of Science and Technology using finger prick method and following routine slide method. Blood group [O] was the most predominant [52.7%] in both Rh positive and negative subjects, followed by blood group A, B and AB. Majority [98.0%] of the subjects were Rh [D] positive and only 2% were Rh negative. The predominant subgroup of ABO was A2 [14.1%]. The frequency of ABO blood groups in both Rh positive and negative subjects among the major Sudanese ethnic group was similar to that reported from neighbouring regions.

Accidents, Aviation

To err is human-case reports of two military aircraft accidents: possible mechanisms of human failure.
Dikshit, Mohan B.
E-mail: mohanb@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Physiology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 120-125 (12 ref.)
Keywords: Military Personnel; Wounds and Injuries; Environment
Abstract: It has been postulated that pilot error or in-flight incapacitation may be the main contributory factors to 70-80% of aircraft accidents. Two fatal aircraft accidents are presented in which either of the above possibilities may have played a role. The first case report describes an erroneous decision by a fighter pilot to use a seat position adjustment of the ejection seat leading to fatal injuries when he had to eject from his aircraft. Injuries to the body of the pilot, and observations on the state of his flying clothing and the ejection seat were used to postulate the mechanism of fatal injury and establish the cause of the accident. The second case report describes the sequence of events which culminated in the incapacitation of a fighter pilot while executing a routine manoeuvre. This resulted in a fatal air crash. Possible contributions of environmental factors which may have resulted in failure of his physiological mechanisms are discussed.

Accidents, Traffic

Smashed to pieces: a patient's view of a road traffic accident.
Freeman, Helen
E-mail: angus_helen@yahoo.com
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 133-135
Keywords: Wounds and Injuries; Intensive Care Units; Patients
mortality

Life loss and disability from traffic accidents: it is imperative we all act now.
Al Lamki, Lamk
E-mail: mijournal@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 1-5 (23 ref.)
Keywords: Mortality; Disability Evaluation; Safety
**Acrocallosal Syndrome**

Caudal regression syndrome with partial agenesis of the corpus callosum and partial lobar holoprosencephaly: case report.
Al Hashami, Hilal; Bataclan, Maria F.; Mathew, Mariam; Krishnan, Lalitha
Sultan Qaboos University Hospital - Department of Child Health
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 89-93 (11 ref.)

**Keywords:** Holoprosencephaly; Pregnancy in Diabetics; Hyperglycemia-complications; Syndrome

**Abstract:** Caudal regression syndrome is a rare fetal condition of diabetic pregnancy. Although the exact mechanism is not known, hyperglycaemia during embryogenesis seems to act as a teratogen. Independently, caudal regression syndrome [CRS], agenesis of the corpus callosum [ACC] and partial lobar holoprosencephaly [HPE] have been reported in infants of diabetic mothers. To our knowledge, a combination of all these three conditions has not been reported so far.

**Adnexal Diseases**

ultrasonography

Review of gray-scale ultrasonographic findings: a valuable guide to suspect adnexal torsion.
Arab, Maliheh; Tehranian, Afsaneh; Mohammadi, Akram Ghara; Hashemieh, Mojgan
E-mail: drmarab@yahoo.com
Shahid Beheshti University of Medical Sciences - Imam Hossein Hospital - Department of Ob and Gynecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 300-303 (24 ref.)

**Keywords:** Adnexal Diseases-diagnosis; Ovary-ultrasonography; Torsion, Mechanical; Retrospective Studies

**Abstract:** To report preoperative gray-scale sonographic characteristics of adnexal Torsion. In a retrospective multicentric study in 20 hospitals, 148 out of 3303 adnexal mass operations, proved histopathologically as Adnexal Torsion, were reviewed regarding age, involved side and gray-scale abdominal sonographic findings. Torsion occurred in 5% of benign adnexal surgeries. Mean age was 29 [SD=12], Mean mass diameter was 9 cm and they mostly revealed a cystic pattern [84%]. Free peritoneal fluid was seen in 29%. Right-sided involvement was shown in 62%. Gray-scale sonographic findings are valuable besides clinical findings to suspect adnexal Torsion.

**Aircraft**

Masters, Ken
E-mail: kmasters@thealthed.com
Sultan Qaboos University - College of Medicine and Health Sciences - Medical Education Unit
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 278-279 (1 ref.)

**Keywords:** Accidents; Military Personnel

**Albinism, Oculocutaneous**

Oculocutaneous albinism associated with axenfeld's anomaly: three case reports.
Keshav, B.R.; Mohammed, Mahmood J.; Mahmood, Nasir
E-mail: keshavraj2000@gmail.com
Sur Hospital - Department of Ophthalmology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 111-113 (8 ref.)

**Keywords:** Mesoderm-abnormalities; Consanguinity; Comorbidity

**Abstract:** Oculocutaneous albinism and anterior mesodermal dysgenesis are well-known heritable conditions, but their occurrence in association has only been rarely reported. We present cases of three siblings of a family with identical presentation suggesting that this association may be more than just a coincidence. This association is worth noting, as this could be one of the causes of ocular morbidity and poor vision in oculocutaneous albinism.
Algae

Biological importance of marine algae.
El Gamal, Ali A.
E-mail: aelgamal00@yahoo.com
King Saud University - College of Pharmacy - Department of Pharmacognosy

Keywords: Biological Products; Seawater-microbiology; Oceans and Seas

Abstract: Marine organisms are potentially prolific sources of highly bioactive secondary metabolites that might represent useful leads in the development of new pharmaceutical agents. Algae can be classified into two main groups; first one is the microalgae, which includes blue green algae, dinoflagellates, bacillariophyta [diatoms], etc., and second one is macroalgae [seaweeds] which includes green, brown and red algae. The microalgae phyla have been recognized to provide chemical and pharmacological novelty and diversity. Moreover, microalgae are considered as the actual producers of some highly bioactive compounds found in marine resources. Red algae are considered as the most important source of many biologically active metabolites in comparison to other algal classes. Seaweeds are used for great number of application by man. The principal use of seaweeds as a source of human food and as a source of gums [phycocollides]. Phycocolloides like agar agar, alginic acid and carrageenan are primarily constituents of brown and red algal cell walls and are widely used in industry.

Alkaloids

Isolation and purification

Bioactive alkaloids produced by fungi I. updates on alkaloids from the species of the genera boletus, fusarium and psilocybe.
Mahmood, Zafar Alam; Ahmed, Syed Waseemuddin; Azhar, Iqbal; Sualeh, Mohammad; Baig, Mirza Tasawer; Zoha, S.M.S.
E-mail: zamahmood@hotmail.com
University of Karachi - Faculty of Pharmacy - Department of Pharmaceutics
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 349-357 (60 ref.)

Keywords: Basidiomycota-metabolism; Psilocybe-metabolism; Fusarium-metabolism

Abstract: Fungi, in particular, are able in common with the higher plants and bacteria, to produce metabolites, including alkaloids. Alkaloids, along with other metabolites are the most important fungal metabolites from pharmaceutical and industrial point of view. Based on this observation, the authors of this review article have tried to provide an information on the alkaloids produced by the species of genera: Boletus, Fusarium and Psilocybe from 1981-2009. Thus the review would be helpful and provides valuable information for the researchers of the same field.

Amino Acids

urine

Prevalence of statin use in type 2 diabetes mellitus and/or hypertensive patients at risk of coronary heart disease in Shamiya family practice health center-kuwait.
Al Mutairi, Ghaida'a F.; Al Baghli, Amani A.; Abdul Halim, Ibrahim M.; Abdul Jalil, Huda K.; Karraz, Samer A.; Ali, Seham A.
Ministry of Health - International Shamiya Family Practice Health Center - Department of Primary Health Care
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 685-690 (22 ref.)

Keywords: Diabetes Mellitus, Type 2; Hypertension; Coronary Disease; Community Health Centers; Prevalence

Abstract: Hyperlipidemia represents an important risk factor in the development and progression of coronary heart disease. Statin, as a lipid-lowering therapy, is associated with a significant reduction in the risk of primary and secondary cardiovascular events. To determine the prevalence of statin use in patients with type 2 diabetes mellitus, and/or hypertensive patients at high risk of coronary heart disease. The study design was cross sectional descriptive one that was carried out in Shamiya primary health care center-Kuwait. All patients with type 2 diabetes and/or hypertension attended for follow-up during the study period were potentially eligible for the study if their age was<=30 years and free from cardiovascular disease. Recruitment effort revealed 265 diabetic and 155 hypertensive patients. The study questionnaire included personal characteristics, clinical data, statin use, in addition to biochemical investigations, Framingham risk assessment equation was used to stratify hypertensive patients into low, intermediate and high coronary heart disease risk groups. Patients in intermediate risk group were re-evaluated for indication of statin use by counting the number of risk factors they had. Overall, borderline and high lipid profiles were detected in
44.3%, 88.3%, 78.1% and 33.5% of the studied subjects for total cholesterol, HDL-C, LDL-C and triglycerides respectively. The total number of hypertensive patients in whom statin was recommended was 26 patients [10 high risk category and 16 intermediate risk category]. Statin was used by 45 diabetic patients [17%] and 9 hypertensive patients [34.6%]. It was freely supplied by the government for 59.3% of patients [68.1% of Kuwaiti versus 0.0% for Non-Kuwaiti patients]. Statin was significantly under-used in diabetic and hypertensive patients at risk of coronary heart disease in primary health care. A multidimensional intervention program is necessary to combat barriers to adequate treatment of high-risk patients including patient, physician and health care system.

Anemia
epidemiology

Anaemia prevalence and associated sociodemographic and dietary factors among Palestinian adolescents in the West Bank.
Mikki, N.; Abdul Rahim, H.F.; Stigum, H.; Holmboe Ottesen, G.
E-mail: nahedmikki@yahoo.com
University of Oslo - Institute of General Practice and Community Medicine - Section of Preventive Medicine and Epidemiology
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 208-217 (26 ref.)
Keywords: Prevalence; Socioeconomic Factors; Diet; Questionnaires; Hemoglobins; Anthropometry
Abstract: Anaemia still persists among children and women of childbearing age in Palestine. We investigated the prevalence of anaemia and associated factors among Palestinian school adolescents [aged 13-15 years] in Ramallah and Hebron governorates. Haemoglobin levels were measured to assess the prevalence of anaemia. The prevalence of anaemia was significantly higher in Hebron than in Ramallah among boys [22.5% versus 6.0% respectively], while among girls the figures were similar [9.2% and 9.3% respectively]. Linear binomial regression analysis showed that among boys, anaemia was independently associated with residence in Hebron and higher standard of living, while among girls, anaemia was associated with higher father's education. Consumption of iron-rich foods, as recorded in food frequency questionnaires, had no significant effects on anaemia prevalence in both boys and girls.

Anemia, Iron-Deficiency
diagnosis

A new valid formula in differentiating iron deficiency Anemia from beta thalassemia trait.
Keikhaei, Bijan
E-mail: keikhaeib@yahoo.com
Ahwaz Jondishapour University of Medical science - Research Center for Thalassemia and Hemoglobinopathy
Pakistan Journal of Medical Sciences 2010; 26 (2): 368-373 (25 ref.)
Keywords: beta-Thalassemia-diagnosis; Sensitivity and specificity; Predictive Value of Tests
Abstract: To compare the validity of a new index [HbxRDWx100/ [RBC] 2xMCHC] with twelve discriminating functions [DFs] to differentiate iron deficiency anemia [IDA] and beta-thalassemia trait [beta-TT]. A total of 823 patients [317 IDA and 506 beta-TT] aged 15 to 35-year-old were enrolled in this study. The diagnostic sensitivity, specificity and other validity parameters were calculated to assess the diagnostic reliability of the novel index [Keikhaei index [KI]] vis-a-vis the other published DFs [Mentzer Index [MI], Green and King Index [G and KI] ,red cell distribution width index [RDWI], England and Fraser Index [E and FI], Bessman and Feinstein index [B and FI], Telmissani et al index [TI], Srivastava and Bevington index [S and BI], Shine and Lai index [S and LI], Ricerca et al index [RI], Ehsani et al index [EI], Sirdah et al index [SI], and Red Blood Cell Count [RBC] were calculated in all patients. All thirteen DFs didn't have the sensitivity and specificity of 100%. The KI, RDWI, G and KI and E and FI showed the most sensitivity and specificity for both IDA and TT; moreover, the lowest reliable indices belonged to B and FI, S and LI and RI. According to Youden’s index [YI], DFs in the order of highest to lowest were KI> RDWI>E and FI>RBC>M I>EI>T>SI>S and BI>R1>S and LI>B and FI.

Angioplasty, Transluminal, Percutaneous Coronary

Percutaneous coronary intervention in unprotected left main coronary artery disease.
Ahmed, Hafeez; Tai, Javed Majid; Dhakam, Sajid
E-mail: hafeez.ahmed@aku.edu
The Aga Khan University Hospital - Department of Medicine
Keywords: Coronary Angiography; Coronary Vessels; Shock, Cardiogenic
Abstract: Percutaneous coronary intervention for unprotected left main coronary artery disease is potentially an important intervention in surgically unstable patients. A detailed review of medical record and visual analysis of coronary angiography and PCI procedure was undertaken. The study was conducted at the Aga Khan University Hospital, from January 2003 to December 2007. Patients included in the study had unprotected > 70% left main stenosis with ongoing ischemia, considered unsuitable for surgical revascularization. A total of 9 patients were included with a mean age of 70.1 years. Six patients had cardiogenic shock. Eight patients had bifurcation lesion. Simultaneous kissing stenting technique was used in 4 patients. There were 4 in-hospital deaths while 5 patients were alive at discharge. All 4 patients who expired had cardiogenic shock. Four patients were alive at a mean follow-up of 17 months. PCI turned out to be an alternative therapeutic option for unprotected left main coronary artery disease when surgery is declined.

Anodontia

Oral stereognostic ability in hypodontia patients.
Ahmed, Bilal; Mirza, Kamran Masood; Butt, Amir Mehmood; Hussain, Mehmood; Yazdanie, Nazia
E-mail: drbilalahmed789@hotmail.com
University of the Faisalabad - Department of Prosthodontics and Oral Implantology
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 14-17 (20 ref.)
Keywords: Case-Control Studies; Stereognosis; Perception
Abstract: Hypodontia is congenital absence of one or more, but not all, of the normal complement of teeth. It is one of the most frequent alterations of human dentition. Hypodontia either alone or association with craniofacial developmental disorders can pose speech and masticatory dysfunctions along with aesthetic and functional problems. Oral Stereognostic ability can be used to diagnose and predict the prognosis of different treatment modalities in hypodontia patients. To compare oral Stereognostic ability in hypodontia patients with those having normal dentition. Case Control study, conducted in the Department of Prosthodontics, de'Montmorency College of Dentistry/ Punjab Dental Hospital, Lahore, Pakistan. Forty hypodontia subjects were selected. Forty dental students of third and final year with normal dentition were selected as controls. Oral Stereognostic ability scores were calculated using specific test samples for both groups. This study showed that oral Stereognostic ability scores were reduced in hypodontia subjects with a significant p value<0.001. It confirms that hypodontia subjects had some difficulty in perceiving the intra oral objects. Oral Stereognostic ability was impaired in hypodontia subjects; correction at early age might improve the case.

Anticholesteremic Agents

therapeutic use

Hypocholesterolemic and antiatherosclerotic effect of Artemisia aucheri in hypercholesterolemic rabbits.
Dinani, N. Jafari; Asgary, S.; Madani, H.; Naderi, Gh.; Mahzoni, P.
Isfahan University of Medical Sciences - Isfahan Cardiovascular Research Center
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 321-325 (17 ref.)
Keywords: Artemisia; Atherosclerosis-drug therapy; Phytotherapy; Rabbits; Hypercholestrolemia-drug therapy
Abstract: Atherosclerosis which results from gradual deposition of lipids in arteries is a leading cause of mortality worldwide. Diet is one of the most important factors underlying atherosclerosis. High-cholesterol diets enhance atherosclerosis and vegetarian diets are known to slow down the process. Artemisia aucheri is a herb of the Composite family. Many species of Artemisia have proven hypolipidemic and antioxidant properties. This study determine the effects of Artemisia aucheri on lipoproteins and atherosclerosis in hypercholesterolemic rabbits. Fifteen male rabbits were randomly divided into three groups. Normal diet group, high-cholesterol diet group [1% cholesterol] and Artemisia aucheri group [1% cholesterol diet supplemented with 100 mg/kg body weight the Artemisi aucheri every other day]. Biochemical factors were measured at the start, end of the first and second months of the study. At the end of the study, the aorta were removed for assessment of atherosclerotic plaques. The results indicate that Artemisia aucheri significantly reduced the level of total cholesterol, LDL cholesterol and triglycerids and increased HDL cholesterol. The degree of atherosclerotic thickness was significantly reduced in the treated group. Therefore, Artemisia aucheri is one of the useful herbal medicine for prevention of atherosclerosis and more studies in this regard is recommended.
Antidepressive Agents

pharmacology

Acute effects of serotonergic antidepressants on tryptophan metabolism and corticosterone levels in rats.
Bano, Samina; Gitay, Mehnaz; Ara, Iffat; Badawy, Abdulla
E-mail:saminbpk@yahoo.com
University of Karachi - University of Wales Institute Cardiff - Department of Biochemistry
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 266-272 (45 ref.)

Keywords: Corticosterone-blood; Tryptophan-metabolism; Brain-metabolism; Serotonin-biosynthesis; Liver-enzymology; Rats, Wistar

Abstract: The aim of present study is to see the effects of antidepressants in relation to tryptophan metabolism and disposition and to know whether they share any common mechanism of action in this regard. These are the monoamine oxidase inhibitor [moclobemide], atypical tricyclic [tianeptine], selective serotonin reuptake inhibitors [SSRIs] namely sertraline and citalopram and an herbal St John's Wort [SJW]. Liver tryprophan pyrrolase activity, serum tryptohan, corticosterone and brain indoles were determined after drug administration in Albino Wistar rats at a dose of 10mg/kg. All five antidepressants inhibited tryptophan pyrrolase activity. Serum total tryptophan concentrations were increased by 19% and 33% by tianeptine and moclobemide respectively, however 34% decrease in total tryptophan was observed after SJW administration. Free tryptophan was increased by all the drugs being maximum [65% P<0.001] by sertraline and minimum [15%, P<0.05] by tianeptine. Corticosterone levels were significantly [P=0.01] decreased by 52 and 58 percent by citalopram and St John's Wort respectively. By contrast an increase by 16% was observed by tianeptine. It was also observed that all the drugs increase brain tryptophan by 21-61 percent but increases in 5-hydroxytryptamine [5-HT] were observed only by two drugs that is moclobemide and SJW, however in comparison increases were greater [68%] after SJW administration. 5-hydroxyindoleacetic acid [5HIAA] concentrations were increased by 45-64% by all other drugs except tianeptine and moclobemide. It is concluded that attenuation of peripheral tryptophan metabolism and elevation of brain tryptophan contributes to the mechanism of action of antidepressants of different classes and pharmacological profile tested.

Antigens, CD95

blood

Habibagahi, Mojtaba; Jaberipour, Mansooreh; Fattahi, Mohammad Javad; Hashemi, Seyed Baslr; Shariati, Mahmood
Shiraz University of Medical Sciences - Immunotherapy Laboratory - Department of Immunology
MEJC - Middle East Journal of Cancer 2010; 1 (1): 21-26 (30 ref.)

Keywords: Antigens, CD95-diagnostic use; Fas Ligand Protein-blood; Alternative Splicing; Fas Ligand Protein-diagnostic use; Head and Neck Neoplasms-blood; Head and Neck Neoplasms-surgery; Prognosis; Enzyme-Linked Immunosorbent Assay

Abstract: Alternative splicing of the Fas transcript can produce a natural secreted isoform of this molecule. Some cancer cells can also produce soluble Fas [sFas] which may have suppressive effects on the immune system's anti-tumor response. Elevated concentrations of sFas have been detected in the sera of patients with different malignancies. The concentrations of sFas in sera of patients with head and neck carcinoma [HNC, n=98] and healthy individuals [n=30] were measured by Sandwich ELISA and compared to values obtained six months after surgical removal of the tumor [n=48]. Data were correlated with different clinical findings of the patients. sFas concentrations in the sera of HNC patients were found to be significantly higher in patients with different tumor stages. sFas concentration did not correlate with age or tumor invasiveness, however a higher concentration of sFas was found in the sera of patients who had higher tumor grades. Surgical removal of tumors in patients resulted in a substantial decrease in sFas concentration. The initial rise in sFas concentration in the sera of HNC patients and its consequent decrease could be regarded as a sign of tumor suppressive mechanisms. Additional studies are needed to fully elucidate this mechanism however these findings might show the prospective use of such biomarkers to determine disease prognosis and even immunotherapeutic applications.
**Antihypertensive Agents**

**analysis**

Determination of mirtazapine in spiked human plasma and tablets by first derivative spectrofluorimetric method.

Youssef, Rasha M.
E-mail: rmny1973@yahoo.com

University of Alexandria - Faculty of Pharmacy - Department of Pharmaceutical Analytical Chemistry

**SPJ - Saudi Pharmaceutical Journal** 2010; 18 (1): 45-49 (20 ref.)

**Keywords:** Mianserin-analges and derivatives; Spectrometry, Fluorescence; Tablets; Mianserin-analysis

**Abstract:** A sensitive first derivative spectrofluorimetric method ([1]D-spectrofluorimetry) was developed for the determination of mirtazapine. Calibration graph for mirtazapine determination was established using the first derivative amplitudes of the mirtazapine emission spectrum [\( \lambda_{max} = 314 \text{ nm} \)] in 0.1 M sulphuric acid measured at 375-435 nm from peak to peak, as the analytical signals. Moreover, the ratio of [1]-spectrophotometric peak amplitudes at these wavelengths was calculated and used for the detection of the presence of interferences. Linearity range was found to be between 1 and 40 ng ml\(^{-1}\) with correlation coefficient \[ r = 0.9999 \]. The limit of quantitation [LOQ] was 1.0 ng ml\(^{-1}\) and the limit of detection [LOD] was 0.2 ng ml\(^{-1}\). The proposed method was validated according to ICH; and it has been applied for the drug determination in human plasma without prior extraction and in tablets. The proposed method's accuracy, reproducibility, selectivity and simplicity suggest its application in quality control analysis of the drug.

**Antineoplastic Agents, Phytogenic**

**Effect of inganen anticancer properties on microtubule organization.**

Khaleghian, Ali; Riazi, Gholam Hossein; Ghafari, Mahmoud; Rezaie, Marzieh; Takahashi, Akira; Nakaya, Yutaka; Nazari, Hossain

Semnan University of medical science - Department of Biochemistry and Hematology

**Pakistan Journal of Pharmaceutical Sciences** 2010; 23 (3): 273-278 (32 ref.)

**Keywords:** Euphorbia-chemistry; Microtubules-chemistry; Microtubules-drug effects; Polymers-chemistry; Spectrometry, Fluorescence

**Abstract:** Euphorbia tirucalli [Euphorbiaceae family] an environmental risk factor for Burkitt's lymphoma also has pharmacological activities. In the northeast of region in Brazil it's latex is used as an antimicrobial, antiparasitic in the treatment of coughs, rheumatism, cancer and other disease as folk treatment. The prevalent constituents of this plant latex are diterpenes from the Ingenan types [Ingenol esters] as well as the tigliane [phorbol esters]. Scientifically, there is not any data till now about anticancer effects of the Euphorbia tirucalli Linn., since the Ingenol esters have already presented tumor-promoting ability. Microtubules [MTs], and cytoskeletal proteins are essential in eukaryotic cells for a variety of functions, such as cellular transport, cell motility and mitosis. Single Inengan in cytoplasm can interact with these proteins and affect on their crucial functions. In this study, we showed the effects of Inengan on MT organization using ultraviolet spectrophotometer and fluorometry. The fluorescent spectroscopy showed a significant tubulin conformational change at the presence of Inengan which decrease polymerization of tubulin as well as the ultraviolet spectroscopy results. The aim of this study is to find the potential function of Inengan for treatment of cancer in cells and human organs.

**Apiaceae**

**Antibacterial agents from the seeds of Peucedanum zenkeri L. [Umbelliferae].**

Mbah, James A.; Gatsing, Donatien; Efange, Simon M.N.

University of Buea - Department of Chemistry

**Pakistan Journal of Medical Sciences** 2010; 26 (2): 314-318 (17 ref.)

**Keywords:** Anti-Bacterial Agents; Seeds

**Abstract:** In a search for natural substances with potential for the treatment of typhoid fevers and urogenital infections, the methylene chloride extract of the seeds of Peucedanum zenkeri was investigated. The extract was subjected to column chromatography leading to the isolation of seven compounds. Their structures were determined using modern 2D NMR techniques and by comparison with published NMR data. These compounds were tested against Salmonella typhi, Salmonella paratyphi B, Escherichia coli, Pseudomonas aeruginosa, Klebsiella pneumoniae and Staphylococcus aureus, using both agar diffusion and broth dilution techniques. The compounds isolated were umbelliprenin [1], prangenin [2], imperatorin [3], isopimpinellin [4], bergapten [5], cnidilin [6] and stigmasterol [7]. Among the above seven compounds, only two [1 and 2] exhibited antibacterial activity. For compound 1, the MIC value was 300 micro g/ml against P. aeruginosa, S. aureus, S. typhi and S. paratyphi B. For compound 2, the MIC values varied between 200 and 300 micro g/ml against all the bacteria strains tested. These data suggest that Peucedanum
Zenkeri seed extract contains antibacterial agents which are active against Salmonella species causing typhoid and paratyphoid fevers, and some bacteria strains causing urogenital infections. The antibacterial activity of compound 2 appears to be due to the epoxide group present in its structure.

**Apnea**

**Fentanyl and midazolam induced respiratory arrest and neuromuscular paralysis during day care surgery: a case report.**

Khan, Rashid M.; Kaul, Naresh; Neelakanthan, Punnuvella H.
Khoula Hospital - Department of Anesthesia
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 255-257 (8 ref.)

**Keywords:** Paralysis; Fentanyl; Midazolam; Ambulatory Surgical Procedures; Lipoma-surgery; Anesthesia, Local

**Abstract:** We report a 44 year-old, American Society of Anesthesiologist Class I [ASA I], female patient scheduled for elective excision of a small lipoma of the left thigh. She went into a 90 minute apnea and complete muscle paralysis as evidenced by the absence of all stimulatory responses by a peripheral nerve stimulator after receiving midazolam [1.0 mg] and fentanyl [100 micro g] intravenously for sedation and analgesia. The patient made an uneventful recovery after 90 minutes. No cause and effect relationship could be established between the administered drugs and this unusual response.

**Appendectomy**

**Experience of laparoscopic appendectomies versus open appendectomies.**

Rooh ul Muqim; Khan, Mansoor; Zarin, Mohammad
E-mail: muqimsaadan@yahoo.com
University of Peshawar - Khyber Teaching Hospital and Khyber Medical College - Surgical C Unit
Pakistan Journal of Medical Sciences 2010; 26 (2): 324-328 (18 ref.)

**Keywords:** Laparoscopy; Prospective Studies; Treatment Outcome; Surgical Wound Infection; Postoperative Complications

**Abstract:** To compare the outcome of laparoscopic and open appendectomies in terms of operative time and post-operative morbidity. This prospective study was done from March, 2008 to March, 2009, at Surgical "C" Unit of Khyber Teaching Hospital, Peshawar. All consecutive appendectomies [open and laparoscopic] performed over this time were included. Demographic details, operative time, conversion, infective post-operative complications and delay in discharge were recorded. The patients were divided into two groups, laparoscopic appendectomies [LA] and open appendectomies [OA]. A total of 165 appendectomies were performed, 72 in the LA group and 93 in OA group. Eighteen appendectomies were perforated at the time of operation. The patients’ ages ranged from 12-65 years [median 24 years]. Eighty were males and eighty five were females. Operative time in LA group was longer with mean duration of 45 minutes [range 35-75 minutes] compared with 35 minutes [range 30-55 minutes] in OA group. A glove finger was used as extraction bag in 59 [83%] in LA group. LA patients' wound infection was recorded in12 patients, two out of 72 in LA and 10 out of 93 in OA group. The site of infection was the port of specimen extraction in LA group. Intra-abdominal abscesses complication was observed in one case in the OA group. LA group had shorter hospital stay [mean 1.5 days] than [OA] [mean 3.5 days], and early return to normal activity, 8-15 [mean 10.5] days in LA and15-25 [mean18.5] days in OA. Laparoscopic Appendectomy [LA] is safe and has major benefits like less post-operative pain, decreased wound infection, early hospital discharge and earlier return to work than Open Appendectomy [OA]. LA is recommended in all patients with acute appendicitis if laparoscopy is not contraindicated.

**Attention Deficit Disorder with Hyperactivity**

**diagnosis**

**A rare presentation of attention deficit/hyperactivity disorder: a recommendation to be more alert.**

Al Sharbati, Marwan; Al Zaidi, Rashid; Al Naamani, Rahma; Al Futaisi, Amna; Jain, Rajeev
E-mail: marwan@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Behavioral Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 84-88 (16 ref.)

**Keywords:** Tuberous Sclerosis; Bipolar Disorder; Comorbidity
**Abstract:** We report the case of a 7 year-old Omani girl with tuberous sclerosis [TS], attention deficit hyperactivity disorder [ADHD] and bipolar disorder [BD], at Sultan Qaboos University Hospital [SQUH], Oman. For a year she had been suffering from hyperactivity, aggression, over talkativeness, insomnia, risk-taking behaviour, distractibility, poor attention and seizures. This clinical picture evolved slowly, but was progressive in nature. Before the consultation at her local health centre, she was given four drugs without being properly investigated; she continued to deteriorate. In SQUH, she showed hyperactive-impulsive behaviour, elation, flight of ideas, preoccupation with self and high self-confidence. The physical examination revealed multiple hypomelanotic patches all over the body and a shagreen patch at the sacral area. The electroencephalogram showed generalised epileptic discharges, while brain imaging showed multiple parenchymal calcified foci in both cerebral hemispheres. Other investigations were normal. She was given valproate, and then a psychostimulant, methylphenidate, that controlled her state. Our aim in reporting this case is not only because it is unique, given its rare comorbidity [ADHD, TS and BD], but also to remind our junior colleagues to be alert to the possibility of an underlying neuropathology when performing clinical examinations and investigations of children presenting with neuropsychiatric symptoms.

**Behcet Syndrome**

**Behcet’s disease associated with hyperthyroidism: case report and review of literature.**

Abro, Ali Hassan; Abdou, Ahmed M. Saleh; Al Saleh, Jamal; Ustadi, Abdulla M.; Younis, Nadeem J.; Doleh, Wafa F.

E-mail:ahabro@dohms.gov.ae

Rashid Hospital Dubai

Pakistan Journal of Medical Sciences 2010; 26 (2): 464-469 (38 ref.)

Keywords: Hyperthyroidism; Comorbidity

Abstract: Behcet's Disease is a multi-system, chronic inflammatory disorder characterized by chronic relapsing course. Its principal manifestations are oral and genital ulcers as well as inflammation of the eyes, skin and joints, while vascular and neurological complications may result in death. The etiology and pathogenesis of the disease are still obscure and specific treatment is not available. We report the case history of a patient with Behcet's Disease. He presented with fever, arthritis and weight loss of 3-week duration. He was also found to have hyperthyroidism, extra-pulmonary tuberculosis, and strongyloidiasis. Although, the association between thyroid diseases and auto-immune connective tissue disorders as well as tuberculosis is well recognized, there had been, to the best of our knowledge, no reports of Behcet’s Disease associated with thyroid dysfunction. However, further studies are required to investigate any association between Behcet's Disease and thyroid dysfunction.

**beta-lactams**

**Study the effect of antibiotic combination of beta-lactam and aminoglycosid with another group antibiotic their synergism effect.**

Abdullah, Rana M.; Samaan, Samer F.; Al Shwaikh, Arwa M.

E-mail:dr.rana_alshwaikh@yahoo.com

University of Baghdad - College of Education - Department of Biology

JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 62-69 (28 ref.)

Keywords: Aminoglycosides-therapeutic use; Anti-Bacterial Agents; Drug Therapy, Combination; Drug Synergism; Ciprofloxacin-therapeutic use; Pseudomonas Infections-drug therapy; Treatment Outcome; Drug Resistance, Bacterial; Microbial Sensitivity Tests

Abstract: This study aimed to evaluate the effect of antibiotic combination between beta-lactams and aminoglycosids with another group of antibiotics. Fifty isolates of Pseudomonas aeruginosa were identified using different microscopic, cultural characteristics and biochemical tests. Eight isolates [16%] were from burn infections, 20 [40%] from urinary tract infections, 16 [32%] from burn infections and 6 [12%] from otitis media cases. Antimicrobial susceptibility tests and minimal inhibitory concentration MIC were performed. Pseudomonas aeruginosa exhibited [100%] resistance to amoxicillin, amoxicillin/clavulanic acid and ceftazolin. While percentages of resistance to carbenicillin, cefotaxime and ceftazidime were [84%], [80%] and [78%] respectively. Resistance percentages to gentamycin, tobramycin, piperacillin, amikacin and ciprofloxacin were [52%], [26%], [24%], [6%] and [4%] respectively. All isolates of Pseudomonas aeruginosa were highly sensitive [100%] to aztreonam, cefepime, imipenem, pefloxacin and ofloxacin. Combinations of ciprofloxacin with gentamycin and ceftazidime gave interesting results against the local bacterial isolates in reducing their MIC values. Gentamycin and ceftazidime gave an obvious decrease in MIC values after combination of these drugs and used against Pseudomonas aeruginosa. The study shows that the combination of beta-lactams and aminoglycosids with ciprofloxacin is highly effective in treatment of Pseudomonas aeruginosa infections.
**Beverages**

**microbiology**

Microbial assessment of un-bottled synthetic juices sold in Peshawar.
Abid, Hamida; Ali, Javed; Hussain, Arshad
PCSIR Laboratories Complex - Food Technology Centre
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 5-9 (14 ref.)
Keywords: Food Contamination; Food Microbiology; Food Preservation; Microbial Sensitivity Tests
Abstract: Un-bottled synthetic juices are sold by street vendors and hawkers raising the concern about their safety. To examine the quality of un-bottled synthetic beverages from different locations of Peshawar city using standard techniques. A total of 56 samples of un-bottled synthetic juices were collected from 8 different locations of Peshawar city and analyzed for Total Plate Count, Total Coliform Bacteria, Total Fecal Coliform bacteria, E. coli, Yeast and Mould. In all localities, the street vended un-bottled synthetic juices were found hygienically of poor quality as all had high total plate count which ranged from 2 x 102 to 5 x 107 and total coliform bacteria ranged from < 0.3 to >110 MPN/ml. Total Fecal Coliform ranged from < 0.3 to 110 MPN/ml. The presence of E. coli contamination was found in [25] 44% samples, while all the analyzed samples were contaminated with yeasts and moulds. All un-bottled synthetic juices sold on roadside were highly contaminated with disease causing microorganisms. Periodic monitoring of street beverages should be carried out to make them safe for consumption.

**Blepharophimosis**

Blepharophimosis-ptosis-epiconthus inversus syndrome in a Pakistani pedigree.
Chaudhry, Tanveer Anjum; Khalid, Mirza Umair; Saleem, Taimur; Khabir, Ahmad
E-mail:tanveer.chaudhry@aku.edu
The Aga Khan University - Department of Surgery, Section of Ophthalmology
Keywords: Blepharoptosis; Syndrome; Pedigree; Family
Abstract: Blepharophimosis-ptosis-epicanthus inversus syndrome [BPES] is a rare developmental ocular disorder. We report this condition affecting 4 members of a Pakistani family across three generations. A 2-year-old girl was brought to the clinic by her father for the correction of her shortened palpebral fissures. Examination findings were consistent with BPES. The girl's father, paternal grandfather and paternal aunt also had identical features. The distance between the medial canthi of the index case was 30 mm, and the lengths of vertical and horizontal palpebral fissure were 6 mm and 20 mm, respectively. BPES must be considered an important differential diagnosis in patients presenting with blepharoptosis and blepharophimosis.

**Body Composition**

Optimum anthropometric criteria for ideal body composition related fitness.
Kilani, Hashem; Abu Eisheh, Asem
E-mail:hakilani@squ.edu.om
Sultan Qaboos University - College of Education - Department of Physical Education
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 74-79 (16 ref.)
Keywords: Anthropometry; Physical Fitness; Body Mass Index; Body Weight; Resistance Training
Abstract: The three aims of this study were to establish equations for ideal body composition related fitness to be used by adults willing to gain optimum body composition related fitness; to predict the possible symmetrical major muscle circumference, and to compute the ideal body fat percentage [BFP] with ideal body weight [IBW] based on the body mass index [BMI]. Twenty-four athletes were intentionally selected, with heights of 166-190 cm and aged 20-42 years, according to a judging committee that used modified International Fitness Federation criteria for the Mr. Fitness competition "super body category". Common anthropometric and body composition measurements were taken for the following independent variables: body height, upper limb length, lower limb length, thigh length, arm length, shoulder width, forearm length, shank length, and wrist girth; and for the following dependent variables: circumferences of shoulder, thigh, waist, hip, chest, biceps, forearm, shank, and neck. Skin fold thickness was measured at three sites by a Harpenden caliper to calculate BFP. The findings indicate that there was a predictive correlation between major independent variables and body circumferences. The mean range used to find out the ideal BFP percentage which was 5.6 +/- 6.7%. The BMI equation used to find the IBW was H2 23.77 +/- 2 SE. Stepwise multiple regressions were also used to derive predictive equations. The most predictive independent variables were wrist girth and height. It is suggested that the above equations, the ideal BFP percentage and the IBW be used as criteria in training sessions to achieve ideal body composition related fitness.
Body Fluids

The efficacy of workshop on body fluids in health and disease and its impact on nurses training. Altun, Insaf  
Kocaeli University - Department of Fundamentals in Nursing  
Pakistan Journal of Medical Sciences 2010; 26 (2): 426-429 (23 ref.)  
Keywords: Nurses; Knowledge; Education, Nursing; Educational Measurement; Teaching  
Abstract: To determine the efficacy of workshop on body fluids in health and disease and its impact on nurses training. Nurses attended an interactive lecture-based workshop on body fluids in health and disease. Participants had to accept an invitation to the presentation prior to the training event. They completed a multiple choice question [MCQ] test, derived from topics covered in the presentation, prior to the lecture. The MCQ test was repeated after the lecture to assess retention and application of knowledge. Thirty-six nurses participated in the workshop. There was a significant improvement in mean test scores after the lecture when compared with pre-lecture scores [Mean=30.9, SD=4.4 vs. Mean=11.7, SD=3.4, p<0.001]. Pre-post data in according to the Kolmogorove-Smirnov test were normally distributed [Asy mp.sig.05, 0.02]. Lecture based interactive workshop on body fluids in health and disease helps improve nurses' knowledge. It also helps in overcoming deficiencies in nurses training.

Body Mass Index

[Body mass index and body fat in Lebanese female adolescents]. Fazah, Abdallah; Jacob, Christophe; El Hage, Rawad; Delamarche, Paul; Moussa, Elie  
University of Balamand - Division of Physical Education - Laboratory of Physiology and Biomechanics of Motor Performance  
LMJ - Lebanese Medical Journal 2010; 58 (2): 97-100 (25 ref.)  
Keywords: Adipose Tissu; Obesity-epidemiology; Absorptiometry, Photon  
Abstract: The aim of this study is to investigate the relation between body mass index [BMI] and body fat [BF] among Lebanese female adolescents. 51 Lebanese females aged 12 to 18 years participated in this study. BMI was calculated as weight/height. Adiposity was measured by dual energy X-ray absorptiometry [DEXA]. Correlation coefficient of percent body fat [%BF] with BMI is 0.82. Correlation coefficient of fat mass [BF] with BMI is 0.93. The two linear regression formulas are: %BF=-0.89+ [1.1 *BMI] and BF=-0.425+ [129 *BMI]. Correlations of BMI with DEXA measurements were higher with BF than%BF. For a given BMI, Lebanese girls have a higher than expected%BF. Based on the current findings, there may be a need to develop new cutoff points. From a public health perspective, this may considerably increase the prevalence of obesity among Lebanese female adolescents.

Bone Density

Bone mineral density in beta thalassemia major and intermedia, correlation with biochemical and hormonal profiles. Rafsanjani, Khadijeh Arjmandi; Azar, Maryam Razzaghy; Shoolami, Leila Zahedi; Vossough, Parvaneh; Modarres, Aliakbar; Taheri, Nima  
Iran University of Medical Sciences - Hazrat Aliashedar Hospital, Grant number: 555  
IJBC - Iranian Journal of blood and Cancer 2009; 1 (4): 121-127 (22 ref.)  
Keywords: beta-Thalasemia; Cross-Sectional Studies; Osteoporosis; Puberty; Ferritins-blood; Hypogonadism  
Abstract: Expansion of bone marrow cavity and decreased cortical and trabecular bone tissues and osteoporosis are resulted from beta-thalassemia. The aim of this study was to assess bone mineral density [BMD] in patients with beta thalassemia major and intermedia, and to determine their biochemical and hormonal profiles that may affect BMD. In a cross sectional study from October 2004 to April 2006, 305 patients [273 thalassemia major [137 males and 136 females] and 32 thalassemia intermedia [13 males and 19 females]] were evaluated for BMD. Dual x-ray absorptiometry was performed at 3 sites: spine [L2-L4], femoral neck, and radius. Z score< -2.5 was considered as osteoporosis, and between -1 and -2.5 as osteopenia. Z-scores were calculated according to bone density values based on age and sex. Patients were grouped according to age 3-6, 6-10, 10-13, 13-16, and over 16 years old. The stage of puberty was determined according to Tanner staging and its progression was followed. Biochemical and hormonal profiles of patients were recorded. In thalassemia major, mean age was 14 +/- 6.5 years, and mean BMD Z-score of spine, radius and hip were -2.3 +/- 0.9, -2.8 +/- 1.2, and -1.9 +/- 1.4, respectively. Mean age of patients with thalassemia intermedia was 13.4 +/- 6.2 years, and the mean Z-score of spine, radius, and hip were -2.1 +/- 0.9, -2.0 +/- 1.3, and -2.3 +/- 1.3, respectively. Hypogonadism was detected in 36% of thalassemia major and 35% of thalassemia intermedia; but hypothyroidism, diabetes mellitus, and hypoparathyroidism were detected only in thalassemia major with frequency of 2.8%, 1.6%, and 1.2%, respectively. BMD in spine and radius were significantly lower in patients with hypogonadism than in patients with normal puberty [P=0.039 and P=0.015, respectively]. Height
Standard Deviation Score [HSDS] was not significantly different in groups of osteoporosis and normal. Osteoporosis was seen in all age groups, and was more common in males than females at spine and radius bones \( P<0.001 \). It was less common in patients with hypothyroidism, hypoparathyroidism, and diabetes mellitus. BMD Z-Score had significant correlation with serum ferritin only in radius area \( P=0.04 \), and it had no significant correlation with serum Ca, P, Mg and Zn. Our results showed that the patients with thalassemia major and intermedia had low BMD. Patients with hypogonadism and males had lower BMD. Young children also had low bone mass, so early attention is essential.

**Breast Neoplasms**

**The current status of breast cancer among resource-limited countries.**
Masood, Shahla
E-mail:shahla.masood@jax.ufl.edu
University of Florida - College of Medicine Jacksonville - Department of Pathology
**Keywords:** Early Detection of Cancer; Culture; Mass Screening; Incidence; Developing Countries; Health Priorities

**etiology**

Assessment of breast cancer risk factors in asymptomatic hospital staff women aged 32-59: a descriptive report.
Hamdi, K.; Yahyazadeh, S.H.; Bahoor, F.; Ziaee, F.; Arefi, Sh.; Jafarnia, N.; Asadi, S.
Iran University of Medical Science - Akbarabadi Hospital - Department of Gynaecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 288-293 (23 ref.)
**Keywords:** Risk Factors; Health Personnel; Questionnaires; Breast Neoplasms-epidemiology

**Abstract:** Iranian breast cancer patients are relatively younger than their Western counterparts. The objective of the present study was to investigate risk factors for breast cancer in Iranian women and compare it with other data driven from other studies. A study was conducted in April 2008 in Tehran, Iran. Demographical data and risk factor related information, including data from their mammograms were collected using a questionnaire. In all, 109 participants were interviewed. The mean age of participants was 40.48 +/- 0.56 years. 1.8% of women were unmarried, while 78% were married and 20.2% were divorced/widowed. The mean age for menarche was 13.34 +/- 1.47 years and 46.89 +/- 4.98 for the menopause, respectively. The mean parity time was 2.36 +/- 1.13 and breastfeeding in women was 23.27 +/- 14.16 months. About 5.5% of the participants used oral contraceptive as a method for contraception. 8.3% of women experienced menopause, at the mean age of 46.89 +/- 4.98. 33.3% of menopaused women, used Hormone Replace Therapy [HRT]. Moreover, 8.3% of women had a positive history of breast cancer in their family. Of those women on whom mammography was done, 10.1% had breast mass in radiological findings, mostly in favour of fibrocystic change. In 20.2% of participants, further investigation was advised. The findings of the present study were in accordance with other studies done in Iran and in some aspects in tune with other studies about breast cancer in other countries. However, more multicentric larger scale studies should be conducted in Iran to determine a pattern for breast cancer in Iranian women.

**Bundle-Branch Block**

**etiology**

Asymptomatic permanent left bundle branch block [LBBB] complicating diagnostic left heart catheterisation.
Al Hadi, Hafidh; Sallam, Mansour
E-mail:halhadi@hotmail.com
Sultan Qaboos University Hospital - Department of Medicine
SQUUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 114-119 (13 ref.)
**Keywords:** Bundle-Branch Block-diagnosis; Heart Catheterization-adverse effects; Coronary Angiography; Electrocardiography

**Abstract:** This case report describes a routine diagnostic left heart catheterisation [coronary angiography, aortography and left ventriculography] procedure at Sultan Qaboos University Hospital, Oman, which was complicated by the development of new asymptomatic, but permanent, left bundle branch block that was observed incidentally towards the end of the procedure. The patient was completely asymptomatic and haemodynamically stable throughout the procedure and afterwards. Urgent investigations, immediately after the procedure, including routine blood, serial cardiac troponin I, serial electrocardiograms, chest X-ray, and urgent echocardiography were normal and failed to show any possible causation of the LBBB. The results of left heart catheterisation showed two vessel coronary artery disease and severe mitral valve regurgitation. After eight days, the patient went on to have coronary artery bypass
surgery and mitral valve replacement surgery both of which were successful. To the best of our knowledge, this is the first case report to describe the occurrence of permanent LBBB after left heart catheterisation. This report describes the case and reviews the literature for the incidence and implications of such a complication.

## Burns

### Epidemiology

Epidemiology of burn injury in Erbil government: a hospital based study.
Shabila, Nazar P.; Al Hadithi, Tariq S.; Al Tawil, Namir G.; Faidulla, Rawand M.
E-mail:nazar.shabila@hawlermu.org
Hawler Medical University - College of Medicine - Department of Community Medicine
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 55-61 (18 ref.)

**Keywords:** Burns-mortality; Age Distribution; Sex Distribution; Body Surface Area; Risk Assessment

**Abstract:** The aim of this study was to find out the burden of burn injury and identify the high risk groups in Erbil city which could help in implementing effective preventive measures. The case records of patients with burn injury admitted to the Emergency Management Center in Erbil city from January 1st 2006 to December 31st 2007 were reviewed. Data on age and sex of patients, extent and aetiology of burn injury, and monthly and seasonal variations of injury were extracted from the case records. Out of 1920 burn patients admitted to the hospital; 452 died with an overall mortality rate of 23.54%; 70 [15.49%] were children and 382 [84.51%] were adults. The mortality rate was significantly higher among adults than children, 35.30% and 8.35%, respectively [p<0.001] and among females than males, 34.38% and 9.63% respectively [p<0.001], giving a male: female ratio of 0.22:1. The highest mortality rate was among adult females [47.88%] particularly the 15-29 years age group [53.07%]. The trend of injury and mortality showed fluctuation with increasing frequencies during the summer months. Flame injury was the main aetiology of burn [94.47%], which was significantly more common than scald injury among adults compared to children and among females compared to males. The study reports a high rate of mortality from burn injury with very high total body surface area [TBSA] burned especially among young adult females, and identifies the significance of burn injury as a public health problem and a social concern.

## Camels

Studies on pituitary [TSH]-thyroid [T3, T4, FT4]-liver axis during seasonal variation at two different ages of male camel [camelus dromedarius].
Al Kheraije, K.
El-Qassim University - Faculty of Agriculture and Vet. Medicine - Department of Vet. Medicine
Veterinary Medical Journal 2009; 57 (1): 7-22 (52 ref.)

**Keywords:** Age Factors; Thyroid Gland-anatomy and histology; Thyroid Function Tests; Liver-anatomy and histology; Liver Function Tests-blood; Cholesterol-blood; Triglycerides-blood; Seasons; Breeding; Male

**Abstract:** This study was undertaken to investigate the intricate relationship between pituitary, thyroid and liver of male camel. Thyroids and corresponding livers and blood at two ages during breeding and non-breeding seasons were collected from slaughter houses. Tissues were used for histological examination and evaluation of T3 and T4 content. Serum was used for determination of TSR, T3, T4 and FT4. Some fat and protein profiles were estimated. Serum activity of certain enzymes as ALT, AST, LDH, and ALP were also measured. The data showed that most of the thyroid follicles were large in old non-breeding and were small in young and old breeding animals. Mild to moderate fatty infiltration and small to medium sized lipid inclusions were common feature in hepatocytes of all tested animals especially in old age. TSFI and T3 in old non-breeding were significantly decreased than old breeding. No significant variation between the different seasons and ages concerning FT4 while a significant decrease in serum T4 was observed in old non-breeding than young breeding camel. No significant variation in the amount of T3 and T4 in the liver extracts while thyroid extract obtained from camel in the non-breeding season showed a significant increased in T4 at both ages than breeding season at any age. Old camel had a significant increased in serum triglyceride, total lipids and cholesterol than young. No significant variation between the two different seasons and ages concerning total protein, albumin, globulin, albumin globulin ratio, ALP and LDH. In the breeding season, level of serum AST was significantly higher in old than young camel, while, old camel during non-breeding season showed a significant increase in serum ALT than young at any season. It is clearly that the old camel during the non-breeding season [summer], their physiological activities concerning pituitary [TSH], thyroid hormones [T3 and T4] and liver function parameters [fat metabolism, ALT and AST] were negatively affected.
**Microbiology**

**Studies on some salmonella serovars isolated from slaughtered imported camels.**

Scharawe, Hala I.; Ibrahim, Hanan M.; Safwat, El Sawy

*Veterinary Medical Journal* 2009; 57 (1): 23-33 (29 ref.)

**Keywords:** Abattoirs; Salmonella-isolatin and purification; Prevalence; Lymph Nodes

**Abstract:** The present study was undertaken to determine the prevalence and distribution of salmonellae from apparently healthy slaughtered camels in Cairo abattoir. One hundred imported slaughtered camels were examined for salmonellae. The mesenteric lymph nodes were collected from all animals after slaughtering. In addition to 55 camels were examined by taking muscle swabs [diaphragmatic or abdominal]. Salmonellae were found in 5% of the mesenteric lymph nodes and in 3.6% of the muscle swabs. Four different serovars were identified, namely salmonella typhimurium, S.Florida, S.Washington and S.Uganda. antibiogram pattern of 7 isolated salmonella serovars against 16 antibiotics was studied. Plasmid profiles of other Styphimurium Isolates and other S.typhimurium From other sources were compared. Public health importance and hygienec measures were discussed.

**Cantharidin poisoning**

**Cantharidin poisoning due to blister beetle ingestion in children: two case reports and a review of clinical presentations.**

Al Binali, Ali M.; Shabana, Medhat; Al Fifi, Suliman; Dawood, Sami; Shehri, Amer A.; Al Barki, Ahmed

E-mail:aalbinali@yahoo.com

King Khalid University - College of Medicine - Department of Child Health

*SQUMJ - Sultan Qaboos University Medical Journal* 2010; 10 (2): 258-261 (14 ref.)

**Keywords:** Beetles; Eating; Infant; Hematemesis

**Abstract:** Cantharidin is an intoxicant found in beetles in the Meloidae [Coleoptera] family. Ingestion may result in haematemesis, impaired level of consciousness, electrolyte disturbance, haematurea and renal impairment. Here, we report two paediatric cases of meloid beetle ingestion resulting in cantharidin poisoning and the clinical presentation of the ensuing intoxication.

**Carcinoma, Basal Cell pathology**

**Mast cells in basal cell carcinoma.**

Heidarpour, Mitra; Rajabi, Parvin; Heidarpour, Majid; Khalife, Ali

E-mail:heidarpour@med.mui.ac.ir

Isfahan University of Medical sciences - School of Medicine - Department of Pathology

*Pakistan Journal of Medical Sciences* 2010; 26 (2): 398-401 (18 ref.)

**Keywords:** Mast Cells; Proto-Oncogene Proteins C-Kit-analysis

**Abstract:** Many researchers have been more interested in inflammatory changes in tumor stroma recently. Recent studies have shown that mast cells are significantly increased in human skin basal cell carcinoma [BCC] and are associated with tumor aggressiveness. In this study, we compared the number of mast cell population expressing c-kit in the BCC samples and normal skin. We also evaluated the number of this cell type in infiltrative and noninfiltrative subtypes of this tumor. Tissue sections containing 30 cases of BCCs and 30 normal skins were prepared and after staining with c-kit were analyzed for the number of stromal mast cells. Our results indicate that the number of c-kit positive mast cells was significantly higher in BCC when compared with normal skin [P<0.01], and number of mast cells in the stroma of infiltrative subtypes of this tumor is higher than noninfiltrative subtypes [p<0.04]. In our study there wasn't any correlation between sex and age with mast cells count. Our results are in line with previous studies indicating that mast cell numbers are increased in BCC. In addition, the results suggest that mast cell populations may contribute to BCC progression. Besides, we demonstrated that this increase in mast cell density was independent of the patient's ages and sexes.
**Carcinoma, Ductal, Breast**

**pathology**

Association of carcinoma breast: grade and estrogen progesterone receptor expression.
Kamil, Muhammad; Khalid, Imran; Hashim, Hasnah; Biswas, Mrinal; Kaur, Gurjeet; Islam, Rajakul
E-mail:kamilpk2001@yahoo.com
University Sains Malaysia - Advanced Medical and Dental Institute

**Keywords:** Receptors, Estrogen; Receptors, Progesterone; Prognosis

**Abstract:** To determine the association between histological grade of tumour and estrogen progesterone receptors [ER/PR] expression in unselected invasive carcinoma of breast in Malaysian patients. An observational study. Advanced Medical and Dental Institute and Hospital, Kepala Batas, from year 2002 to 2007. Ethical approval from Ministry of Health of Malaysia was obtained. Retrospective case records of patients presented between 2002-2007 were reviewed for obtaining information on grade of tumour and expression of ER/PR in unselected carcinoma of breast patients. Records with missing data were discarded. Out of 195 cases evaluated, 42 cases of grade-I tumour were recorded of which 08 [19%] tested positive for ER and 34 [81%] tested negative, 86 cases represented grade-II tumour of which 33 [38%] tested positive for ER and 53 [62%] were negative for ER, while out of 67 grade-III tumours 22 [33%] were positive for ER receptors while 45 [67%] were negative, [chi^2] statistic [df] 4.831, p=0.089. For PR, 192 cases were evaluated and data was missing for 3 cases on PR status. Grade-I tumour consisted of 39 cases of which PR +ve represented 07 [17.94%] and 32 [82.05] cases PR -ve; 86 cases were of grade-II of which 31 [36.04%] were PR +ve and 55 [63.95%] PR -ve. Sixty seven cases of grade-III tumour of which 19 [28.35%] were PR +ve and 48 [71.64] were PR -ve [chi^2] statistic [df]: 4.297; p=0.117. ER/PR positivity trend was highest for grade-II tumours compared to grade-I and grade-I 11 tumours. In general ER positivity was more with grade-II and grade-III tumours compared to grade I tumours. Although results did not reach statistical significance but there was a trend towards ER/PR positivity in grade-II and III tumours. So far, studies from South East Asia reported ER/PR expression more with low grade tumours.

**Carcinoma, Small Cell**

**pathology**

[Small cell neuroendocrine carcinoma of the urinary bladder: report on two cases and review of the literature].
Chouairy, Camil J.; Salloum, Ali N.; Ghazal, George Y.
E-mail:camil.chouairy@balamand.edu.lb
St George Hospital University Medical Center - Department of Pathology

**Keywords:** Carcinoma, Small Cell-diagnosis; Carcinoma, Small Cell-DRUG THERAPY; Urinary Bladder Neoplasms-pathology; Urinary Bladder Neoplasms-diagnosis; Cystoscopy; Immunohistochemistry

**Abstract:** Small cell [Neuroendocrine] carcinoma of the urinary bladder is a rare but highly aggressive malignancy. The neoplastic cells exhibit both neuroendocrine and epithelial differentiation. It is morphologically indistinguishable from the more common pulmonary small cell carcinoma. It can occur either in association with urothelial [transitional cell] carcinoma or in a pure form. Presenting signs and symptoms are non specific. Histologically, it can mimic poorly differentiated urothelial carcinoma and lymphoma. Muscle invasion is almost invariably present at diagnosis and mortality is mainly due to metastases rather than loco regional recurrence. The optimal therapeutic modality is still controversial. In this article, we report on two cases occurring in a pure form and we briefly review the published literature regarding the clinical presentation, morphology, differential diagnosis, prognosis and treatment.

**Carnitine**

**pharmacology**

Pharmacological preconditioning with l-carnitine: relevance to myocardial hemodynamic function and glycogen and lactate content.
Najafi, Moslem; Javidnia, Ali; Ghorbani Haghjo, Amir;Mohammadi, Sadollah; Garjani, Alireza
Tabriz University of Medical Sciences - School of Pharmacy - Department of Pharmacology
Keywords: Ischemic Preconditioning, Myocardial; Hemodynamics-drug effects; Glycogen-analysis; Lactic Acid-analysis; Rats; Myscardium-metabolism

Abstract: Carnitine is a vital biologic substance facilitating fatty acids transport into mitochondria for ATP production. This study was to investigate the effects of pre-ischemic pharmacological preconditioning [PC] with L-carnitine [L-Car] on myocardial infarct size and cardiac functions in ischemic and reperfused isolated rat heart and meanwhile on left ventricular glycogen and lactate content. Isolated rat hearts were subjected to 30 min coronary artery occlusion followed by 120 min reperfusion. The hearts [n=8-12] were perfused with L-Car [0.5-5 mM] only for 15 min before to 10 min after induction of ischemia. Preconditioning of the hearts with L-Car provided concentration-dependent cardioprotection as evidenced by improved posts ischemic ventricular functional recovery [developed pressure, left ventricular end diastolic pressure and coronary flow rate] and reduced myocardial infarct size [p<0.001]. L-Car [2.5 mM] decreased both glycogen [p<0.001] and lactate [p<0.05] content in left ventricle during ischemia compared with the control. The results of this study demonstrate that L-Car pharmacologically precondition the hearts against ischemic and reperfusion injury in part by recovery of posts ischemic ventricular hemodynamic functions, depletion of glycogen and therefore reduction of lactate accumulation.

Catfishes

Variability of serum biochemistry in wild catfish clarias gariepinus collected from South and North Cairo area. I. liver and kidney functions.
Rizkalla, Esam H.; Fahmy, Basem A.G.; Fudilalah, Ferial M.N.
Department of Nutritional Deficiency Diseases and Toxicology
Veterinary Medical Journal 2009; 57 (1): 77-96 (59 ref.)

Keywords: Liver Function Tests; Gamma-Glutamyltransferase; Kidney Function Tests; Seasons

Abstract: Fish serum reflects status of many biochemical processes in the metabolism. Many environmental stressors alter serum biochemical parameters in fishes. Thus, both sexes of Nile catfish, Clarias gariepinus, were collected from south [Al-Aiat] and north [Barrage] Cairo city to investigate the responses of serum gamma glutamyl transferase [Y-GT], alkaline phosphatase [ALP], urea, uric acid and creatinine to environment in different seasons. Different seasonal patterns were reflected for serum biochemical parameters in all fish groups studied. Season significantly affected the serum ALP in all groups. Male's serum urea and uric acid from the two regions showed significant seasonal changes in addition to the female's serum urea from Barrage region. For serum creatinine, only females from Al-Aiat region demonstrated significant seasonal changes. Serum Y-GT did not show any significant seasonal change in this study.Location effect appeared more evident with serum ALP and urea and to lesser degree with serum creatinine. Serum Y-GT and uric acid were the lowest parameters affected with the location of samples. Serum Y-GT, ALP, urea and uric acid were affected by fish sex, while serum creatinine showed no significant sex change.All the serum biochemical parameters were effected andy die interactions of season with location and season with both location and sex, while the interaction of location with sex affected only serum ALP and creatinine. No change was detected for the effect of season interaction with sex on the serum parameters.

Celiac Disease

diagnosis

Evaluation of endoscopic versus serologic and histopathologic changes in the diagnosis of celiac disease.
Saeed, Bashar Ali; Strak, Sarkis K.; Al Haroon, Sawsan S.
M.B.Ch.B
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 2-8 (37 ref.)

Keywords: Celiac Disease-immunology; Celiac Disease-pathology; Endoscopy; Sensitivity and Specificity; Predictive Value of Tests

Abstract: To evaluate the endoscopic versus serologic and histopathologic changes in the diagnosis of celiac disease and to correlate the endoscopic changes with the degree of mucosal damage. Seventy two patients with symptoms of chronic diarrhea, 38 females whose ages ranged from 11 to 60 years and 34 males whose ages ranged from 10-59 years were tested for anti-tissue transglutaminase after they underwent upper gastroduodenoscopy. Duodenal mucosa was visualized carefully for any changes of celiac disease. Four endoscopic biopsies were taken from each patient and sent for histopathologic examination.Duodenal biopsies were classified according to modified. Marsh's classification. Among the 72 patients who were enrolled in the study, 28 patients tested positive for anti tissue transglutaminase, 47 patients had histopathologic changes, 26 patients who had both anti tissue transglutaminase and histopathologic changes were classified as celiac patients, among them 19 patients had endoscopic changes. The sensitivity, specificity, positive predictive value and negative predictive value of endoscopic changes were [73.07%], [86.95%], [76%], and [85.1%], respectively. The endoscopic appearance of the duodenum may be predictive of the severity of mucosal damage; but overall, the endoscopic changes have a wide range of sensitivity because the endoscopic findings had been normal in the presence of minor mucosal changes. Anti tissue transglutaminase was well correlated with histopathologic changes in celiac disease.
Cell Differentiation

drug effects

Phorbol myristate acetate [PMA] induced megakaryocytic differentiation of K562 cells from human chronic myelogenous leukaemia patient.
Naseer, Muhammad Imran; Zubair, Hassan; Ikramullah; Najeebullah; Lee, Hae Young; Kim, Myeong Ok.
Gyeongsang National University
Pakistan Journal of Medical Sciences 2010; 26 (2): 352-357 (25 ref.)
Keywords: K562 Cells-drug effects; Tetradecanoylphorbol Acetate; Megakaryocyte Progenitor Cells-drug effects; Leukemia, Myelogenous, Chronic, BCR-ABL Positive
Abstract: To observe the K562 cell line derived from a patient of chronic myelogenous leukemia differentiated into megakaryocytes by growing in the presence of phorbol myristate acetate [PMA]. The differentiation process of K562 cells was monitored by the expression of a platelet cell marker, CD61 through immunocytochemistry using mouse alkaline phosphatase antialkaline phosphatase [APAAP] complex employing fast red TR as substrate, crystal violet and MTT assay used for cell growth analysis. The crystal in the presence of PMA, cells obtained were of large size and less in number as compared to cells incubated without PMA where they were of smaller size and more in number and immunochenical reaction used to detect the presence of CD61, a platelet cell marker that is expressed during differentiation of K562 cells to megakaryocytes. The results showed that the addition of PMA to the growing culture of K562 cell lines induced differentiation, observed through CD61 expression and increase in cell size and cessation of proliferation.

Cell Physiological Phenomena

Phenomenological explanation of cell inactivation cross section in terms of direct and indirect action.
Azooz, Faika A.; Meerkhan, Suaad A.
E-mail:faikaaazooz@yahoo.com
University of Mosul - College of Education - Department of Physics
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 64-73 (23 ref.)
Keywords: DNA Damage; Cross-Sectional Studies; Survival; Radiation; Cells-radiation effects
Abstract: The aim of this study was to use survival curves data for the inactivation of V79 cells and CHO-K1 cells by protons, neutrons, C12 ions and He3 ions to study the role of direct and indirect action in cell inactivation. A large number of survival curves for the inactivation of V79 cells by protons, neutrons, and C12 ions and for CHO-K1 cells inactivated by He3 ions over a wide energy range were taken from published references. Experimental data points were extracted from the published survival curves using MATLAB [Version 7.0] and fitted to the linear quadratic equation. The fit parameters were used to calculate the inactivation cross section [sigma] at the initial slope, the 2Gy dose and at 10% survival for each particle type separately. The results, in general, showed that the inactivation cross section decreases nearly exponentially when increasing the mean free path for primary ionisation [lamda], except in the case of protons, and to some extent neutrons, where the cross section takes a constant value at specific lamda values. The cross section increased with increasing linear energy transfer [LET] and also became independent of LET at specific LET values. The results indicate that the cell damage due to the double strand breaks of DNA caused by indirect action is much larger than that caused by the direct action.

Central Serous Chorioretinopathy

drug therapy

Role of avastin in management of central serous chorioretinopathy.
Mehany, Shaaban A.; Shawkat, Ahmad M.; Sayed, Mohamed F.; Mourad, Khaled M.
El-Minia University - El-Minia University Hospital - Department of Ophthalmology
Keywords: Antibodies, Monoclonal-therapeutic use; Vascular Endothelial Growth Factors A; Angiogenesis Inhibitors; Prospective Studies; Treatment Outcome
Abstract: To evaluate the short-term safety and efficacy of intravitreal bevacizumab for the treatment of intraretinal or subretinal fluid accumulation secondary to central serous chorioretinopathy [CSC]. Prospective interventional series non-comparative study. Department of Ophthalmology, Al-Minya University Faculty of Medicine, Egypt. The study included 20 eyes of 20 patients with central serous chorioretinopathy [CSC]. Out of them 10 eyes with acute CSC [group I], 6 eyes with chronic CSC [defined as symptoms present for longer than 6 months] and four eyes with
recurrent [defined as more than one episode of the disease] chronic and recurrent cases are considered in one group [group II], all patients were injected with intravitreal Avastin [IVA] 1.25 mg [0.05 mL] of commercially available bevacizumab [Avastin; Genentech, Inc., San Francisco, CA] as a primary treatment. At baseline and follow up visits patients had best corrected visual acuity [BCVA], IOP assessment, dilated fundus examination, fundus photography, fluorescein angiography [FA] and optical coherence tomography [OCT] imaging is used for measurement of central retinal thickness [CRT]. Main outcome measures were the resolution of neurosensory detachment, improvement in visual symptoms and visual acuity, and resolution of leakage in FA. Secondary outcome and measures were the need for re-injection and the adverse effects. The mean number of injections was 2 [range 1-3 injections] 6-8 weeks intervals and follow up for 6 months [range 5-7 months]. All finding at baseline and each follow up visit were reported and compared. The mean age of all patients was 40.3 years +/- 6.5 [range 25-50 years], 15 males and five females patients. In acute CSC group, the mean baseline BCVA was 20/60 [log MAR 0.48] and improved to 20/30 [log MAR 0.30] with statistically significance difference change [P<0.003] and in [chronic and recurrent group], the mean baseline VA was 20/80 [log MAR 0.60] and improved to 20/40 [log MAR 0.30] with statistically significance difference change [P<0.002]. The mean baseline CRT for all patients was 486 +/- 86 micro m [range, 386-580], decreased to 316 +/- 56 micro m [range, 276-368] after 1 months with statistically significance difference change [P<0.02] and to 272 +/- 52 micro m [range 220-338] at last follow up with statistically significance difference change from the baseline [P<0.001]. Intravitreal Avastin [IVA] injection was associated with visual improvement and reduced neurosensory detachment without adverse events in patients with CSC. Although these results are promising, further randomized controlled studies would be helpful to understand this therapy for patients with CSC.

Cholestasis

etiology

Protective effect of Jasia montana against ethinylestradiol-induced cholestasis in rats.
Hussein, Mohammed A.; Abdel Gawad, Soad M.
E-mail:abdallamohammed_405@hotmail.com
October 6th University - Faculty of Pharmacy - Department of Biochemistry
Keywords: Cholestasis-prevention and control; Cholestasis, Intrahepatic; Estrogens-therapeutic use; Ethinyl Estradiol-therapeutic use; Rats; Plants, Medicinal
Abstract: Estrogens, and particularly glucuronides such as ethinylestradiol [EE], have been shown to cause cholestasis in animal studies, by reducing bile acid uptake by hepatocytes. The aim of the present article is to investigate anticholestatic activity of the ethanolic extract of the aerial parts of Jasia montana against liver cholestasis induced by EE in adult female rats in an attempt to understand its mechanism of action, which may pave the way for possible therapeutic applications. Subcutaneous administration of 100 micro g/kg b.w. ethinylestradiol to rats induced hepatocellular cholestasis with a significant decrease in serum cholesterol, bile acids and bilirubin levels as well as in hepatic superoxide dismutase [SOD], glutathione peroxidase [GPx], glutathione reductase [GR] activities and hepatic total, protein-bound and non-protein sulfhydryl groups. Also, treatment with EE produced significant increase in serum Pi-glutathione-s-transferase [Pi-GST], gamma glutamyl transeptidase [gamma-GT] and alpha-glutathione-s-transferase [alpha-GST] activities as well as serum nitric oxide [NO] and tumor necrosis factor alpha [TNF-alpha] level and hepatic malondialdehyde [MDA] level as compare to control group. Oral administration of the aerial parts of ethanolic extract at a concentration of 150 mg/kg b.w. daily to rats treated with EE for 15 days showed a significant protection against-induced decrease in serum cholesterol, bile acids and bilirubin levels. The treatment also resulted in a significant increase in hepatic SOD, GPx and GR activities as well as hepatic total, protein-bound and non-protein sulfhydryl groups. In addition, the extract could inhibit serum Pi-GST, gamma-GT and alpha-GST activities as well as reduce serum TNF-alpha, NO and hepatic MDA as compare to ethinylestradiol treated rats. High content of flavonoids and phenolic compounds was found in ethanolic extract, which may be responsible for free radical activity. The results clearly suggest that the aerial parts of J. montana extract may effectively normalize the impaired antioxidant status in ethinylestradiol [EE]-cholestatic model. Thus the extract may have a therapeutic value in drug-induced biliary cholestasis as well as in hormonal therapy.

Classical Lissencephalies and Subcortical

A ten year-old girl with band heterotopia or double cortex [two brains].
Koul, Roshan; Alfutaisi, Amna; Alazri, Faisal; Jain, Rajeev
E-mail:koul@squ.edu.om
Sultan Qaboos University Hospital - Department of Child Health
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 136-137
Keywords: Band Heterotopias-diagnosis; Magnetic Resonance Imaging; Seizures-etiologie; Seizures-diagnosis
Communication

Communication skills of doctors in a paediatric department, their perceptions and practices.
Ejaz, Muzamil Shabana; Ahmed, Aneela; Ali, S.M. Inkisar
E-mail:muzamilejaz08@yahoo.com
Dow University of Health Sciences - Civil Hospital and Lyari General Hospital - Department of Paediatrics
Pakistan Journal of Medical Sciences 2010; 26 (2): 384-389 (17 ref.)
Keywords: Clinical Competence; Physicians; Pediatrics; Professional Practice; Mothers; Perception; Cross-Sectional Studies
Abstract: To determine the perceptions and practices regarding communication skills of doctors in a paediatric department of a tertiary care hospital. This was a cross-sectional study conducted in the Department of Paediatrics, Dow Medical College and Civil Hospital Karachi from October to December 2008. Fifty four doctors including faculty, consultants, registrars, postgraduates and medical officers of indoor and outdoor departments and wards were enquired regarding their behavior and communication with parents and physicians. Their responses were recorded on a questionnaire based on standards IMNCI/WHO guidelines for good communication skills. The data was later analyzed and given as frequencies and percentages. Sixty five percent doctors were spending less than 10 minutes with patients, seventy percent of the doctors claimed that they were polite and friendly with their patients, thirty seven percent were using simple language, thirty nine percent were listening carefully without interruption whereas eighty percent did not know the appropriate time of follow up. Seventy four percent doctors claimed that lack of parental understanding is one of the important reasons for lack of effective communication. Other reasons reported were large number of patients [56%] lack of adequate time [50%, inadequate numbers of doctors [35%] and other paramedical staff [30%]. Majority of doctors of Paediatric Department are using inadequate communication skills. Large number of patients, lack of adequate number of doctors and paramedical staff and lack of parental understandings were the reasons given by the doctors for inadequate communication practices.

Congenital Abnormalities

epidemiology

Incidence and determinants of birth defects and enzyme deficiencies among live births in Oman: a review of the 2005 national register.
Khandekar, Rajiv; Jaffer, Yasmin
E-mail:rajshpp@omantel.net.om
Ministry of Health - Department of Non-communicable Diseases Control
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 23-30 (37 ref.)
Keywords: Congenital Abnormalities-epidemiology; Incidence; Risk Factors; Consanguinity
Abstract: In 2003, the Omani Ministry of Health Child Health Care Program initiated a national Birth Defects [BD] Register. This paper reviews the magnitude and risk factors of birth defects in children born and registered in 2005 using data from the BD Register. Pediatricians and neonatologists examined children with BDs found either during screening at birth or when attending clinics in their first year of their life. Clinical examination, laboratory, sonographic and radiological investigations were carried out. A pre-tested form was used to note personal details, type of birth defect including International Classification of Diseases-10 [ICD-10] codes of BD and selected risk factors. The incidence rates per 100 live births were calculated. The annual incidence of BD in Oman was 2.53% [95% CI 2.38-2.68]. Males had a significantly higher risk of BD than females [relative risk [RR]=2.0]. The regional variation of BD was also significant [X^2=363]. The incidence of anaemia due to enzyme disorders was 1.4%. BD of urogenital organs, hands and feet and Down's syndrome were the main types of anatomical defects. Consanguinity among parents [RR=0.85] and low birth weight [RR=0.28] was negatively associated to birth defects. Mothers giving birth at gestational age of<37 weeks [RR=1.89] had a higher risk of having children with BD. Maternal and paternal age were not associated to BD. The national Register for BD is an important evaluation tool. Both genetic and acquired risk factors seem to affect BD rates and types in Oman.

Contraception

Non-enzymatic antioxidant status of women using four different methods of contraception.
Akinloye, O.; Oyabiyi, S.A.; Oguntibeju, O.O.; Arowojolu, A.O.
Ladoke Akintola University of Technology - College of Health Sciences - Department of Chemical Pathology
Pakistan Journal of Medical Sciences 2010; 26 (2): 374-379 (18 ref.)
Keywords: Antioxidants; Tocopherols-blood; Ascorbic Acid-blood; Selenium-blood; Cross-Sectional Studies; Women; Body Mass Index
Abstract: To investigate antioxidant status of women on four different methods of contraception. Sixty non-pregnant women aged 16-45 years on oral contraceptive pills, injectables, Norplant and intra-uterine contraceptive devices [IUD]
attending the Family Planning Clinics of the University College Hospital [UCH] and Adeoyo Maternity Hospital, Ibadan were recruited for the study. Fifty-eight apparently healthy women aged 16-45 years who were not on any contraceptive served as a control group. The body mass index [BMI] of all participants [subjects and controls] was determined following standard protocol. Serum levels of ascorbic acid, tocopherol, malondialdehyde, bilirubin, creatinine, uric acid, total protein and albumin were determined using standard spectrophotometric methods. Progesterone was estimated by the chemilumiscence method while selenium was determined by atomic absorption spectrophotometry [AAS]. The BMI was significant in women on oral contraceptive pills [OCP] when compared to the control group [P<0.05] but insignificant [P>0.05] in intra-uterine device [IUD], injectables and Norplant users. The mean serum ascorbic acid [P<0.01], tocopherol [P<0.05], total protein [P<0.01], albumin [P<0.05], uric acid [P<0.05], selenium [P<0.01] of women on OCP were significantly lower when compared to the control group but insignificant [P>0.05] in users of other contraceptive methods. Serum levels of malondialdehyde was significantly elevated in women on OCP [P<0.01] than in control group and insignificant [P>0.05] in users of other contraceptive methods. There was no significant association between progesterone and antioxidants in women on OCP, IUD, injectables and Norplant. Oral contraceptive pills showed a significant decreasing effect on the antioxidant status of its users while IUD, injectables and Norplant did not indicate any significant effect. Routine monitoring of the antioxidant status of women on different methods of contraceptive particularly those on OCP is recommended.

**Coronary Angiography**

**methods**

The higher cross-over rate from transradial to transfemoral coronary angiography: do we have the explanation?
Sallam, Mansour; Al Hadi, Hafidh
E-mail: mansoursallam@yahoo.com
Sultan Qaboos University Hospital - Department of Medicine and Health Sciences
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 269-271 (4 ref.)
Keywords: Radial Artery; Femoral Artery

**Coronary Artery Bypass**

**psychology**

The effect of education on the stress levels in patients undergoing coronary artery bypass graft surgery.
Ozer, Nadiye; Akyl, Rahsan; Yurttas, Alife
Ataturk University - Health Sciences Faculty
Pakistan Journal of Medical Sciences 2010; 26 (2): 282-287 (18 ref.)
Keywords: Educational Status; Stress, Psychological
Abstract: To investigate the effect of education on the stress levels associated with Coronary Artery Bypass Graft [CABG] surgery in the week after CABG surgery. The study used a quasi-experimental design. Patients were selected through convenience sampling at a university hospital in Turkey. There were 60 patients in the study; 30 in the experimental group and another 30 in the control group. Data were collected using the Stressors Scale associated with CABG on the third day of the post-operative period. Cronbach's alpha of the scale was 0.89. Alpha coefficients ranged from 0.82 to 0.79. The difference between the score averages of the experimental and control group was p=0.002 for the illness-related subscale, p=0.031 for the hospital related subscale, and p=0.006 in total. Education was effective for reduction of stress associated with CABG surgery.

**Coronary Artery Disease**

Spontaneous coronary artery dissection associated with apical hypertrophic cardiomyopathy.
Tuncer, Mustafa; Gumrukcuoglu, Hasan Ali; Ekim, Hasan; Gunes, Yilmaz; Simsek, Hakki
E-mail: hasanalig80@yahoo.com
Yuzuncu Yil University - Faculty of Medicine - Department of Cardiology
Pakistan Journal of Medical Sciences 2010; 26 (2): 474-477 (10 ref.)
Keywords: Coronary Vessels-pathology; Cardiomyopathy, Hypertrophic; Electrocardiography; Coronary Artery Bypass
Abstract: Apical hypertrophic cardiomyopathy [HCM] is a relatively uncommon inherited disease. Spontaneous coronary artery dissection [SCAD] is also uncommonly observed, which often occurs in pregnant or post partum
women but is rare in men. This report describes a 38 years old man with apical hypertrophic cardiomyopathy who developed SCAD leading to acute inferior myocardial infarction. After emergent appendectomy operation at another hospital, he was immediately transferred to the Cardiology Department of our hospital due to acute myocardial infarction. He emergently underwent coronary angiography which showed a long dissection involving the right coronary. He underwent an emergent CABG with cardiopulmonary bypass. Postoperative recovery was uneventful and he was discharged. According to our knowledge, no case of spontaneous coronary artery dissection associated with apical hypertrophic cardiomyopathy unrelated to postpartum period or oral contraceptive use has been reported so far.

Cyclooxygenase 2 Inhibitors

administration and dosage

Preparation and evaluation of celecoxib transdermal patches.
Jayaprakash, S.; Halith, S. Mohamed; Firthouse, P.U. Mohamed; Yasmin; Nagarajan, M.
E-mail:jpkmcp@yahoo.com
KM College of Pharmacy - Department of Pharmaceutics
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 279-283 (20 ref.)
Keywords: Administration, Cutaneous; Pyrazoles-administration and dosage; Rabbits; Rats; Solubility; Sulfonamides-administration and dosage
Abstract: Celecoxib Transdermal patches were prepared by using different polymers such as hydroxyl-propylmethylcellulose [HPMC], methylcellulose [MC], Polyvinylpyrolidone [PVP]. The in-vitro release of the drug from the formulations were studied using commercial semi permeable membrane. The prepared formulation were subjected to various physicochemical evaluation test, in-vitro dissolution studies, kinetics studies shows diffusion might be one of the prominent mechanism influencing the drug release. To confirm the fact Peppas plot was drawn, which confirmed that the diffusion mechanism involved in the drug release was of non fickian diffusion type. ex-vivo diffusion studies by using rat skin, guinea pig skin and pig ear skin and finally in-vivo evaluation studies [the patch F4 HPMC 0.75%, PVP 0.25%] were carried out by using rabbits.

Delivery of Health Care

Four decades of progress: evolution of the health system in Oman.
Alshishtawy, Moeness M.
E-mail:drmoness@gmail.com
Ministry of Health - General of Planning Department
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 12-22 (33 ref.)
Keywords: Delivery of Health Care, Integrated; Health Systems Plans; Health Policy
Abstract: Since 1970, Oman has witnessed rapid and significant improvements in health made possible largely because of the country's success in building a state-of-the-art health care infrastructure. This paper presents Oman's experience in health development, analyses the whole system, highlights its strengths and delineates the factors to which Oman's success could be attributed. Furthermore, health care financing and expenditures, health care workforce, the delivery system, quality and other issues are discussed in detail. The paper intends also to study thoroughly the organisation of Oman's health system and discuss health policy, and planning in Oman. This analysis could serve as a source of information for future investigation and development of the health system in Oman.

Dental Devices, Home Care

Comparison of plaque removal efficacy of new and 3-month-old toothbrushes in children.
Malekafzali, B.; Biria, M.; Tadayon, N.; Abbasi, H.
Shahid Beheshti University of Medical Sciences - Faculty of Dentistry - Department of Paediatric Dentistry
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 115-120 (22 ref.)
Keywords: Toothbrushing; Dental Plaque; Dental Plaque Index
Abstract: The cost of replacing toothbrushes at frequent intervals may be prohibitive in underdeveloped countries. The objective of this study in Tehran was to compare the plaque removal efficacy of new and 3-month-old toothbrushes in children. In a randomized, crossover study, 93 children aged 7-9 years old received a new manual toothbrush to use twice per day for 3 months. Plaque scores were measured using the modified Quigley-Hein plaque index after children had brushed for 60 seconds with either a new or their used toothbrush. Bristle wear of worn brushes was assessed by measuring brushing surface areas on digital images. Compared with new brushes in the same subjects, no statistically significant differences were found for plaque score reductions for 3-month-old toothbrushes exhibiting various degrees of wear. Worn toothbrushes are equally effective as new ones for children.
**Dermatomycoses**

**epidemiology**

The prevalence of superficial fungal infections in the elderly.
Zarrin, Majid; Arab, Seyedeh Elham; Yaghoobi, Reza
E-mail: mjzarrin@yahoo.co.uk
Ahvaz Jundishapur University of Medical Sciences - Medical School - Department of Parasitology and Mycology
Pakistan Journal of Medical Sciences 2010; 26 (2): 364-367 (20 ref.)

**Keywords:** Prevalence; Age Distribution; Sex Distribution

**Abstract:** The main goals of this study were to determine the distribution and frequency of dermatologic diseases in geriatric patients according to age and gender, and the place of residence. A total of 349 patients aged 65 years and over lived in elderly care centers and geriatric patients in Ahvaz Jundishapur University Hospitals were studied in winter of 2008. Specimens were collected from clinically suspected fungal infections of various body sites including toenail, fingernail, body and groin, head and scalp, face, hand, and foot. The distribution of the patients in the different age groups was as follows: 16 patients in the 65-74 year age group [11 female [69%] and 5 male [31%]]; 11 patients in the 75-84 year age group [7 female [58%] and 5 male [42%]]; and 3 patients in the>85 year age group [1 female [33%] and 2 male [67%]]. Overall, the 3 most frequent diseases in this cohort of patients were erythrasma [16 patients [53.3%]], onychomycosis [10 patients [33.3%]] and skin yeast infections [4 patients [13.4%]]. In this study Corynebacterium minutissimum was the most frequent agent of infections [53.3%] followed by filamentous fungi [23.3%], C. albicans, Candida sp. and yeasts [6.7% each]. Only one dermatophyte [T. verrucosum] was isolated [3.3%]

**Diabetes Mellitus**

**prevention and control**

Controlling diabetes mellitus: struggle continued.
Shaikh, M. Zaman
E-mail: m.zaman@duhs.edu.pk
Dow University of Health Sciences

**Keywords:** Diabetes Mellitus-history; Diabetes Mellitus-economics; Diabetes Complications-prevention and control; Blood Glucose; Life Style

**Diabetes Mellitus, Type 2**

**genetics**

Clinically-defined maturity onset diabetes of the young in Omani: absence of the Common caucasian gene mutations.
Woodhouse, Nicholas J.Y.; Elshafie, Omayma T.; Al Mamari, Ali S.; Mohammed, Nagi H.S.; Al Riyami, Fatma; Raeburn, Sandy
E-mail: nickwood2@doctors.org.uk
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 80-83 (21 ref.)

**Keywords:** Mutation-genetics; Family; Glucokinase

**Abstract:** We are seeing a progressive increase in the number of young patients with clinically defined maturity onset diabetes of the young [MODY], having a family history suggestive of a monogenic cause of their disease and no evidence of autoimmune type 1 diabetes mellitus [T1DM]. The aim of this study was to determine whether or not mutations in the 3 commonest forms of MODY, hepatic nuclear factor 4alpha [HNF4 alpha], HNF1alpha and glucokinase [GK], are a cause of diabetes in young Omanis. The study was performed at Sultan Qaboos University Hospital [SQUH], Oman. Twenty young diabetics with a family history suggestive of monogenic inheritance were identified in less than 18 months; the median age of onset of diabetes was 25 years and the median body mass index [BMI] 29 at presentation. Screening for the presence of autoimmune antibodies against pancreatic beta cells islet cell antibody [ICA] and glutamic acid decarboxylase [GAD] was negative. Fourteen of them consented to genetic screening and their blood was sent to Prof. A. Hattersley's Unit at the Peninsula Medical School, Exeter, UK. There, their DNA was screened for known mutations by sequencing exon 1-10 of the GCK and exon 2-10 of the HNF1alpha and HNF4alpha genes, the three commonest forms of MODY in Europe. Surprisingly, none of the patients had any of the
tested MODY mutations. In this small sample of patients with clinically defined MODY, mutations of the three most commonly affected genes occurring in Caucasians were not observed. Either these patients have novel MODY mutations or have inherited a high proportion of the type 2 diabetes mellitus [T2DM] susceptibility genes compounded by excessive insulin resistance due to obesity.

**Diet**

**Diet, nutritional status and school performance t among adolescents in Gaza Strip.**
Abudayya, A.; Shi, Z.; Abed, Y.; Holmboe Ottesen, G.
E-mail:abdallah.abudayya@medisin.uio.no
University of Oslo - Institute of Health and Society - Department of Community Medicine
**Keywords:** Nutritional Status; Educational Measurement; Schools; Questionnaires; Cross-Sectional Studies; Anthropometry
**Abstract:** The associations between dietary intake, nutritional status and school performance among 932 adolescents aged 12-15 years were examined in a cross-sectional survey in 2002 in north Gaza Strip. School performance was obtained from school records and height and weight were measured for body mass index [BMI]. Self-administered questionnaires included sociodemographic characteristics and food frequency intakes. Adolescents consuming fruit and vegetables more than 3 times per week were more likely to have good school performance [72.6% versus 59.9%). When adjusting for sociodemographic variables and BMI, fruit and vegetables intake was positively associated with school performance [OR = 1.61, 95% CI: 1.11-2.32] and stunting was negatively associated [OR = 0.53, 95% CI: 0.31-0.90]. The findings support a broader implementation of school nutrition programmes.

**Disease Management**

**Integrated Management of Childhood Illness in Lahej, Yemen: a qualitative analysis from the perspective of health providers.**
Basaleem, H.O.; Amin, R.M.
E-mail:hudabasaleem92@yahoo.com
University of Aden - Faculty of Medicine and Health Sciences - Department of Community Medicine and Public Health
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 101-108 (23 ref.)
**Keywords:** Health Personnel; Perception; Interviews as Topic
**Abstract:** Health providers’ perceptions about the Integrated Management of Childhood Illness [IMCI] in Lahej governorate, Yemen, were explored in a qualitative analysis of 12 in-depth interviews in 2007. The following themes emerged: appreciation of clinical aspects of IMCI but unclear about community IMCI; IMCI working better in peripheral than central health facilities; inflexible rules; lack of integration of services; poor supervision; multiple roles for one person; success of immunization; basic equipment and drug supplies deficient; conflicting views about health committees and community participation; and solutions for community health problems. After 4 years of IMCI experience in Yemen, the gaps identified would endanger the positive influence of IMCI unless action is undertaken at different levels.

**Drug Prescriptions**

**Effectiveness of three interventions on primary care physicians’ medication prescribing in Riyadh city, Saudi Arabia.**
Ministry of Health - General Administration for Mental Health and Social Services and Medical Research
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 172-179 (33 ref.)
**Keywords:** Physician’s Practice Patterns; Primary Health Care; Physicians, Primary Care; Teaching; Quality Indicators, Health Care; Cost-Benefit Analysis
**Abstract:** A number of strategies have been shown to improve the quality of drug prescriptions. The objective of this study was to implement and assess the effectiveness of 3 interventions on physicians’ prescribing and cost containment: training physicians about quality prescribing, regulatory and administrative measures to improve rational drug prescribing; and a multi-faceted approach using 2 these strategies plus additional elements. Three public health centres, 1 for each intervention, were randomly selected, 61 physicians were trained in drug prescribing and completed a pre- and post-training questionnaire, and 100 post-intervention prescriptions from each centre were compared. All 3 interventions effectively improved the quality of drug prescriptions and the notation of drug-related information and trainees returned positive evaluations of the training course. Whether or not physicians' improvement in prescribing will be sustained is unclear and therefore subsequent follow-up evaluations are needed.
Medication prescribing pattern in primary care in Riyadh city, Saudi Arabia.
Ministry of Health - General Directorate for Quality Development
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 149-155 (34 ref.)
Keywords: Physician's Practice Patterns; Primary Health Care; Physicians, Primary Care; Cross-Sectional Studies
Abstract: Physicians' prescribing behaviour is closely linked with patient safety and this area is poorly researched in Saudi Arabia. The objective of this study was to analyse physicians' prescribing patterns and the adequacy of noted information in the primary health care sector in Riyadh city. All medication prescriptions from 5 public [n = 1182] and 5 private [n - 1200] health centres were collected by simple random sampling during 1 working day. Antibiotics were the most commonly prescribed drugs in both sectors. The mean number of drugs per prescription was 2.08 and 2.36 in the public and private sectors respectively. Information and instructions noted on prescriptions varied considerably between private and public health centres. Similarly the medication prescribing pattern differed across the 2 health settings. Primary care physicians in Saudi Arabia need continuing training to improve their prescribing practices.

Ministry of Health - General Directorate for Quality Development
Keywords: Physician's Practice Patterns; Medication Errors; Primary Health Care; Physicians, Primary Care; Teaching
Abstract: Rational prescribing is associated with improved safety in drug use, better quality of life for patients and cost-effective care. Medication prescribing is a relatively unexplored area of research in Saudi Arabia and until now most studies have been in the secondary and tertiary health care system. This paper is the first of 3 review articles that form the background for a series of 5 interconnected studies of prescribing patterns and medication errors in the public and private primary health care sectors of Saudi Arabia. A MEDLINE search was conducted to identify papers published in peer-reviewed journals over the previous 3 decades. The paper reviews variations in prescribing patterns and influences on physicians' prescribing behaviour worldwide and in Saudi Arabia.

Cooperation Council for the Arab States of the Gulf
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 132-139 (71 ref.)
Keywords: Physician's Practice Patterns; Primary Health Care; Physicians, Primary Care; Quality of Health Care; Medication Errors
Abstract: Unlike suboptimal prescribing, rational prescribing, coupled with certain indicators, is associated with improved safety in drug use in drug prescribing, better quality of life for patients and cost-effective care. Medication prescribing is a relatively unexplored area of research in Saudi Arabia and until now most studies have been health care system. This paper is the second of 3 review articles that form the interconnected studies of prescribing patterns and medication errors in the public care sectors of Saudi Arabia. A MEDLINE search was conducted to identify papers published in peer-reviewed journals over the previous 3 decades. The paper reviews rational prescribing with its indicators suboptimal prescribing, classification of medication errors, and how to achieve quality in health care prescribing worldwide and in Saudi Arabia.

Physicians' medication prescribing in primary care in Riyadh city, Saudi Arabia. Literature review, part 3: prescribing errors.
E-mail: qureshinaseem@live.com
Ministry of Health - General Directorate for Mental Health and Social Services and Medical Research
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 140-148 (100 ref.)
Keywords: Medication Errors; Physician's Practice Patterns; Primary Health Care; Physicians, Primary Care
Abstract: Medication errors are globally huge in magnitude and associated with high morbidity and mortality together with high costs and legal problems. Medication errors are caused by multiple factors related to health providers, consumers and health system, but most prescribing errors are preventable. This paper is the third of 3 review articles that form the background for a series of 5 interconnected studies of prescribing patterns and medication errors in the public and private primary health care sectors of Saudi Arabia. A MEDLINE search was conducted to identify papers published in peer-reviewed journals over the previous 3 decades. The paper reviews the etiology, prevention strategies, reporting mechanisms and the myriad consequences of medication errors.

Predictors of quality of medication prescribing in primary care in Riyadh city, Saudi Arabia.
Ministry of Health - General Directorate for Quality Development
Keywords: Physician's Practice Patterns; Primary Health Care; Physicians, Primary Care; Quality Indicators, Health Care; Questionnaires; Cross-Sectional Studies
Abstract: Identifying the indicators of good quality medication prescribing assists physicians in preventing medication errors. This study in Riyadh city aimed to examine the relationship between physicians' self-reported influences on prescribing and the quality of their prescribing, defined as the completeness and accuracy of their prescription documentation. A sample of 600 randomly selected prescriptions written by 87 physicians were rated as high or low quality. The same physicians completed a questionnaire to determine the indicators of quality prescribing. The 7 components identified with factor loadings +0.5 or -0.5 were subjected to binary logistic regression modelling. While a range of potential quality indicators of drug prescribing were identified, none of the variables underpinning the 7 components/factors survived the binary logistic regression mode. More studies are needed that take into account other quality indicators of medication prescribing in Saudi Arabia.

**Dysmenorrhea**

**epidemiology**

A study of dysmenorrhea among female residents aged 18-45 years in semirural area of West Turkey.
Unsal, Alaettin; Ayranci, Unal; Tozun, Mustafa
Eskisehir Osmangazi University - Medical Faculty - Public Health Department
Pakistan Journal of Medical Sciences 2010; 26 (2): 335-340 (23 ref.)
Keywords: Prevalence; Cross-Sectional Studies; Family; Medical History Taking; Depression-epidemiology; Dysmenorrhea-etiology

**Abstract:** To determine the correlates and the prevalence of Dysmenorrhea in a group of women. This cross sectional study was carried out on the 556 subjects aged 18-45 years in a town of western Turkey between January, and March 2009. We used visual analogue scale to assess the severity of dysmenorrhea. The data were evaluated by Logistic Regression Analysis and Chi-square tests. The prevalence of dysmenorrhea was 66.7%. About 32.3% of the women described their dysmenorrhea as severe. When compared to the age group of 35 and over, the risk of dysmenorrhea was 2.677 fold higher in the age group of 24 and over. The risk of dysmenorrhea was nearly 2.5 fold higher in those who had family history of dysmenorrheal. The prevalence of depression among women was relatively high. This indicates the need for knowledge concerning dysmenorrhea to be addressed by menstruation-related health education programs.

**Ear, Inner**

**surgery**

Hearing improvement after partial labyrinthectomy: resection of petrous apex cholesterol granuloma.
Hagr, Abdulrahman A.
E-mail: dhagr90@yahoo.com
King Saud University - King Abdulaziz University Hospital - Department of Otolaryngology
SJUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 249-254 (15 ref.)
Keywords: Hearing; Granuloma, Foreign-Body-surgery; Cholesterol; Petrous Bone; Cranial Nerves

**Abstract:** We present the case of a 57 year-old male presenting with symptomatic petrous apex cholesterol granuloma, multiple cranial nerve weaknesses and deafness of the left ear. The chosen intervention was a cholesterol granuloma resection via the translabyrinthine approach. This resulted in cranial nerve recovery and improved facial functionality. Hearing in the operated ear improved within 3 months after surgery. The patient experienced no postoperative complications. We conclude that a translabyrinthine approach can be used for drainage of petrous apex cholesterol granulomas with a chance of hearing loss recovery.
Echinococcosis, Hepatic

Predictive clinical factors, diagnosis, and management of intrabiliary rupture of a hepatic hydatid cyst in Erbil Teaching Hospitals, Erbil province-North Iraq.

Zangana, Abdulqadir Mahged; Aldabbagh, Ali Abdulrazak; Younis, Saeed Nahdem
E-mail:dragzangana@yahoo.com
Hawler Medical University - College of Medicine - Department of General Surgery and Gastroenterology
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1); 22-31 (20 ref.)
Keywords: Rupture-diagnosis; Rupture-surgery; Echinococcosis, Hepatic-surgery; Prospective Studies; Early Diagnosis

Abstract: This study investigates the clinical factors associated with an intrabiliary rupture of a hepatic hydatid cyst for early diagnosis and management of cystobiliary communications in patients with liver echinococcosis and presents our experience with this condition. A prospective study included patients with hepatic hydatid cysts treated between years 2000 and 2007 in a single institution, Erbil Teaching hospital Erbil province-Iraq. Database containing 121 patients with a hepatic hydatid cyst were reviewed. The following variables were analyzed as potential predictors of an intrabiliary rupture: age, sex, type, duration of symptoms, findings on physical examination, leukocyte count, liver function test results, serologic test results, suggestive ultrasonographic findings, ultrasonographic cyst features [type, diameter, number, and localization], and whether the cyst is primary or recurrent. Multivariate analysis showed that the independent clinical factors for the presence of an occult rupture were a history of gastric upset in the form of nausea and vomiting [p=0.004], alkaline phosphatase level greater than 140 U/L [p=0.004], total bilirubin level greater than 0.7 mg/dl [≥13.5 micro mol/L] [p<0.001], and cyst diameter greater than 14.5 cm [p<0.001] in multivariate analysis. Multivariate analysis also showed that history of jaundice [p<0.001], jaundice found on physical examination [p=0.05], cyst diameter greater than 10.5 cm [p=0.009], a type IV cyst [p<0.001], and suggestive ultrasonographic findings [p<0.001] were the independent clinical predictors for the presence of a frank intrabiliary rupture. Patients with cystobiliary communications had increased morbidity rates to 47.8% of 23 patients vs. 9.9% of 98 patients [p<0.001], and longer mean postoperative hospital stays [11.5 versus 8.4 days; p=0.03] compared with others. Clinical predictors should be considered for early diagnosis and proper management of intrabiliary ruptures in patients with hepatic hydatid cysts, since a frank intrabiliary rupture of hepatic hydatid cyst is a rare but serious event, and one should be aware of it in differential diagnosis of obstructive jaundice. Patients with cystobiliary communications had increased morbidity rates.

Education, Medical

Assessment of self-reported cardio metabolic risk awareness among physicians.
Alfadhli, Eman; Hanafi, Manal Ibrahim; Sultan, Intessar
Alexandria University - Faculty of Medicine - Department of Community Medicine
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 677-684 (20 ref.)
Keywords: Physicians; Health Knowledge, Attitudes, Practice; Coronary Disease; Risk Factors; Life Style; Primary Prevention; Questionnaires

Abstract: Lack of coronary artery disease [CAD] risk factors [RFs] knowledge and orientation among physicians would indicate a defect in their attitude towards primary preventive strategies. To assess the prevalence and the awareness of self-reported major and life-style CAD risk factors among physicians working in Medina, Saudi Arabia. A cross-sectional survey was conducted from May 2008 to January 2009 to screen a stratified random sample of 209 physicians aged 41.8 +/- 9.1 years. Using a pre-coded questionnaire, the prevalence and awareness of CAD major and life-style RFs were self-reported by the participants. Life-style RFs were more prevalent than major RFs among physicians [86% Vs 48.8%], 41.2% of the physicians were having combined RFs increasing their future risk of CAD. Female physicians lost their gender protection despite being significantly younger than males [39.9 +/- 8.1 Vs 42.6 +/- 9.4 years, p < 0.00], however they had longer duration of diabetes [6.7 +/- 6.4 vs 5.6 +/- 4.3 years, p < 0.000] and hypertension [8.5 +/- 6.8 Vs 7.98 +/- 7] years, p < 0.00]. Less than 10% of physicians were unaware of their serum lipids with no gender difference. Physicians were likely to be aware of their serum lipids if they had hypertension [p = 0.3] or family history of diabetes [p = 0.04]. While physicians who were unaware of their serum lipids tend to consume more dairy products [P = 0.02]. Life-style RFs are prevalent among physicians working in Medina together with substantial unawareness of their lipid profile this indicates a need for increasing their awareness about lipid screening programs and initiating healthy lifestyle modifications as essential primary preventive strategies to minimize their future risk of CAD.

Privatisation of medical education: viewpoints with a global perspective.
Shehnaz, Syed I.
E-mail:shehnazilyas@yahoo.com
Gulf Medical University - Department of Pharmacology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 6-11 (47 ref.)
Keywords: Privatization; Students, Medical
Re: evaluation tools in postgraduate medical education-do we need "made in oman" tools?
Al Wardy, Nadia
E-mail:naiwardi@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences - Medical Education Unit
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 280-281 (2 ref.)
Keywords: Educational Measurement

Assessment, Medical, Undergraduate

Assessment methods in undergraduate medical education.
Al Wardy, Nadia M.
E-mail:naiwardi@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences - Medical Education Unit
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 203-209 (51 ref.)
Keywords: Educational Measurement-methods; Knowledge
Abstract: Various assessment methods are available to assess clinical competence according to the model proposed by Miller. The choice of assessment method will depend on the purpose of its use: whether it is for summative purposes [promotion and certification], formative purposes [diagnosis, feedback and improvement] or both. Different characteristics of assessment tools are identified: validity, reliability, educational impact, feasibility and cost. Whatever the purpose, one assessment method will not assess all domains of competency, as each has its advantages and disadvantages; therefore a variety of assessment methods is required so that the shortcomings of one can be overcome by the advantages of another.

Entamoeba histolytica

Isolation and purification

Prevalence of Entamoeba histolytica in humans.
Tasawar, Zahida; Kausar, Shabana; Lashari, M.H.
Bahauddin Zakariya University - Institute of Pure and Applied Biology
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 344-348 (57 ref.)
Keywords: Feces-parasitology; Prevalence; Age Factors; Sex Characteristics
Abstract: The present survey was carried out to determine the prevalence of human amebiasis. During the study, 1360 fecal samples were examined from February 2007 to December 2007 at Nishtar Hospital, Multan. Out of 1360 hosts examined, 295 were infected with E. histolytica. The overall prevalence of E. histolytica was [21.69%]. Relationship between sex and E. histolytica in humans showed that the infection of E. histolytica was more prevalent in male hosts [22.36%] as compared to female hosts [20.9%]. However the difference was statistically non-significant [P>0.05]. Results regarding the relationship between age and E. histolytica revealed that the parasite had highest prevalence [30.82%] in age group of 1 day to 15 years and lowest prevalence [17.34%] in age group of 31 to 45 years. The difference was statistically significant [P<0.05] .

Epilepsy

[Brain tumors and epilepsy : postoperative evaluation of surgical procedures].
Ghostine, B.; Ali, Y.; Menassa, L.; Okais, N.; Nohra, G.; Rizk, T.; Maarawi, J.; Samaha, E.; Moussa, R.
University of Saint-Joseph - Department of Radiology
LMJ - Lebanese Medical Journal 2010; 58 (2): 71-75 (14 ref.)
Keywords: Brain Neoplasms-surgery; Brain Neoplasms-pathology; Prognosis; Treatment Outcome; Magnetic Resonance Imaging
Abstract: To study the efficacy of surgery on the postoperative control of epilepsy in patients operated for brain tumors. Forty patients operated for supratentorial cerebral tumors with epilepsy, at Hotel-Dieu de France [HDF] hospital center, between 1983 and 2005, were included in this study. Clinical, paraclinical and surgical information were collected. The extent of the tumor resection was based on the postoperative MRI results. The mean duration of the follow-up was 52 +/- 6 months [from 6 months to 10 years]. 62.5% of our patients have had acute seizures [<1 year] and 37% had experienced chronic seizures [>/=1 year]. The histopathologic exam revealed 2 DNET, 3 pilocytic astrocytomas, 2 diffuse astrocytomas, 6 A oligodendrogliomas, 7 B oligodendrogliomas, 7 anaplastic astrocytomas and
glioblastomas and 13 meningiomas. Twenty-two patients had a complete resection, whereas the postoperative MRI of 18 patients have shown a tumoral remnant. After one year of follow-up, a complete remission was noted in 57.5% of the patients [Engell]. The prognostic factors of good outcome were: low-grade glial tumors [I +/- II], meningiomas, and complete tumor resection. The efficacy of surgery for epilepsy associated to cerebral tumors, established by the majority of articles, matched the results obtained for the patients operated at HDF, with complete seizures control in 57.5% of patients. This control depended essentially on the extent of tumor resection and on tumor's nature.

Erythrocyte Indices

Role of mean corpuscular volume as screening test for thalassaemia in pregnant women at Isra University Hospital Hyderabad.

Amna, A.; Zehra, N.; Haider, G.; Anjum, F.; Rani, S.; Munir, A.A.
E-mail: amb4_siddiqui@yahoo.co.in
Isra University Hospital - Department of Obstetrics and Gynecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 390-393 (14 ref.)
Keywords: beta-Thalassemia-diagnosis; Prenatal Diagnosis; Sensitivity and Specificity; Predictive Value of Tests
Abstract: To see the sensitivity, specificity, positive and negative predictive value of mean corpuscular volume [MCV] in screening for beta thalassemia minor in pregnant women attending antenatal clinic at Isra University Hospital [IUH] Hyderabad. This validation study was conducted at the department of obstetrics and gynecology Isra University Hospital Hyderabad from 1st November 2004 to 30th October 2005. Women were interviewed using a pre designed questionnaire regarding their demographic profiles and Gestational age at the time of presentation. On their first antenatal visit MCV were checked as less than or equal to 70 fl on complete blood picture. HbA2 level were assessed by Hemoglobin electrophoresis to find out the carrier of beta thalassaemia minor. The data was analyzed on SPSS vr 15. This study showed that MCV is a good screening test for beta thalassemia minor. Out of 100 screened subjects 53% had MCV less than 70 fl or equal to 70 fl. Positive MCV test [<70 fl] showed a sensitivity of 79% and specificity of 30% in screening for beta thalassaemia trait. The positive and negative predictive values were 56% respectively. Our study showed that MCV is 79.9% sensitive and 30% specific and positive and negative predictive value is 56% in detection of beta thalassaemia minor. It was found to be a good screening tool in pregnant women for beta thalassaemia. This test can be adopted in future as part of evaluation for sub fertility in all young women.

Esophageal Fistula

radiography

Aortoesophageal fistula caused by a foreign body.
Al Saqri, Badriya; Kamona, Atheel; Al Lamki, Neela
E-mail:b_saqri@hotmail.com
Sultan Qaboos University Hospital - Department of Radiology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 266-268 (6 ref.)
Keywords: Aorta-pathology; Radiography, Thoracic; Foreign Bodies; Aneurysm, False; Tomography, X-Ray Computed

Esophageal Neoplasms

epidemiology

Esophageal cancer in Iran: a review.
Sadjadi, Alireza; Marjani, Hajiamin; Sennani, Shahryar; Moghaddan, Siavosh Nasserer
Tehran University of Medical Sciences - Shariati Hospital - Digestive Disease Research Center
MEJC - Middle East Journal of Cancer 2010; 1 (1): 5-14 (72 ref.)
Keywords: Carcinoma, Squamous Cell-epidemiology; Incidence; Risk Factors; Adenocarcinoma-epidemiology; Esophageal Neoplasms-etiology; Esophageal Neoplasms-pathology; Esophageal Neoplasms-prevention and control
Abstract: Esophageal cancer is the second and third most common malignancy in Iranian males and females, respectively, claiming lives of approximately 5800 Iranians each year. Squamous cell carcinoma [SCC] is presently the most common type accounting for about 90% of all esophageal cancers in Iran. Recent studies have shown that there is a gradual increase in the incidence of adenocarcinoma of the distal esophagus along with gastric cardia adenocarcinoma. Thirty-five years ago, the age standardized rate [ASR] of esophageal SCC in the city of Gonbad [Golestan Province, northeast of Iran] was found to be one of the highest rates for any single cancer that had been reported worldwide [ASR >100/10[5]/year]. Recent studies have shown that the incidence of SCC in Gonbad has
declined to less than half of what it was in the past. This decline in the incidence of esophageal SCC parallels an improvement in the socioeconomic situation of people living in this region. According to recent cancer registry data in Iran there is still an obvious intracountry variability between the incidence of esophageal cancer in the south with an ASR of 3 for males and 2 for females in Kerman and 43 and 36 in the northeastern province of Golestan. The reasons for this very high rate of SCC in northeastern Iran have been the subject of several studies during the past 35 years. According to results of these studies the suspected risk factors are: low intake of fruits and vegetables, drinking hot tea, consumption of opium products and tobacco, H.pylori infection in the stomach, using unhealthy drinking water from cisterns and genetic susceptibility. The main suspected mutagens are polycyclic aromatic hydrocarbons [PAH] and N-nitroso compounds. In order to embark primary and secondary prevention of this fatal cancer, further prospective studies are presently underway in the region. The Golestan esophageal cancer cohort study which follows of 50,000 subjects is on going. We expect simple and feasible evidence based preventive strategies to be implemented in the future according to the results of this study.

**pathology**

**Carcinosarcoma of the esophagus.**
Zia ur Rehman; Pal, Inam; Ahmed, Zubair; Qureshi, Asim
E-mail: drzia779@yahoo.com
The Aga Khan University Hospital - Department of Surgery
**Keywords:** Carcinosarcoma; Immunohistochemistry
**Abstract:** Carcinosarcoma of the esophagus is a rare neoplasm characterized histologically by presence of carcinomatous and sarcomatous elements. Case report of Carcinosarcoma of the esophageogastric junction whose morphological and immunohistochemical features makes it quite distinctive from other tumours is presented. It was an ulcerated lesion diagnosed in an elderly Afghan lady located 34 cms from the incisor teeth. The patient was a smoker.

**Eye Foreign Bodies**

**Long-term corneal complication of retained anterior chamber-angle foreign body.**
Jastaneiah, Sabah S.
King Khaled Eye Specialist Hospital - Cornea and Anterior Segment Division
Saudi Journal of Ophthalmology 2010; 24 (3): 105-108 (5 ref.)
**Keywords:** Anterior Chamber; Cornea-pathology; Edema-etiology
**Abstract:** A 33-year-old patient referred to the cornea and anterior segment department to evaluate inferior corneal edema related to a retained intraocular foreign body [IOFB] in the anterior chamber-angle. The foreign body, which was a single piece of glass caused by an exploded light bulb twenty years back, was surgically removed; edema resolved and vision improved to 20/30. In the presence of an anterior chamber IOFB; long-term adverse effects should be considered. We would advise removal of the FB regardless of the inertness and location facts, as long as the risk and benefits of the surgical intervention are carefully evaluated.

**Fatty Acid-Binding Proteins**

**diagnostic use**

**Heart-type fatty acid-binding protein in the early diagnosis of acute myocardial infarction: the potential for influencing patient management.**
Alhadi, Hafidh A.; Fox, Keith A.A.
E-mail: halhadi@hotmail.com
Sultan Qaboos University Hospital - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 41-49 (14 ref.)
**Keywords:** Myocardial Infarction-diagnosis; Early Diagnosis; Prospective Studies; Sensitivity and Specificity; Predictive Value of Tests; Creatine Kinase-diagnostic use
**Abstract:** The objective of this study was to evaluate the diagnostic value of heart-type fatty acid-binding protein [H-FABP] in patients with acute chest pain and compare it with standard cardiac markers. We undertook a prospective evaluation of 100 consecutive patients admitted with acute chest pain suggestive of acute coronary syndromes [ACS]. Serum cardiac troponin I [cTnI], cardiac troponin T [cTnT], creatine kinase-MB [CK-MB] mass, myoglobin, and H-FABP were determined at presentation and 2, 4, 8-10, and 16-24 hours after presentation. The main outcome measure was the best sensitivity value within 6 hours after symptom onset. H-FABP peak concentration occurred at 8 hours after symptoms onset and was the most sensitive early marker with 79.9% and 98% of patients with AMI identified at presentation and 2 hours after presentation respectively. The sensitivity of all other cardiac markers [CK-MB mass,
cTnI, cTnT, and myoglobin] at presentation was <62%. The negative predictive value of H-FABP [94%] was also superior to other markers within the first 2 hours of presentation. Myoglobin was the second most sensitive early marker at presentation. Peak sensitivity of cTnI, CK-MB mass, and cTnT were present at 4, 8-10, and 8-10 hours respectively after presentation. Combined measurement of H-FABP and cTnI on two occasions during the first 8 hours after symptom onset was sufficiently sensitive and specific for the early diagnosis of most patients with acute MI and may provide advantages over other cardiac marker combinations.

Validity of cardiac markers as diagnostic and prognostic indicators of complications in patients undergoing percutaneous coronary intervention.

Alhadi, Hafidh A.; Fox, Keith A.A.
E-mail: halhadi@hotmail.com
Sultan Qaboos University Hospital - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 31-40 (25 ref.)

Keywords: Troponin I-diagnostic use; Troponin T-diagnostic use; Prognosis; Angioplasty, Transluminal, Percutaneous Coronary; Sensitivity and Specificity; Reproducibility of Results; Prospective Studies; Creatine Kinase-diagnostic use

Abstract: The aim of this study was to assess the diagnostic and prognostic value of heart-type fatty acid-binding protein [H-FABP] in elective percutaneous coronary intervention [PCI] and compare it with standard cardiac markers. A prospective evaluation was done of 80 consecutive patients admitted for elective PCI. Serum cardiac troponin T [cTnT], cardiac troponin I [cTnI], creatine kinase-MB [CK-MB mass], myoglobin, and H-FABP were determined pre-angioplasty and 1, 2, 4, and 16-24 hrs post-angioplasty. Elevated cardiac markers were correlated with demographic, angiographic and procedural variables. Patients were followed up for 20-26 months. H-FABP peaked early at 2 hours and was useful for the early detection of evolving AMI within 1-3 hours after angioplasty. Cardiac-TnI, myoglobin, H-FABP, CK-MB mass, and cTnT concentrations were elevated in 46.25%, 17.5%, 13.3%, 11.25%, and 7.5% respectively. Cardiac-TnI was the most sensitive marker for detecting all complications and was superior to all other markers. Elevated cardiac markers were correlated with old age [P<0.02]; chest pain +/- ECG changes of ischaemia [P<0.003]; use of stents [P<0.019] and major complications such as major dissection [P<0.004]; transient vessel closure [P<0.022]; bail out stent [P<0.003], and AMI [P<0.042]. Elevated cardiac markers were associated with a reduction of event-free survival [16.92 versus 20.67 months, P<0.03]. Heart-type-FABP measurements at 1 hour [or thereafter] post-PCI may offer an early chance of detecting evolving AMI; cTnI was the most sensitive marker for the detection of major complications in patients undergoing PCI. Measurements of cTnI 16-24 hours post-PCI should be part of the routine management of patients following elective PCI.

Fatty Liver

Non-alcoholic fatty liver disease [NAFLD] - is it an emerging risk factor for coronary artery disease?: preliminary study in a local Indian population.

Thiruvagounder, Manopriya; Khan, Shaheen; Sheriff, Dhastragir S.
University of Calicut - Department of Life Sciences
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 221-226 (26 ref.)

Keywords: Coronary Artery Disease; Risk Factors; Adiponectin; Plasminogen Activator Inhibitor 1; Tumor Necrosis Factor-alpha; Insulin Resistance; Metabolic Syndrome X

Abstract: The objective of this study was to identify the presence of non-alcoholic fatty liver disease [NAFLD] in patients with coronary artery disease [CAD]. 149 patients were selected, who had been referred to the Institute of Cardiology, Banglore, India, between January 2007 and June 2009 and diagnosed with CAD. Four patients did not participate in the study. Venous blood samples were taken from these cases, and age-matched healthy controls who came for a master health check-up [N=100]. All were subjected to routine liver function tests including serum transaminases, enzyme immunoassays for plasminogen activator inhibitor 1 [PAI-I], C reactive protein [CRP], and tumour necrosis factor-alpha [TNF-alpha]. Using ultrasonography and serum alanine aminotransferase [ALT] levels, the presence of NAFLD in CAD patients was reported. CAD patients with NAFLD had significantly higher liver enzymes and marginally higher A1C levels compared to control subjects. Levels of TNF-alpha and PAI-I were higher in CAD patients with NAFLD compared to both female and male controls [P <0.1 and P <0.05]. Levels of CRP [P <0.01 in both groups] and uric acid were increased in both group of patients [P <0.05 and P <0.01 in male and female patients, respectively]. Levels of adiponectin were significantly reduced in the patients compared to the controls [P <0.05 and P <0.001] in male and female patients respectively. The increased serum levels of PAI-I and TNF-alpha reflected the proinflammatory status in these CAD patients which may be due to the presence of NAFLD. This could contribute additively to the development of cardiovascular events [CVD].
**Fissure in Ano**

**surgery**

Fissurectomy with posterior midline sphincterotomy for management of chronic anal fissure.
Memon, Abdul Sattar; Siddiqui, Faisal Ghani; Hamad, Adeel
E-mail: asatarmemon@yahoo.com
Liaquat University of Medical and Health Sciences - Department of Surgery
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2010; 20 (4): 229-231 (26 ref.)

Keywords: Treatment Outcome; Chronic Disease

Abstract: To determine the efficacy and safety of fissurectomy with posterior midline Sphincterotomy in the management of chronic anal fissure in terms of symptomatic relief, complications and recurrence. Observational case-series. Department of Surgery, Liaquat University Hospital, Jamshoro/Hyderabad, for a period of 3 years from January 2005 to December 2007. A total of 136 patients with chronic anal fissure were recruited for this study. All subjects underwent elective fissurectomy and posterior Sphincterotomy. Surgery was performed either under spinal or general anaesthesia. Symptomatic relief and early postoperative complications were recorded. The patients were followed for 18 months. Follow-up included assessment for complications such as pain, incontinence, keyhole deformity, and recurrence. All patients presented with pain during and after defaecation. Forty [29.4%] patients presented with bleeding per rectum. One hundred and sixteen [85%] patients complained of perianal swelling while 8 [5.9%] patients complained of perianal itching. Retention of urine was the most common postoperative complication, seen in 10 [7.4%] cases. It occurred within the first 24 hours after operation and all cases required catheterization. Six [4.4%] patients complained of moderate to severe postoperative pain in the first 24 hours, requiring narcotic analgesics. Transient incontinence of flatus and faeces occurred in 5 [3.7%] and 3 [2.2%] cases respectively. One patient presented with a recurrent anal fissure after 8 months but responded to conservative treatment. Given the low rate of complications and almost negligible rate of recurrence, fissurectomy with posterior midline Sphincterotomy is still a treatment of choice for the management of chronic anal fissure.

**Fluoroquinolones**

**pharmacology**

Antimicrobial susceptibility testing of newer quinolones against gram positive and gram negative clinical isolates.
Iffat, Wajiha; Shoaib, Muhammad Harris; Muhammad, Iyad Naeeem; Rehana; Tasleem, Samiah; Gauhar, Shahnaz
E-mail: harrisshoaib2000@yahoo.com
Dow Medical University - Dow College of Pharmacy
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 245-249 (22 ref.)

Keywords: Ofloxacin-pharmacology; Microbial Sensitivity Tests; Gram-Negative Bacteria-drug effects; Gram-Positive Bacteria-drug effects; Drug Resistance, Bacterial

Abstract: Antibiotic resistance development is an ongoing process associated with irrational antibiotic use. WHO recommends regular surveillance programs for monitoring of antibiotic resistance. The present study is a step in this direction. A total of 124 clinical isolates of Escherichia coli, Staphylococcus aureus, Klebsiella pneumoniae and Pseudomonas aeruginosa were collected from different hospitals in Karachi. In vitro antimicrobial susceptibility studies were carried out by agar dilution method using newer quinolones that included Gatifloxacin and Levofloxacin. It was observed that 50% [n=30] isolates of Staphylococcus aureus were resistant to gatifloxacin. Gatifloxacin was more active against Pseudomonas aeruginosa [n=23] and showing complete susceptibility with MIC 1mg/L except for three very resistant strains that shown resistance at even higher concentrations. Escherichia coli [n=45] has shown 15.5% and Klebsiella pneumoniae [n=26] 34.61% resistance to gatifloxacin. Levofloxacin was more active against Staphylococcus aureus and Escherichia coli showing complete susceptibility at 0.5 mg /L concentration. Pseudomonas aeruginosa and Klebsiella pneumoniae were found to be resistant to Levofloxacin showing 36.36% and 23.08% resistance respectively. The study strongly recommends the adherence to the antibiotic policy and regular susceptibility testing to overcome the problem associated with antimicrobial resistance.

**Food Microbiology**

Microbiological quality of home cooked meat meals and vegetable salads.
Elmacioglu, Funda; Tayfur, Muhittin; Bener, Ozgun; Akman, Mehmet; Aksoydan, Emine
Ondokuz Mayis University - Samsun Health Vocational High School
Pakistan Journal of Medical Sciences 2010; 26 (2): 416-419 (28 ref.)

Keywords: Food Contamination; Vegetables-microbiology; Meat-microbiology
Abstract: To determine the microbiological quality of home meals and salads samples. A total of 180 samples were collected between May 2007 and July 2007 in Ankara, Turkey. The samples were analysed for the presence of total aerobic bacteria (TAB), thermotolerant coliform bacteria (TCB), Escherichia coli, Salmonella spp. and Staphylococcus aureus. In the present study, S. aureus, coliforms, E. coli, and Salmonella were not detected in cooked meat meals samples. TAB was detected in 22 (24.4%) meat dishes ranges 102-104. The cooked meat dishes samples were analyzed for the presence of TCB, and detected in 2 [2.2%] meat dishes ranges 103-104. Numbers of the aerobic mesophilic bacteria ranged from 102 to 105 cfu/g and coliforms from 37 to 1400 MPN/g in 17 [18.9%] of salad samples. E. coli was detected at level 102-103 [n=12, 13.3%] and S. aureus was detected in 9 [10.0%] at levels of 103-104 cfu/g salad samples tested. In 4 [4.4%] of the salads samples S. aureus and E. coli were isolated together. The results indicate that the type of vegetable salads analysed may contain pathogenic bacteria and thereby represent a risk to the consumers in regard to foodborne diseases. Thus, it remains essential to include the significance of effective hygiene practices as an important safety measure in programmes of home hygiene, consumer education, and advice.

Food-Drug Interactions

Studies of food drug interactions.
Aman, Syed Faisal; Hassan, Fouzia; Naqvi, Baqar S.; Hasan, Syed Muhammad Farid
E-mail: faridsm2002@yahoo.com
University of Karachi - Faculty of Pharmacy - Department of Pharmaceutics
Keywords: Biological Availability; Area Under Curve
Abstract: Medicines can treat and alleviate many diseases provided that they must be taken properly to ensure that they are safe and useful. One issue related with the medicines is that whether to take on empty stomach or with food. The present work gives information regarding food-drug interactions that were studied by collecting seventy five prescriptions from various hospitals. In most of the collected prescriptions, food-drug interactions were detected using the literature available. It was also found that only few studies have been carried out so far on the effect of food on drug disposition in the Asian population. Thus more studies on food-drug interactions particularly in the local population is recommended in order to determine the effect of food and food components on drug disposition and to the kinetics of the drugs which has not yet well highlighted in this part of the world.

Foreign Bodies

iatrogenic foreign body from left to right bronchus: the lessons learnt.
Mohamad, Irfan; Mohamad, Hazama; Ismail, Hashimah; Khamis, Nadzman; Othrub, Khaled
E-mail: irfan@kb.usm.my
University Sains Malaysia - School of Medical Sciences - Department of Otorhinolaryngology
Pakistan Journal of Medical Sciences 2010; 26 (2): 482-484 (7 ref.)
Keywords: Bronchi; Iatrogenic Disease; Bronchoscopy
Abstract: Iatrogenic foreign body in the airway is a known complication of medical treatment that may occur in various clinical settings. The foreign material can be from extraluminal or intraluminal source. The symptoms may manifest acutely or months and years after treatment. Our case highlighted the possibility of the dislodgement of the foreign body during retrieval from the initial site, and the importance of prompt identification and management.

Foxes

Parasitology

Studies on intestinal helminthes infecting free-ranging red fox [vulpes vulpes] in north-western part of Libya.
Hosni, M.M.; El Maghrbi, A.A.
Alfatah University - Faculty of Vet. Medicine - Department of Preventive Medicine
Veterinary Medical Journal 2009; 57 (1): 59-66
Keywords: Helminths; Intestinal Diseases, Parasitic; Cestode Infections
Abstract: Eighteen free-ranging live red fox [Vulpes vulpes] captured during the period ringed from October 2007 to April 2008 from rural and semi-desert regions of North-Western part of Libya were investigated parasitologically for presence of intestinal helminthes. The study revealed that 2 foxes [11.1%] were free from intestinal helminthes and 16 foxes [88.9%] were infected with helminth parasites species. These helminthes were four cestodes: joyeuxiella
echinorhynocoides 5[31.25%], mesocestoides spp. 6[37.5%], diplopylidium nolleri 2[12.5%] and dipylidium caninum 1[6.25%]. Three nematodes: Rictularia caherrsis 3[8.7%], Ancylostoma caninum 3[18.7%] and Toxocara canis 2[12.5%]. Only one acanthoeephala: moniliformis dubius 4[25%]. No trematodes were found. All these helminthes were recovered and reported for the first time from red fox [Vulpes vulpes] in north-western part of Libya. Five helminthes of them has zoonotic important. Therefore, the study showed that the red fox [Vulpes vulpes] plays an important role in the investigated area as a reservoir host of a number of parasites of domesticated and wild animals or may have zoonotic importance. The results were discussed with reference to variations in the live behavior and diet in the rural areas of North-western part of Libya.

**Ganglioneuroma**

**diagnosis**

**Primary orbital ganglioneuroma in a 2-year-old healthy boy.**

Al Khiai, Hattan; Ayoubi, Ayman; Elkhamary, Sahar M.
King Khaled Eye Specialist Hospital - Oculoplastic and Orbit Division
**Saudi Journal of Ophthalmology** 2010; 24 (3): 101-104 (12 ref.)

**Keywords:** Ganglioneuroma-pathology; Orbital Neoplasms-pathology; Exophthalmos-etiology; Biopsy

**Abstract:** A 2-year-old healthy child presented with progressive unilateral proptosis. Complete work up including: general examination, detailed ophthalmic evaluation and radiological imaging were done. He underwent orbital exploration via anterior orbitotomy incision and debulking of the tumor was done. The histopathological examination confirmed the diagnosis of orbital ganglioneuroma. Ganglioneuroma is an unusual benign tumor of neuroplastic origin with extremely rare orbital involvement with only one prior reported case in a youth. The tumor is slow growing and non-metastasizing. Biopsy is necessary to differentiate it from the malignant neuroblastoma and excision is usually curative.

**Gangrene**

**etiology**

**Neonatal gangrene of the extremity: a complication of umbilical catheterization.**

Mousavi, Seyed Abdollah; Sahebpour, Alireza Alam; Shahmohammadi, Soheila
E-mail: skavardi@yahoo.com.sg
Mazandaran University of Medical Sciences - Faculty of Medicine - Department of Pediatric Surgery
**Pakistan Journal of Medical Sciences** 2010; 26 (2): 488-489 (9 ref.)

**Keywords:** Catheterization-adverse effects; Lower Extremity-pathology; Umbilical Veins

**Abstract:** We report a case of severe tissue ischemia after umbilical catheterization in a preterm newborn. Umbilical catheters can accidentally enter branches of the iliac artery during attempted placement in the umbilical vein. If these misplacements are not recognized by radiology and promptly corrected, arterial obstruction may lead to ischemia and infarction of the extremities. This is the first report of below-knee gangrene due to peripheral vasospasm or thrombosis occurring after umbilical vein catheterization [UVC]. We discuss that the radiographic verification is essential before infusing medications.

**Glaucoma**

**complications**

[Annual world glaucoma day. Enhancing awareness of glaucoma: a leading cause of preventable blindness].

Sbeity, Zaher; Ritch, Robert
E-mail: z.sbeity@web.de
El-Horn Clinical Research Center - Department of Ophthalmology
**LMJ - Lebanese Medical Journal** 2010; 58 (2): 120-121 (6 ref.)

**Keywords:** Glaucoma-epidemiology; Glaucoma-prevention and control; Blindness-etiology; Blindness-prevention and control; Awareness
Glucagonoma

diagnosis

A case of glucagonoma and a review the literature.
Breizat, Abdel Hadi; Al Tahieneh, Amal S.
E-mail: dr_abriezat@yahoo.com
Ministry of Health - Al Bashir Hospital - Department of Surgery
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 70-74 (15 ref.)
Keywords: Glucagonoma-pathology; Glucagonoma-surgery; Neoplasms Metastasis; Prognosis; Glucagonoma-drug therapy; Streptozocin-therapeutic use; Treatment Outcome
Abstract: Glucagonoma is a rare islet cell tumor [alpha cell tumor] of the pancreas, when active it produces a syndrome characterized by necrolytic migratory erythema, diabetes mellitus, weight loss, anemia, glossitis, thromboembolism, neuropsychiatric disturbances and hyperglucagonemia. We present a case of a large pancreatic head tumor with diabetes mellitus [DM], anemia, weight loss and muscle wasting. After complete resection of the pancreatic tumor, the hyperglycaemia subsided. Reviewing 120 cases of glucagonoma in the literature the average tumor diameter was 3.6 cm. Most of the tumors [90%] occurred in the body and the tail. Two thirds of the reported glucagonomas were malignant and 53.3% metastasizes to other organs. Necrolytic migratory erythema [NME] is not a prerequisite for the diagnosis of Glucagonoma syndrome, where anemia, hyperglycemia, muscle wasting and weight loss may be the presenting features.

Graves Ophthalmopathy

radiotherapy

[Corticosteroids and radiotherapy in the treatment of graves-ophthalmopathy].
E-mail: nasre@inco.com.lb
CHU Hotel-Dieu of France - Department of Endocrinology
LMJ - Lebanese Medical Journal 2010; 58 (2): 86-90 (16 ref.)
Keywords: Graves Ophthalmopathy-drug therapy; Treatment Outcome; Steroids-therapeutic use; Quality of Life; Retrospective Studies
Abstract: Graves ophthalmopathy is a debilitating disease impairing the quality of life of affected individuals. The management of moderate-to-severe active Graves’ ophthalmopathy is a major therapeutic challenge, and the treatment outcome is often unsatisfactory. We have carried out a retrospective study to assess the efficacy of combined orbital irradiation and systemic corticosteroids. Ten patients were included; all patients had received 20 Grays to the retrobulbar tissues in ten fractions, and oral or intravenous glucocorticoids. The main therapeutic outcome measures were the criteria of Donaldson and co-workers and a self-assessment evaluation. The quality of life outcome was also evaluated by the GO-QOL [Graves' ophthalmopathy quality of life] questionnaire. Seven patients [70%] demonstrated improvement in ocular parameters; the response was excellent in three cases, good in three cases and fair in one case. Three patients showed no response to the treatment. The self-assessment evaluation showed that 75% of patients were satisfied with the results of the treatment. Proptosis was the most responsive sign to radiation and steroids. A duration of the eye disease of more than 18 months was associated with less improvement and a higher failure of the treatment. Concerning the quality of life, the score for visual functioning was 88.2 +/- 18.2 after treatment, while the score for appearance was 63.3 +/- 23.3. In conclusion, a combination of orbital irradiation and systemic steroids is associated with 70% of favorable responses, but the quality of life is not restored in the same proportions and remains impaired after treatment.

Growth

Growth pattern and sexual maturation in type 1 diabetic patients Erbil city-Iraq.
Ahmed, Abbas Abdulkader
E-mail: abas_alrabaty@yahoo.com
Hawler Medical University - College of Medicine
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 42-47 (30 ref.)
Keywords: Sexual Maturation; Diabetes Mellitus, Type 1-complications; Reference Values; Prospective Studies; Case-Control Studies; Body Mass Index
Abstract: The aims of this study were to assess the physical growth and pubertal maturation in a group of children of type 1 diabetes mellitus compared with controls. In this case-control study, physical growth assessment and sexual maturity rating of 40 patients aged 8-18 years [26 males, 14 females] with established type 1 diabetes were compared
with those of 40 healthy controls of the same age and gender. Assessment of height, weight, Body Mass Index (BMI) and Sex Maturity Rating (SMR) were studied in comparison to a matched age group. The height of 10 patients [25%] was less than 5th percentile, twenty nine patients [72.5%] were between 5-75th percentile and one [2.5%] above 75th percentile in comparison with the results of the controls: one [2.5%], 23 [57.5%] and 16 [40%] respectively. The weight of 11 patients [27.5%] was less than 5th percentile, twenty six patients [65%] were between 5-75th percentile and three patients [7.5%] above 75th percentile in comparison with the results of the controls: one [2.5%], 25 [62.5%] and 14 [35%] respectively. The mean BMI was 19.52 +/- 3.48 in patients whereas in the control group it was 21.41 +/- 4.80. The mean age of starting menarche in diabetic patients was 13.30 +/- 1.15 years in comparison to 12.69 +/- 0.85 years of controls. Twenty four diabetic patients [60%] had normal SMR compared to 35 [87.5%] of controls, and sixteen patients [40%] had delayed SMR compared to 5 [12.5%] of controls. It is concluded that diabetic children [type 1] are associated with impairment of physical growth and delayed sexual maturation.

Guillain-Barre Syndrome

microbiology

Campylobacter jejuni infection and childhood guillain-barre syndrome.
Barzegar, Mohammad; Hashemilar, Mazyar; Bonyadi, Mohammad Reza
Tabriz University [Medical Sciences] - Pediatric Health Research Centre - Department of Pediatric Neurology
Pakistan Journal of Medical Sciences 2010; 26 (2): 304-309 (29 ref.)
Keywords: Campylobacter Jejuni; Campylobacter Infections-epidemiology; Prognosis; Prospective Studies; Case-Control Studies
Abstract: Guillain-Barre syndrome [GBS], acute postinfectious polyneuritis, is the most common cause of acute neuromuscular paralysis. Infection with Campylobacter jejuni is recognized as a common antecedent of the GBS. This study aimed to determine the frequency of this infection in children with GBS and, the clinical and epidemiologic features of this association. We performed a prospective case-control study on a cohort of 47 children with GBS admitted to Tabriz Childrens Hospital in the northwest of Iran between July 2006 and July 2008. Serologic investigations were used to diagnose preceding C. jejuni infection. We found evidence of recent C. jejuni infection in 40.4% of the patients with GBS, as compared with 6.1% in household controls [odds ratio 10.5, 95% CI: 2.2-49.2, P<0.001]. Duration to achieve independent walking was longer in C. jejuni-associated patients [P<0.013]. However 95% of C. jejuni-associated GBS patients achieved independent walking at end of one year. The patients with preceding C jejuni infection were more likely to have axonal neuropathy [P<0.05]. Campylobacter jejuni infection is an important antecedent illness in childhood Guillain-Barre syndrome in Iranian children, and is associated with good prognosis.

Head and Neck Neoplasms

drug therapy

Squamous cell carcinoma of the head and neck: dramatic response to chemoradiotherapy.
Mosalaei, Ahmad; Hashemi, Seyed Basir; Sedaghat, Sanaz
E-mail:mosalaasums.ac.ir
Shiraz University of Medical Sciences - Nemazee Hospital - Department of Radiation Oncology
MEJC - Middle East Journal of Cancer 2010; 1 (1): 55-57 (5 ref.)
Keywords: Head and Neck Neoplasms-radiotherapy; Carcinoma, Squamous Cell-drug therapy; Carcinoma, Squamous Cell-radiotherapy; Treatment Outcome

Health Manpower

Re: Afghanistan and Oman: personal reflections on a profound contrast.
Alshishtawy, Moeness
E-mail:droness@gmail.com
Ministry of Health - Department of General of Planning
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 272-275 (13 ref.)
Keywords: Health Personnel; Students, Medical; Nurses; Physicians
Health Personnel

Attitudes of health caregivers on teamwork and safety climate in an educational medical center.
Mahfoozpour, Soad; Mojdehkar, Reyhanneh
E-mail:s.mahfouzpoor@sbmu.ac.ir
Shahid Beheshti University of Medical Sciences - Faculty of Health
Pakistan Journal of Medical Sciences 2010; 26 (2): 450-453 (14 ref.)
Keywords: Attitude; Questionnaires; Patient Care Team; Safety; Occupational Health
Abstract: To study the attitudes of health caregivers on teamwork and safety climate in an educational Medical Center in Tehran Iran. In this descriptive study, 225 residents physician, nurses and other paramedics working for at least one month in the studied hospital participated. Data collection tool was Safety Attitudes Questionnaire [SAQ] which consisted of three sections: provider group characteristics, 14 teamwork questions, and 13 safety climate questions. Validity [content] and reliability [test-retest] of the questionnaire were confirmed and chi square test was used for data analysis. The results indicated that from 225 subjects, 39.11% were male and 60.89% were female, with 70.23% being married and 26.66% being single. There was not a significant relationship between caregivers' attitudes on teamwork and safety climate with provider group characteristics [gender, experience in organization, marital status, and organizational position]. By comparing teamwork and safety climate points, the status of teamwork in the studied hospital was better than that of safety climate and the caregivers were more satisfied with status of teamwork in the hospital. Achievement of patient safety depends on teamwork. Safety climate also leads to an appropriate feedback and culture of learning from errors. Therefore, further studies on safety climate related factors, for continuous improvement in patient safety is recommended.

Health Services Research

National research for health system mapping in 5 countries in the Eastern Mediterranean Region and perspectives on strengthening the systems.
Ghannem, Hassen; Becerra Posada, Francisco; Ijsselmuiden, Carel; Helwa, Iman; Haan, Sylvia
E-mail:ghannem@cohred.org
University Of Sousse - Faculty of Medicine - Department of Epidemiology
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 260-261 (5 ref.)
Keywords: Health Planning; World Health Organization; Health Systems Plans

Hearing

Hearing health practices and beliefs among over 20 year-olds in the Omani population.
Khandekar, Rajiv; Ved, P. Narang; Kantharaju, K.K.; Mane, Pratibha; Hassan, Abdul R.M.; Niar, Raghunandan; Fahim, A. Shah; Al Khabori, Mazin; Al Harby, Saleh
E-mail:rajshpp@omantel.net.om
Ministry of Health - Eye and Ear Health Care - Department of Non-Communicable Disease Control
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 241-248 (25 ref.)
Keywords: Health Knowledge, Attitudes, Practice; Culture; Questionnaires; Noise; Hearing Loss
Abstract: The objective of this study was to investigate hearing health practices and beliefs among people over 20 years old in the Omani population. This descriptive study was conducted in Oman during 2007-2008. Arabic speaking health staff interviewed a total of 598 selected people from urban and rural Oman and also industrial workers using a closed ended questionnaire with 15 questions. Participants' responses to the hearing practice related questions were graded into excellent [>=20 points], average [10 to 19] and poor [<10 points]. The responses to the questions about hearing beliefs were grouped into excellent [>=25 points], good [5 to 24], average [-4 to 4], poor [-24 to -5] and very poor [<25 grades. We calculated the frequencies, percentage proportions and 95% confidence intervals of the different grades of beliefs and hearing practice. The rates were also compared among different subgroups. We performed regression analysis to identify predictors of good hearing practice and scientific beliefs. Among the 598 participants, an 'excellent' grade of hearing practice and belief was noted in 386 [64.5% [95% CI 60.7-68.4]] and average in 205 [34.3% [95% CI 29.5 - 37.1]]. Being in the 20 to 39 years age group [OR=1.67] and an urban resident [OR=1.53] were both predictors of an excellent grade of hearing practice, while male gender [OR=1.71] and illiteracy [OR=1.80] were predictors of scientific beliefs. We noted high levels of good hearing practice and low levels of modern scientific beliefs among Omani participants. The Ear Health Care program of Oman should focus on improving the knowledge about healthy hearing so that attitudes and hearing practices are improved and noise-induced hearing loss can be prevented or delayed.
Hearing Loss, Sensorineural

epidemiology

Sensorineural hearing loss in patients with diabetes mellitus.
Yaseen, Ehab Taha; Abed, Ali
E-mail:drehab2007@yahoo.com
Al Mustansiriyah University - College of Medicine - Department of Surgery
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 32-37 (21 ref.)

Keywords: Hearing Loss, Sensorineural-Diabetes Mellitus; Diabetes Complications; Time Factors

Abstract: The aim of this study was to find cause effect relationship between diabetes and sensorineural hearing loss. Hearing threshold of 70 diabetic patients and 70 healthy controls were determined using pure tone audiometry at Al Yarmouk Teaching hospital. Their ages ranged between [9-45] years old. The patients were categorized into groups according to their age, the duration of disease, complications, control and type of diabetes. These observations were compared with those from the control subjects using appropriate statistical methods. The results of the study revealed that mean hearing threshold was worse in diabetic patients than control subjects. All age groups with diabetes showed significant low and high frequency hearing loss as compared to those who were well controlled. The threshold was worse in complicated diabetics than in non complicated diabetics. Diabetics with longer duration shows worse threshold than others. However, threshold was better in patients with good control of diabetes and there were no differences in threshold between insulin and non insulin dependent diabetics. It was found that diabetics had a poorer hearing threshold which was seen in all age groups, and there was a relationship between the duration, control and complications of diabetes and the level of hearing loss. No significant difference in hearing loss was found between insulin-dependent and non-insulin dependent diabetics.

Heart Defects, Congenital

surgery

Prevalence and risk factors of mortality after surgery for congenital heart disease in Tabriz, Iran: a five year retrospective analysis.
Sohrab, Negargar; Alireza, Yagoubi; Ata, Mahmoodpoor; Mahmoud, Samadi; Bahram, Qaderi; Azad, Rahmani; Etemadi, Sahar
Tabriz University of Medical Sciences - Department of Anesthesiology
Pakistan Journal of Medical Sciences 2010; 26 (2): 267-270 (16 ref.)

Keywords: Cardiovascular Surgical Procedures-methods; Prevalence; Risk Factors; Retrospective Studies; Mortality

Abstract: The mortality rate after surgeries for congenital heart disorders is the most important factor for determination of the quality of these operations. A study that evaluate the mortality rate of these surgeries has not been done till now in Iran. Therefore, the purpose of this study was to determine the prevalence and risk factors of mortality after surgery for correction of congenital heart disease. In a retrospective study, 120 children who expired after cardiac surgery and also 150 children who survived after surgery were evaluated between 2005 and 2009. Personal and Social parameters and some risk factors were analyzed. Analysis of results was performed using SPSS version 14 and descriptive and inferential statistics. It showed that 12.64% of children died after surgery. Important risk factors of death were age, weight, height, body surface, preoperative Blood Urea Nitrogen, preoperative Prothrombin Time, preoperative cyanosis and postoperative bleeding. The results of this study indicate that the death rate of children after heart surgery in cardiovascular center of Tabriz Medical University seems to be high. Because of the lack of studies in this field more trials are advised.

Hepatitis B Surface Antigens

blood

Wasfi, O.A.S.; Sadek, N.A.
University of Alexandria - High Institute of Public Health - Department of Microbiology
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 238-242 (33 ref.)

Keywords: Hepatitis C Antibodies-blood; Blood Donors; Prevalence; Cross-Sectional Studies; Enzyme-Linked Immunosorbent Assay; Seroepidemiologic Studies
Abstract: Hepatitis B and C virus infections are common serious complications of blood transfusion. Over a 6-month period in 2007/08 all samples from a blood bank in Alexandria, Egypt [n=3420] were tested for hepatitis B surface antigen [HBsAg] and anti-hepatitis C virus [HCV] antibodies. A total of 119 donors [3.5%] were positive for anti-HCV and 47 [1.4%] for HBsAg. The mean age of HCV - positive donors was significantly higher than HBV-positive donors: 35.7 [SD 83] versus 29.9 [SD 7.4] years, HCV and HBV prevalence was highest among males [93.3% and 93.6% respectively], in urban areas [66.4% and 80.9%] and among manual workers [64.7% and 46.8%]. The rates were lower than previous studies in Egypt, perhaps due to predonation screening which excludes those known to be at high risk of contracting bloodborne infections or who had other contraindications to blood donation.

Hepatitis B Vaccines

Hepatitis B vaccination coverage among Iranian children aged 15-26 months in 2006.
Esteghamati, A.; Keshkari, A.A.; Nadjafi, L.; Gouya, M.M.; Salaramoli, M.; Roshandel, Gh.; Yaghini, F.
Ministry of Health and Medical Education - Centre for Disease Control and Prevention - Office of Vaccine Preventable Diseases
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 93-100 (29 ref.)
Keywords: Vaccination-utilization; Questionnaires
Abstract: This study in 2006 estimated the hepatitis B virus [HBV] vaccination coverage in the Islamic Republic of Iran at the national and district levels in urban, rural and remote populations of 41 university health service areas. Of 21905 children recruited to the study, vaccination coverage based on vaccination card records was 100% in 14,15 and 10 of the 41 university areas for the 1st, 2nd and 3rd doses of HBV respectively. National levels of HBV1, HBV2 and HBV3 coverage were 98.9%, 98.8% and 98.4% respectively. The lowest HBV vaccination coverage rate was 90.7% [in a remote district]. HBV vaccination coverage was at an acceptable level in Iranian children.

Hepatitis C Antibodies

The prevalence of HCV antibodies in skin disease patients in Saudi Arabia.
Halawani, Mona; Balbisi, Amal; Alotaibi, Hend; Alsaf, Fahed; Bakir, Talal M.
E-mail:Monahalawani@gmail.com
King Khalid University Hospital - Department of Dermatology
Keywords: Skin Diseases-virology; Prevalence; Prospective Studies; Polymerase Chain Reaction; Hepatitis C-epidemiology
Abstract: Hepatitis C virus [HCV] infection is a worldwide health issue with about 3% of the world's population having HCV. In Saudi Arabia, prevalence ranges from 1.0% to 5.87%. Cutaneous diseases can indicate the presence of HCV infection. The research project aims to identify prospectively the prevalence of HCV infection in 200 patients with various types of skin disorders and 50 healthy blood donors, and to quantify this association through clinical and laboratory investigations. Two hundred patients with cutaneous manifestations who presented at the Dermatology outpatient clinics of King Khalid University Hospital [KKUH] and King Abdulaziz University Hospital [KAUH], Riyadh, and 50 healthy blood donors were prospectively studied. Patients were examined by a team of dermatologists and clinical data were collected through a standard questionnaire. Ten milliliters of venous blood were collected from fully consented, 8-1 Oh fasting patients and serum was analyzed for AST, ALT, double infection with HBsAg, anti-HCV antibodies, and screened for HCV-RNA-PCR. Patients from the study [n = 200] consisted of 25 [12.5%] males and 175 [87.5%] females, with a mean age of 42.9 +/- 15.06 years. Clinical examinations revealed that [35%] had urticaria, followed by pruritus [28%], lichen planus [25.5%], prurigo [10%], and palpable purpura [1.5%]. The main serum levels of ALT and AST were within the normal reference ranges. Twenty-four patients [12%] tested positive for anti-HCV antibodies, with 15 (62.5%) being positive for the presence of HCV-RNA by PCR and 9 [37.5%] resulting negative for the viral RNA. Of the 24 anti-HCV positive patients, pruritus 12 [50%], urticaria 5 [20.8%], lichen planus 5[20.8%], and palpable purpura 2[8.3%]. Five [2.5%] patients were positive for HBsAg, with 3 [60%] having pruritus and 2 [40%] presenting with urticaria. Of the 50 healthy blood donors, only one [2%] tested positive for the presence of anti-HCV antibodies, and all the donors tested negative for HBsAg. Results clearly indicate the prevalence of anti-HCV antibodies in 24 out of 200 patients [12%] with skin manifestations seen at the dermatology outpatient clinics and documented with HCV-RNA-PCR positivity of 15/24 [62.5%]. A p-value of <0.05 was considered significant, therefore, it is suggested that patients presenting with urticaria, pruritus and LP be investigated to exclude the possibility of HCV infection.
Sero-prevalence of hepatitis C antibodies in the people visiting roadside barbers.
Makheja, Kirpal Das; Abro, Ali Hassan; Kumar, Susheel
E-mail:kirpalmakheja@yahoo.com
Jinnah Postgraduate Medical Center [JPMC] - Department of Medicine
Pakistan Journal of Medical Sciences 2010; 26 (2): 402-406 (24 ref.)
Keywords: Hepatitis C-epidemiology; Prevalence; Seraepidem iologic Studies; Barbering; Enzyme-Linked Immunosorbent Assay
Abstract: Sharing of blades and shaving kits, especially unsterilized ones are known risk factors for the transmission of Hepatitis C. The objective of this study was to determine the prevalence of Hepatitis C antibodies reactivity among the patients admitted due to any medical condition and who have been visiting roadside barbers. This was a descriptive study conducted from July 2007 to June 2008 in the Medical Unit-111, Jinnah Postgraduate Medical Center, Karachi. The study was designed to include patient's demographics [age, occupation, marital status and education], clinical information and duration of the visits to roadside barbers with an approximate frequency of shavings per month. The patients with history of>3 visits to a roadside barber during the last six months were included in the study. Whereas, the patients with history of liver disease, blood transfusion, surgery, dental treatment, tattoo marks, intravenous drug use, on regular injectable medicine [like insulin, etc], multiple sexual partners and on haemodialysis were excluded from the study. A blood sample was collected at the time of admission and the screening for HCV-antibodies was done by Enzyme Linked Immuno-Sorbant Assay [ELISA]. A total of 184 male patients were included in the study. The mean age+ SD of the patients under the study was 33.8+13.2 years. The majority of study patients were uneducated and belonged to low socioeconomic group. Out of 184 patients, 70 [38%] were found to be HCV-antibodies reactive. In comparison to younger patients [age<40 years], the older patients as well as those with history of longer duration of visits to roadside barbers had high prevalence of HCV-antibodies reactivity, P.015 and P.02 respectively. There was no statistical significant difference for the prevalence of HCV-antibodies reactivity among the different socioeconomic groups, educational level and marital status. In the present study, it is concluded that the sharing of unsterilized shaving kits and used blades by roadside barbers are the main sources for the transmission of HCV. The transmission rate of HCV infection increases with the duration and multiple exposures for shaving.

Hepatitis C, Chronic
Clinical significance of plasma homocysteine concentration in chronic hepatitis C patients with liver cirrhosis.
Taba, Khalid; El Shayeb, Ayman; Shafeh, Reem; Deghady, Akram; Zein Eldin, Soheir
Alexandria University - Faculty of Medicine - Department of Tropical Medicine
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 755-760 (24 ref.)
Keywords: Liver Cirrhosis; Homocysteine-blood; Liver Function Tests-blood; Folic Acid-blood; Vitamin B 12-blood; Disease Progression; Kidney Function Tests
Abstract: Homocysteine [Hcy] is a sulfur containing amino acid that is formed as an intermediate in methionine metabolism. Extensive evidence shows that hyperhomocysteinemia is considered an independent risk factor for atherothrombotic vascular disease. Methionine metabolism occurs mostly in the liver. Altered methionine metabolism, in advanced liver disease, may play a pathogenic role. The aim of this work was to evaluate the clinical significance of plasma Hcy concentration in chronic hepatitis C patients with liver cirrhosis. Twenty male patients [mean age 43.13 +/- 7.02 year] with chronic hepatitis C with liver cirrhosis [Group I] and 10 healthy age-matched control subjects [Group II] were included into the study. Ten patients with liver cirrhosis were diagnosed with hepatorenal syndrome [HRS] [Group Ia] and 10 did not have FiRS, Liver function, renal function tests, urinalysis, HCV Ab, HCV-PCR, plasma folate, B12 and Hcy concentration, abdominal ultrasound were performed for all studied subjects. Plasma Hcy concentration was significantly elevated in cirrhotic patients compared to healthy controls [P<0.05]. Hcy was positively correlated with the severity of liver disease as expressed by the Child score [P<0.05]. Plasma Hcy concentration was significantly higher in patients with HRS than in patients without HRS [P<0.05], and inversely correlated with the creatinine clearance rate [P<0.05]. There was no significant difference in folate and B12 levels between patients and controls. Plasma Hcy is elevated in patients with chronic hepatitis C and liver cirrhosis, and correlated with the progression of liver disease, Patients with cirrhosis complicated with HRS have higher Hcy concentration compared to patients with normal renal functions, and Hcy level increases with the deterioration of renal function.
Hernia, Ventral

etiology

Port site herniation of the small bowel following laparoscopic-myomectomy: a case report.
Elshafie, Ghazi A.; Al Wahaibi, Khalifa; Al Azri, Ahmed; Al Qadhi, Hani; Al Harthi, Abdullah
Sultan Qaboos University Hospital - Department of Surgery
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 106-110 (18 ref.)

Keywords: Laparoscopy-adverse effects; Abdominal Wall; Uterus-surgery; Hysteroscopy

Abstract: Bowel herniation, through fascial defects secondary to laparoscopic surgery at the site of trocar entry, is a rare, but potentially serious, complication. Closure of the fascia at port sites measuring 10mm or more has been highly recommended to avoid such complications. We report a case of a small bowel which herniated and strangulated through the port site immediately after laparoscopic myomectomy. Resection of the strangulated bowel with primary anastomosis was required to manage this complication. We present this case report with literature review to discuss the risk factors and the methods to prevent such a complication post laparoscopic surgery.

Homocysteine

drug effects

Effect of low-dose folic acid supplementation versus HRT and combination of folic acid and HRT on plasma level of homocysteine in postmenopausal women.
Nasrolahi, Shahla; Radnia, Nahid; Neghab, Nosrat; Shafie, Akram
Hamedan University of Medical Science and Health Service - School of Medicine - Department of Gynecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 310-313 (7 ref.)

Keywords: Folic Acid-therapeutic use; Folic Acid-administration and dosage; Homocysteine-blood; Postmenopause; Hormone Replacement Therapy

Abstract: This study was designed to evaluate the effect of hormone replacement therapy [HRT] and folic acid supplementation on Homocysteine [Hcy] level in postmenopausal women. This is a randomized clinical trial conducted on 66 postmenopausal women [menopause at least for 2 years] attending Hamedan outpatient Fatemieh teaching hospital. Since March 2006 till April 2007. The patients were randomly divided into four groups. Before studying plasma level of Albumin, total protein, folate, fasting level of plasma Hcy was measured. The patients of first group received folic acid 5mg daily. In the second group of patients took oral conjugated estrogen 0.625mg and medroxy progesterone acetate 2.5mg daily. In third group the patients received combination of folic acid and HRT and placebo in fourth group. Fasting plasma level of Hcy was measured four weeks later. Plasma level of Hcy was significantly decreased in group1, 2 and 3 [p=0.026] after treatment. There was significant difference between group 1, 3 [p=0.005] and 1, 4 [P=0.005] for plasma level of Hcy. HRT and folic acid therapy can reduce plasma Hcy. Combination of both HRT and folic acid supplementation is more effective than HRT or folic acid alone in reduction of hyperhomocysteinemia.

Horner Syndrome

diagnosis

Horner's syndrome as a co-presentation of tuberculous retropharyngeal abscess.
Raza, Syed Nusrat; Rabat, Z.M.
E-mail: razanusrat@gmail.com
Combined Military Hospital - Department of ENT

Keywords: Retropharyngeal Abscess-diagnosis; Retropharyngeal Abscess-microbiology; Tuberculoma-diagnosis

Abstract: Tuberculosis is a disease known to affect any part of the body and to present in many interesting forms. A case of tuberculous retropharyngeal abscess is described here presenting with odynophagia and Horner's syndrome. Horner's syndrome as a presenting feature of tuberculous retropharyngeal abscess has never been reported in Pakistan.
Humeral Fractures

surgery

Comparison of shoulder function, radial nerve palsy and infection after nailing versus plating in humeral shaft fractures.
Khan, Aizaz Saleem; Afzal, Waseem; Anwar, Adnan
E-mail: draizazortho@hotmail.com
Combined Military Hospital - Department of Orthopaedic
Keywords: Fracture Fixation-methods; Fracture Fixation-adverse effects; Fracture Fixation, Intramedullary; Bone Plates; Shoulder; Radial Neuropathy; Wound Infection; Treatment Outcome
Abstract: To compare shoulder function, radial nerve palsy and infection after interlocking nailing with plating of fractures of shaft of humerus during 30 weeks of follow-up. Experimental study. Orthopaedic Wards of Combined Military Hospital, Rawalpindi, from November 2006 to November 2008. Two groups of 30 patients each were inducted. Group A [n=30] was treated with intramedullary interlocking nailing while Group B [n=30] underwent plating with dynamic compression plate [DCP]. Shoulder function using ASES score, radial nerve palsy and infection were observed for 30 weeks. In group A, 11 patients had severe or moderate shoulder dysfunction [ASES score below 39], out of whom 8 [72%] were above 50 years. This age related disability was significant [p=0.003]. Transient palsy was observed in 3 patients [10%] and mild wound infection in 2 [6%), which was not associated with age or open fracture. In group B, only 1 patient had severe shoulder dysfunction, the difference was statistically significant between the two groups [p=0.001], especially in patients above 50 years of age. There was no statistical difference in infection and palsy rates between the two groups. Although nailing and plating are effective treatments for fractures of shaft of humerus, ante-grade nailing may not be suitable in elderly patients, as it can cause significant shoulder dysfunction.

Hydroxyurea

therapeutic use

Hydroxyurea can reduce or eliminate transfusion requirements in children with major and intermediate thalassemia.
Hashemi, Azamsadat; Abridshamkar, Mahboobeh; Jenabzade, Ali Reza; Eslami, Ziae
E-mail: m_abrishamkar@yahoo.com
YAZD Shahid Sadoughi University - Department of pediatric hematology and oncology
Keywords: beta-Thalassemia-drug therapy; Blood Transfusion; Ferritins-blood
Abstract: Hydroxyurea [HU] is a well known chemotherapeutic agent that has been used largely for various myeloproliferative diseases over the past 20 years. In beta-thalassemia, the effect of HU is much less clear and remains controversial. This study was undertaken to describe the hematologic and clinical responses of thalassemia major and intermediate patients to HU treatment during 2 years. Seventy one major and twenty transfusion-dependent intermediate thalassemia participants were selected among 150 beta-thalassemia patients. All patients underwent laboratory tests, and the state of energy, social activity, tolerance, and mood were recorded in the beginning of the study. Echocardiography was carried out before and during treatment with HU. All patients were treated with HU; the initial dose was 10-15mg/kg/day given once a day. All the patients tolerated HU well and showed a dramatic response to the drug. Nine of 20 intermediate and 8 of 71 major patients became completely transfusion free. In 6 intermediate and 15 major patients, transfusion interval prolonged more than 50%. After treatment, 95% of intermediate and 81% of major patients described an increase in social activity. HU therapy was also associated with a marked decrease in serum ferritin level in major thalassemia patients. HU may be administered in thalassemia major and intermediate patients to minimize or obviate the need for regular transfusion and concomitant iron overload. HU therapy appears to be safe and effective when administrated in thalassemia patients.
Hyperparathyroidism
diagnosis

Severe hyperparathyroidism versus parathyroid carcinoma: a clinical dilemma.
Al Fadhli, Mariam; Doi, Suhail A.R.; Muttikkal, Thomas; Al Sumait, Basel
E-mail: goldlife203@hotmail.com
Mubarak Al-Kabeer Teaching Hospital - Department of Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 94-100 (25 ref.)
Keywords: Parathyroid Neoplasms-diagnosis; Parathyroid Neoplasms-complications; Parathyroid Neoplasms-surgery
Abstract: No clinical or laboratory data allow a preoperative diagnosis of parathyroid carcinoma and only occasionally does a definite finding differentiate an adenoma from a carcinoma. We present a case of primary hyperparathyroidism presenting with severe elevation of parathyroid hormone and serum calcium as well as complications. We go on to discuss the case in the light of a literature review. The severity of the elevation of the parathyroid hormone, other biochemical alterations, the presence of skeletal and renal complications and of a neck mass should alert the clinician to a possible parathyroid carcinoma. Radical surgery is the only effective therapy for parathyroid carcinoma, and should always be performed if a preoperative suspicion is entertained.

Hyperprolactinemia
drug therapy

Comparative effects of bromocriptine and cabergoline on serum prolactin levels, liver and kidney function tests in hyperprolactinemic women.
Mahmood, Isam Hamo; Al Husaynei, Ahmed Jasim; Mohamad, Shatha Hani
E-mail: isam_mahmood@yahoo.com
College of Medicine - Department of Pharmacology
Pakistan Journal of Medical Sciences 2010; 26 (2): 255-260 (22 ref.)
Keywords: Bromocriptine-therapeutic use; Ergolines-therapeutic use; Prolactin-drug effects; Kidney Function Tests; Liver Function Tests; Treatment Outcome
Abstract: To compare the effects of cabergoline and bromocriptine on serum prolactin levels and liver and renal functions in hyperprolactinemic women. This study involved one hundred women, who had symptoms of hyperprolactinemia and elevated serum prolactin concentration. They were divided into two groups of 50 women. The first group received 0.5 mg of cabergoline weekly and the second group received bromocriptine up to a maximum of 2.5 mg twice daily. Serum prolactin, total bilirubin, serum alkaline phosphatase activity, AST activity, ALT activity, serum creatinine and serum urea concentrations and creatinine clearance were determined at baseline and at 8 week interval [at the end of the trial]. The efficacy of treatment was assessed with the regular menstrual cycle, absence of galactorrhea, oligomenorrhea and normalization of serum prolactin levels. Normalization of serum prolactin level was achieved in 28 of 50 [56%] women taking bromocriptine and in 40 of 50 [80%] women taking cabergoline. Cabergoline group showed a higher percent of improvement of the symptoms of hyperprolactinemia and elevated serum prolactin concentration. They were divided into two groups of 50 women. The first group received 0.5 mg of cabergoline weekly and the second group received bromocriptine up to a maximum of 2.5 mg twice daily. Serum prolactin, total bilirubin, serum alkaline phosphatase activity, AST activity, ALT activity, serum creatinine and serum urea concentrations and creatinine clearance were determined at baseline and at 8 week interval [at the end of the trial]. The efficacy of treatment was assessed with the regular menstrual cycle, absence of galactorrhea, oligomenorrhea and normalization of serum prolactin levels. Normalization of serum prolactin level was achieved in 28 of 50 [56%] women taking bromocriptine and in 40 of 50 [80%] women taking cabergoline. Cabergoline group showed a higher percent of improvement of the symptoms of hyperprolactinemia and elevated serum prolactin concentration. Figures of 83.33% for amenorrhea, 71.4% for galactorrhea and 95.45% for oligomenorrhea have been noted with cabergoline versus 55.5%, 33.33% and 72%, respectively for bromocriptine. Sixty six percent of the women taking bromocriptine were reported to have adverse effects as compared with 30% of those taking cabergoline therapy. No significant adverse effects on liver and kidney functions have been reported in the study. The present study demonstrated that both bromocriptine and cabergoline are effective in the treatment of hyperprolactinemia but cabergoline has the advantage over bromocriptine in terms of both efficacy and tolerability. Therefore it is preferred in the treatment of women with hyperprolactinemia. However, both drugs showed no abnormality in liver function as well as kidney function tests.

Hypertension, Renovascular

complications

Renovascular disease and cognitive impairment in elderly: a novel risk maker.
Gomaa, Sekina A.; Kotb, Hesham T.; Mohamed, Azza Hassan; El Sawy, Mohamed M.; Awadalla, Amira A.
Alexandria University - Faculty of Medicine - Department of Internal
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 697-712 (53 ref.)
Keywords: Cognition Disorders; C-Reactive Protein-blood; Intercellular Adhesion Molecule-1-blood; Carotid Arteries-ultrasonography; Renal Artery-ultrasonography; Ultrasonography, Doppler, Color; Glomerular Filtration Rate; Aged; Risk Factors

Abstract: Renal artery stenosis is most commonly due to either fibromuscular dysplasia or atherosclerosis. Atherosclerosis accounts for 90 percent of cases of renal-artery stenosis. Renal-artery stenosis may occur alone [isolated anatomical renal-artery stenosis] or in association with hypertension, renal insufficiency [ischemic nephropathy], or both. The aim of the present work was to study the role of renovascular disease as a novel risk marker of cognitive impairment in elderly. The study included 80 patients divided into 4 groups: Group 1: 20 cases of elderly patients above 65 years and suffering from grade 2 or 3 CKD. Group II: 20 cases aged 20-40 years and suffering from grade 2 or 3 CKD. Group III: 20 healthy controls aged above 65 years. Group IV: 20 healthy controls aged 20-40. They had been evaluated for their: Clinical condition, including physical examination and history taking, ECG, BMI estimation, MMMS examination, Routine investigation including: complete blood picture with differential counting, bleeding and coagulation time, liver functions tests, lipid profile, fasting and post-prandial plasma glucose, renal function tests, complete urine analysis, 24-hours proteins in urine, assessment of glomerular filtration rate [GFR] by MDRD and creatinine clearance and in addition specific laboratory investigations were done including: Serum CRP using turbidimetry, Microalbuminurea using turbidimetry, v-WF Ag by ELISA, s-ICAM. By ELISA and Duplex study was performed on carotid and renal arteries. The results of the present study showed that there was a significant increase in the BMI in groups land II in comparison to group III which was higher than group IV. The MMMS test was significantly lower in group I in comparison to groups II and III which were in turn significantly lower than group IV. Hemoglobin was significantly lower in groups I and II than group III and IV. Platelets count was significantly lower in groups I and II than group III which was also significantly lower than group IV. Creatinine clearance was significantly lower in groups I and II than in groups III and IV v-WF levels were significantly lower in groups land II than in groups III and IV s-ICAM I was significantly higher  in groups I and II compared to groups Ill and IV. CRP was significantly lower in groups I and II than in groups III and IV Acceleration index was significantly lower in groups I and II than in groups III and IV. A significant positive correlation was found between age and urinary albumin, CRP, and s-ICAM. A significant negative correlation between age and creatinine clearance and MDRD in groups I, II and III. Reno vascular disease is common in elderly and the most important cause is atherosclerosis in this group of patients. There are many risk factors for cognitive impairment in patients suffering from renovascular disease and most of them are correctable. Renovascular disease can be considered as a novel risk factor of cognitive impairment through many interacting mechanisms.

Ibuprofen

chemistry

Dissolution of ibuprofen from spray dried and spray chilled particles.

Elkordy, Amal A.; Essa, Ebtessam A.
E-mail: amal.elkordy@sunderland.ac.uk
University of Sunderland - Department of Pharmacy

Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 284-290 (22 ref.)

Keywords: Microscopy, Electron, Scanning; Solubility; Calorimetry, Differential Scanning; Spectroscopy, Fourier Transform Infrared

Abstract: The formulation of hydrophobic drugs for oral drug delivery is challenging due to poor solubility, poor dissolution and poor wetting of these drugs. Consequently, the aim of this study was to improve the dissolution of a model poorly water soluble drug, ibuprofen. Microparticles containing ibuprofen were produced by spray drying and spray chilling technology in the absence/presence of a hydrophilic surfactant. Poloxamer 127, tri-block copolymer, was chosen as the hydrophilic surfactant to improve drug particle wettabillity and hence the dissolution rate. The prepared formulations were evaluated for in vitro dissolution and intrinsic solubility. In addition, the produced drug particles were characterised by scanning electron microscopy [SEM], differential scanning calorimeter [DSC] and Fourier transform infrared spectroscopy [FT-IR]. SEM revealed changes in the surface morphology of processed ibuprofen, suggesting the effective formation of the drug particles. DSC data showed shifting of the melting peak of the drug towards lower melting temperature in the prepared particles, indicating the possibility of drug/polymer interaction. The results of the dissolution studies of spray dried ibuprofen and spray dried ibuprofen/Poloxamer 127 particles showed significantly [P<0.05] increased percentage drug release compared to control [ibuprofen raw material]. For spray chilling, the prepared particles did not improve the dissolution of the drug, the dissolution was even less than that of the control. DSC and FT-IR results demonstrated that spray drying reduced drug crystallinity, but for spray chilled particles there was evidence of polymorphic changes in the drug with and without the surfactant. Consequently, it is believed that spray drying of ibuprofen is a useful tool to improve wettabillity, solubility and hence the dissolution behaviour of poorly water soluble drugs, in contrast to spray chilling technique.
Infection Control

Status of hospital infection control measures at seven major tertiary care hospitals of northern Punjab.
Ikram, Aamer; Shah, Sayed Ibrar Hussain; Naseem, Saji da; Absar, Syeda Fatima; Ullah, Safi; Ambreen, Tahira; Sabee, M. S.M.; Niazi, Saifullah Khan
E-mail:maahin1@yahoo.com
Armed Forces Institute of Pathology - Department of Microbiology
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2010; 20 (4): 266-270 (20 ref.)
Keywords: Hospitals; Health Surveys; Cross-Sectional Studies; Drug Resistance, Multiple, Bacterial; Cross Infection

Abstract: To determine the availability and implementation of various hospital infection control measures at tertiary care hospitals. Survey. National Institute of Science and Technology, Islamabad, from June through August 2008. Seven tertiary care very busy hospitals were selected; one from Islamabad, 5 from Rawalpindi, and one from Lahore. A detailed proforma was designed addressing all the issues pertaining to hospital infection control measures. Air sampling was done and growth yielded was identified by standard methods. Analyses revealed that all of the hospitals had an Infection Control Committee. Microbiological diagnostic facilities were adequate at all the hospitals and overall microorganism yield was very high. Antibiotic policy was claimed by most, not available on ground. Majority of the operation theatres were without proper air flow system and autoclaves were not being regularly monitored. There was no proper disposal for sharps and needles. Incineration was not the usual mode for infectious waste. The results of the present study imply availability of proper hospital infection control policies with need of strict implementation of such measures.

Influenza A virus, H1N1 Subtype

Are patients with malignancy more prone to swine flu complications? current status and future strategic plans.
Sabayarr, Behnam; Lankarani, Kamran Bagheri; Vaghefikia, Azadeh
Shiraz University of Medical Sciences - School of Medicine - Health Policy Research Center
Keywords: Influenza, Human-complications; Neoplasms-complications; Risk Assessment; Vaccination

Swine flu: a fact or manufactured panic attack.
Meo, Sultan Ayoub; Imran, Muhammad Babar
E-mail:smeo@ksu.edu.sa
King Saud University - King Khalid University Hospital - Department of Physiology
Pakistan Journal of Medical Sciences 2010; 26 (2): 497-498 (9 ref.)
Keywords: World Health Organization; Disease Outbreaks; Correspondence as Topic

Understanding the influenza A H1N1 2009 pandemic.
Al Muharrmi, Zakariya
E-mail:almuharrmi@gmail.com
Sultan Qaboos University Hospital - Department of Microbiology and Immunology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 187-195 (73 ref.)
Keywords: Disease Outbreaks; Polymerase Chain Reaction; Influenza Vaccines; Influenza, Human-diagnosis; Influenza, Human-mortality; Influenza, Human-therapy

Abstract: A new strain of Influenza A virus, with quadruple segment translocation in its RNA, caused an outbreak of human infection in April 2009 in USA and Mexico. It was classified as Influenza A H1N1 2009. The genetic material originates from three different species: human, avian and swine. By June 2009, the World Health Organization [WHO] had classified this strain as a pandemic virus, making it the first pandemic in 40 years. Influenza A H1N1 2009 is transmitted by respiratory droplets; the transmissibility of this strain is higher than other influenza strains which made infection control difficult. The majority of cases of H1N1 2009 were mild and self limiting, but some people developed complications and others died. Most laboratory tests are insensitive except the polymerase chain reaction [PCR] which is expensive and labour intensive. The Influenza A H1N1 2009 virus is sensitive to neuraminidase inhibitors [oseltamivir and zanamivir], but some isolates resistant to oseltamivir have been reported. A vaccine against the new pandemic strain was available by mid-September 2009 with very good immunogenicity and safety profile. Surveillance is very important at all stages of any pandemic to detect and monitor the trend of viral infections and to prevent the occurrence of future pandemics. The aim of this review is to understand pandemic influenza viruses, and what strategies can be used for surveillance, mitigation and control.
Injections

Assessment of injection practices in public sector expanded programme of immunization clinics in Karachi.
Habibullah, Sultana; Afsar, Salahuddin
E-mail: s.habib@duhs.edu.pk
Dow Medical College - Pakistan Medical Research Council Research Centre
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 1-4 (16 ref.)

Keywords: Safety Management; Medical Waste Disposal; Immunization Programs; Public Sector; Health Surveys; Cross-Sectional Studies; Questionnaires

Abstract: A safe injection is defined as one that does not harm the recipient, expose the health worker to avoidable risk or result in waste that is harmful to others. To assess injection practices in Public Sector Expanded Programme of Immunization [EPI] clinics in three urban towns of Karachi and see if these clinics meet the necessary requirement for staff competence, supply of vaccines, injection equipment and their disposal. This was a health centre based cross-sectional survey conducted in 49 Public Sector EPI clinics from June 2008 to March 2009. These clinics were selected using random table from three urban towns i.e. Saddar, Lyari and Jamshed town of Karachi. Variables of the study were socio-demographic characteristics of the vaccinators including their training qualifications, staff competence, information regarding supply of vaccines, injection equipment, puncture proof safety boxes, maintenance of cold chain and vaccination/medical waste disposal. WHO tool for the assessment of injection safety was used as a questionnaire for the collection of data and it was analyzed on computer package SPSS version 11. Data showed that 35 [71%] vaccinators were males and of the total, 38 [78%] vaccinators were less than 30 years of age, 45 [92%] were trained dispensers but also trained for vaccinations and 4 [8%] staff nurses. It was observed that in all clinics disposable syringes were used for BCG and AD syringes were used for DPT, Measles and Hepatitis vaccination. Adequate amount of vaccines, injection equipment and puncture proof safety boxes were available, cold chain for the preservation of vaccines was well maintained, used syringes/needles were not re-used, families did not bring their own syringes for vaccination. Recapping of used syringes was observed in 20% clinics, skin barrier [piece of gauze under the thumb] while breaking vaccine bottles was not practiced in any EPI clinic. All used syringes and needles were thrown in puncture proof safety boxes. There was no history of needle prick injuries among vaccinators. Policy Document for safe injection practice and waste disposal was not found in any EPI clinic and the staff was ignorant about it. The study concludes that in all 49 EPI clinics, injection practice was safe except its method of waste disposal, sufficient amount of vaccines, injection equipment, and puncture proof safety boxes were available and staffs of these clinics were well trained. The policy document for safe disposal of sharp waste/vaccination waste should be available at all clinics and hospitals and staff should be trained for its use.

Interferon Alfa-2a

therapeutic use

Safety and efficacy of pegylated interferon alfa-2a for the treatment of hepatitis c in patients with major thalassemia.
Alavian, Seyed Moayed; Abolghasemi, Hassan; Mri, Seyyed Mohammad; Keshvari, Maryam; Elizee, Pegah Karimi; Behnava, Bita; Tabatabaie, Seyed Vahid; Hajibeigi, Bashir; Lankarani, Kamran Bagheri
E-mail: editor@hepmon.com
Grand floor of Bagiyatallah Hospital - Baqiyatallah Research Center for Gastroenterology and Liver Diseases

Keywords: Polyethylene Glycols; Hepatitis C-drug therapy; beta-Thalassemia; Cohort Studies; Treatment Outcome; Prospective Studies

Abstract: Hepatitis C virus [HCV] infection is the most common transfusion transmitted disease in poly-transfused patients worldwide. In this study we aimed to evaluate the effects of pegylated interferon alfa-2a [PEG-IFN A-2a] in reducing serum ALT and eradicating serum hepatitis C virus [HCV] RNA in HCV infected polytransfused thalassemic patients. A cohort of 51 HCV-RNA positive thalassemic patients were enrolled to our study and received 180 u,g PEG-IFN A-2a once-weekly for 48 weeks. The primary end point was sustained virological response [SVR]. The secondary outcome was normalization of ALT. Patient safety was assured by monthly, and if needed, weekly laboratory assessment and visits. Of 52 patients, 42 participants completed the treatment schedule. A sustained virological response [SVR] was attained in 22/51 [43%] cases. Among non-responders or relapsers to previous HCV antiviral therapy, 9/27 [33%] attained an SVR. Five patients died during treatment and 3 subjects discontinued the therapy because of adverse effects. Adverse events were generally mild, and laboratory abnormalities were rare. A course of 48-week PEG-IFN A-2a monotherapy is effective in eradicating HCV-RNA during treatment. But about one third of thalassemic patients would relapse within 6 months of treatment schedule completion, in whom combination therapy is needed.
Intervertebral Disk Displacement

therapy

Complementary-alternative medicine used by patients with disc herniation.
Kiyak, Emine; Citlik, Seyhan
E-mail: frtemine@hotmail.com
Ataturk University - School of Nursing - Department of Internal Diseases Nursing
Pakistan Journal of Medical Sciences 2010; 26 (2): 358-363 (19 ref.)

Keywords: Complementary Therapies; Socioeconomic Factors

Abstract: The study aimed at determining the extent of use of complementary-alternative medicine [CAM] various CAM methods used, and factors influencing CAM application by patients with disc herniation. The subjects of this descriptive study consisted of 134 patients with disc herniation attending the physical therapy and rehabilitation outpatient clinic of a hospital in Erzurum, Turkey, between January and June 2008. The data were analyzed using Chi-square test based on mean and percentages calculated. While most patients preferred CAM use [71.6%] for treatment of disc herniation disease, some did not [28.4%]. Types of CAM used by the patients varied: 67.7%, herbal medicine; 63.5%, wool belt; 34.4%, hot application; 20.8%, plaster; 14.6%, Turkish baths and/or hot springs; 13.5%, fish and/or fish oil; 9.4%, spinal manipulation; 6.3%, cupping therapy; 6.3%, salt; 5.3%, massage; 3.1%, corset; 2.1%, plastic bag and soap treatment. No differences were identified between the socio-demographic and disease characteristics of both groups of patients regardless of CAM use [P>0.05]. Study showed that patients with disc herniation had higher rates of CAM use [71.6%]. No differences were determined between the socio-demographic and disease characteristics of both groups of patients regardless of CAM use. Thus, nurse professionals should train patients about effective and appropriate application of CAM.

Intestinal Diseases

diagnosis

Role of multi-row detector CT enterography in evaluation of small bowel disorders.
Gamal Eldin, Omneya Ahmed; Eid, Mohamed; Alfi, Mohamed Tamer; Fathi, Alaa Mohamed; Saleh, Tarek Rashad
Alexandria University - Faculty of Medicine - Department of Radiodiagnosis
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 739-753 (49 ref.)

Keywords: Tomography, X-Ray Computed; Intestine, Small-physiopatliology

Abstract: Imaging diagnosis of small bowel diseases has long been technically challenging. Imaging techniques included plain radiography, contrast studies, computed tomography [CT], magnetic resonance imaging [MRI], sonography, scintigraphy and angiography. Multi-row detector CT [MDCT] enterography is a new technique that improved depiction and characterization of small bowel pathology. To assess the role of multi row detector computed tomography [CT] enterography in evaluation of small bowel disorders. The study was conducted on 30 patients suffering from known or suspected small intestinal disease and subjected to CT enterography using multi-detector row CT and iso-osmotic mannitol as neutral enteric contrast material. CT showed symmetrical mural and mucosal changes in 12 patients, seven of them associated with comb sign and creeping fat sign proved to be Crohn's disease and five patients without specific features due to Crohn's, ulcerative colitis, typhoid colitis, ileitis sequel to complicated appendicitis and typhilitis with ileitis. CT showed symmetrical thickening, grey attenuation pattern and aneurysmal dilatation proved to be lymphoma in three patients. CT showed vascular occlusion and mural changes in two patients. CT showed hyperattenuating lesion in two patients due to bowel wall hematoma, CT showed asymmetrical thickening in four patients, two of them showed infiltrative mesenteric mass with calcifications and desmoplastic reaction proved to be due to carcinoid tumour. One patient with asymmetrical thickening showed strongly enhancing lesion in the enteric phase in the second part of duodenum proved to be peripapillary carcinoma. The fourth patient with asymmetrical thickening showed heterogeneous enhancement in the venous at distal heal loop with mesenteric stranding, lymph adenopathy and liver deposit proved to be due to adenocarcinoma. CT showed dilated bowel loops with transitional zone in two patients proved to be due to intestinal obstruction. There were five patients with unremarkable CT features that were followed up without definite lesion. CT enterography with iso-osmotic mannitol is a simple, non invasive, economic, effective method for assessing small bowel disease and can replace other imaging modalities.
Intubation, Intratracheal

adverse effects

An unnoticed broken sheathed metallic stylet in an endotracheal tube: a case report.
Sharma, Pradeep K.; Khan, Rashid M.; Kaul, Naresh
Khoula Hospital - Department of Anesthesia and ICU
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 126-128 (6 ref.)
Keywords: Intubation, Intratracheal-instrumentation; Foreign Bodies
Abstract: We report a 58-years old patient, who underwent surgery for a fracture to the neck of the femur. Tracheal intubation was performed with the aid of a stylet; however, 15 minutes later, it was brought to the notice of the attending anesthesiologist that a broken piece of stylet had been left inside the lumen of the endotracheal tube. Prior to this, there was no evidence of a foreign body in the endotracheal tube or tracheobronchial tree. The broken piece of stylet was successfully retrieved with the help of a Kocher's forceps.

Iron

therapeutic use

Better results obtained by daily supplementation of iron drops in toddlers with iron deficiency anemia in Iran.
Shahriari, Mahdi; Tootoonchi, Hassan
E-mail:shahryor@sums.ac.ir
Shiraz University of Medical Sciences - School of Health - Hematology and Oncology Ward, Department of Pediatrics
IJBC - Iranian Journal of blood and Cancer 2009; 1 (4): 159-165 (8 ref.)
Keywords: Anemia, Iron-Deficiency-drug therapy; Treatment Outcome; Prospective Studies; Questionnaires
Abstract: The [Iron Supplementation Project] for anemic toddlers in Iran has not been subject to scientific studies yet. Since daily consumption of iron drops by children could bring about physical and mental problems, the aim of this study was to determine whether weekly doses of iron drops would also improve the iron status of children significantly. We determined the iron status of 12 to 21-month-old anemic toddlers receiving iron drops [ferrous sulfate] daily referred to health care centers in Shiraz. One hundred and four children were divided into two groups; one group receiving iron drops [1 mg/kg] daily as before, and the other group receiving iron drops weekly [3 mg/kg]. After three months children showed a significant increase in hemoglobin [Hb], mean corpuscular hemoglobin [MCH], and mean cellular hemoglobin concentration [MCHC] levels. Although weekly supplementation led to a significant increase in Hb levels, daily supplementation had a significantly greater effect than weekly supplementation on the levels of mean corpuscular volume [MCV] and MCHC. We generally conclude that weekly iron supplementation is not suitable for anemic children.

Kidney Neoplasms

diagnosis

Small incidental renal masses in adults: review of the literature.
Al Marhoon, Mohammed S.
E-mail:msalmarhoon@hotmail.com
Sultan Qaboos University Hospital - Department of Surgery
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 196-202 (33 ref.)
Keywords: Incidental Findings; Kidney Neoplasms-therapy; Biopsy; Review Literature as Topic; Adult; Carcinoma, Renal Cell
Abstract: Incidental renal tumours are becoming an important clinical problem that many physicians will need to deal with. A good knowledge of the nature of these tumours and how to manage them is therefore needed. The aim of this paper is to review the literature about incidental renal tumours in adults. Many incidentally discovered small renal tumours [<4 cm] are benign and of low stage, grade and progression potential. The preferred management in young fit patients is open or laparoscopic nephron-sparing surgery. Treatment alternatives include needle-ablative therapies and surveillance in elderly unfit patients. Tumour renal biopsy is encouraged prior to needle- ablative therapy and surveillance. Awareness about incidental renal masses and their management is essential for treating doctors.
**Laryngeal Neoplasms**

**diagnosis**

Stridor caused by a rare laryngeal tumour.

Khan, Muhammad Irshad; Aldhawi, Zaid Muhammad; Almaghrabi, Lamia Hasan

E-mail: irshadjg@yahoo.com

Riyadh Medical Complex - Department of ENT

**JCPSP - Journal of the College of Physicians and Surgeons Pakistan** 2010; 20 (4): 276-278 (10 ref.)

**Keywords:** Laryngeal Neoplasms-pathology; Paraganglioma, Extra-Adrenal; Laryngeal Neoplasms-surgery

**Abstract:** This report describes stridor caused by a rare laryngeal tumour. The patient had presented to ENT with a midline neck-mass and stridor of acute onset and diagnosed radiologically as a mass in the right lobe of thyroid gland in continuity with enhancing polypoidal mass in trachea at the same level. Total thyroidectomy along with the resection of the mass and tracheal ring was performed, trachea being anastomosed primarily. Histopathology reported it as a paraganglioma of the larynx. The patient has been followed-up for 5 years with no clinical or radiological recurrence of the tumour.

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**Laryngoscopy**

**Anatomical factors of anticipated prolonged laryngoscopy.**

Ahmad, Merhij

E-mail: merhij@yahoo.com

Department of Anesthesiology and Intensive Care

**JABHS - Journal of the Arab Board of Health Specializations** 2010; 11 (1): 38-41 (10 ref.)

**Keywords:** Larynx-anatomy and histology; Risk Factors; Prospective Studies; Tongue

**Abstract:** To evaluate the impact of some anatomical factors on the frequency of anticipated prolonged laryngoscopy. Our investigation included 504 adult patients of both sexes, aged 23-71 years, ASA I-II, scheduled for various elective surgical procedures at Prince Rashed military hospital during the period January 2008 till December 2008, under general endotracheal controlled anesthesia. Frequency of prolonged laryngoscopy was determined in relation to some anatomical factors. Total frequency of prolonged laryngoscopy [>15 seconds] was 13.3% [Group II, n=67 patients]. There were no significant discrepancies regarding demographic data in this group. Group I [n=437] included patients with decreased laryngoscopy time [<15 seconds]. p-value was more significant [<0.05] regarding the following anatomical risk factors: mouth opening less than 5 cm, thyromental distance less than 6.5 cm and sternomental distance less than 12.5 cm. The presence of at least three anatomical risk factors in the same patient could anticipate prolonged laryngoscopy and hence disturbance of ventilation.

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**Leishmaniasis, Visceral**

**congenital**

Congenital visceral leishmaniasis.

Haque, Md. Azizul; Ekram, A.R.M. Salifuddin; Sharmin, Laila Shamima; Belaluddin, Md.; Salam, M.A.

E-mail: drazadbd@gmail.com

Rajshahi Medical College - Department of Medicine

**Pakistan Journal of Medical Sciences** 2010; 26 (2): 485487 (15 ref.)

**Keywords:** Leishmaniasis, Visceral-diagnosis; Leishmania donovani

**Abstract:** Visceral leishmaniasis [kala-azar] is caused by the protozoan parasite Leishmania donovani and transmitted by the bite of infected sand fly Phlebotomus argentipes. Only a few cases of congenital transmission have been reported. We are reporting a 15 days old baby with congenital visceral leishmaniasis and then the literature is reviewed.

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**Lenses, Intraocular**

**Intra-ocular lens power calculation in patients with high axial myopia before cataract surgery.**

El Nafees, Raouf; Moawad, Ashraf; Kishk, Hanem; Gaafar, Walid

Mansoura University - Faculty of Medicine

**Saudi Journal of Ophthalmology** 2010; 24 (3): 77-80 (19 ref.)
Keywords: Myopia; Cataract Extraction; Prospective Studies

Abstract: To evaluate the accuracy of different formulas used for IOL power calculation in patients with high axial myopia undergoing cataract surgery. A prospective clinical study was carried out on 53 eyes of 51 patients with an axial length from 25.5 to 31.4 mm including 21 males [41.2%] and 30 females [58.8%]. Calculation of the IOL power to be implanted was done by three available IOL power formulas; Haigis formula, SRK/T formula, and Holladay I formula. The mean error [ME] was calculated from the difference between the formula predicted refractive error and the actual post operative refractive error. There was no statistically significant difference between the mean error of the three formulas used in the overall performance or in the axial length subcategories. SRK/T formula caused the smallest mean error, [+0.17 D]. Haigis formula showed a higher ME [+0.21 D] and Holladay formula caused a myopic postoperative refractive error [+0.20 D]. The calculation of IOL power in patients with high axial myopia using the third or the fourth generation formulas help in improvement of the accuracy of the calculation and decreasing the post operative refractive error. SRK/T formula showed the lowest mean error, however, there was not statistically significant difference between the three formulas used, neither in the overall performance, nor in axial length subcategories.

Leukemia, Lymphoid

epidemiology

El Saygh, Mervat; El Ghandour, Ashraf
Alexandria University - Faculty of medicine - Department of Microbiology and Internal Medicine [Hematology]
Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 713-720 (16 ref.)
Keywords: Lymphoma; Deltaretrovirus; Prevalence

Abstract: The aim of this study was to find the incidence of human T. Cell leukemia virus [HTLV-I] in acute lymphatic leukemia and lymphomas in Alexandria. 100 cases of acute lymphatic leukemia and lymphoma attended the Main University Hospital, out patient clinics and internal medicine department-150 Control of other types of leukemias, cancer and normal subjects attending also the out patient clinics and internal medicine department. The patients and controls were subjected to the following: Clinical examination, White cell count total and differential, Bone marrow Aspiration, Lactic acid dehydrogenase enzymens. Serum calcium, Erythrocytic Sedmentation Rate [E.S.R.], C-reactive protein [C.R.P.], Anti HTLV-1 antibodies using SERODI-HTLV-1 [passive particle agglutination test manufactured by FUJIREBIO Inc. Tokyo-Japan]. HTLV-I Ab was positive in 14% in cases of acute lymphatic leukemia and lymphoma. While, it was positive in the control group compared to Normal subjects and other types of leukemia and cancer [3.3%]. It was found that HTLV-1 virus in acute lymphatic leukemia is less than in other endemic areas. Trials for immunization are urgent. Blood blanks examination for the virus is essential, where it is transmitted by 1] blood 2] mother to child [breast feeding] 15 and transplacental, 3] Sexually transmitted disease [STD].

Leucocytes

physiology

Leucocytes show improvement growth on PHA polymer surface.
Hassan, Mohamed A.; Amara, Amro A.; Abuelhamd, Ashraf T.; Haroun, Bakry M.
Mubarak City for Scientific Research and Technology Applications - Genetic Engineering and Biotechnology Research Institute - Protein Research Department
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 332-336 (28 ref.)
Keywords: Polyhydroxyalkansates-pharmacology; Polyhydroxyalkansates-metabolism; Cell Proliferation; Cells, Cultured; Hemolysis-drug effects

Abstract: Polyhydroxyalkanoate [PHA] from one fermentation process shows diverse physical properties when extracted using different methods. Pseudomonas aeruginosa strain has been previously isolated from the Egyptian ecosystem was cultivated on olive oil as a carbon source under PHA accumulation conditions. PHA was extracted using four different extraction methods and the polymer give different biological properties. Leucocytes grown in different rate on each preparation. RBCs haemolysis test was used to determine the polymers toxicity. PHA isolated directly with chloroform give the highest leucocytes number [19.4 10 4 Cells/48 hr] and the lowest Haemolytic index [2.28]. Bioassays used in this study are recommended for evaluating the in vitro polymer biocompatibility aiming to in vivo application or as a cell line-supporting matrix.
Lipoma
diagnosis

Lipoma Arborescens of the knee: report of a case with full range of motion.
Ensafdararr, Ahmad; Vosoughi, Amir Reza; Khozai, Arash; Torabi, Simin; Ensafdararr, Mohammad Reza
Shiraz University of Medical Sciences - Chamran Hospital - Research Center for Bone and Joint Diseases, Department of Orthopedics
MEJC - Middle East Journal of Cancer 2010; 1 (1): 51-54 (10 ref.)
Keywords: Knee-pathology; Range of Motion, Articular; Synovial Membrane-pathology; Arthroscopy; Lipoma-pathology; Magnetic Resonance Imaging
Abstract: This report describes a rare intra-articular benign tumor, lipoma arborescens, of the knee joint in a 21 year-old female. The patient suffered from left knee joint swelling for five years with occasional pain. Swelling was soft and boggy in the suprapatellar area. Motion of joint was complete. No abnormality was detected in any laboratory tests. MRI showed a large soft tissue density in the suprapatellar area with high signal intensity on T1 and T2 weighted images. Operative arthroscopy revealed a creamy brown hypertrophied synovium with diffuse papillary processes characterized by villous proliferation of the synovium infiltrated by mature fat tissue, chronic inflammatory cells and vessels as seen in the pathologic slides. Lipoma arborescens or villous lipomatous proliferation of the synovial membrane should be distinguished from other similar lipomatoid conditions such as synovial lipoma and Hoffa disease. Lipoma arborescens should be considered in patients with painless, slowly progressive swelling of a joint, especially the knee.

Liver Function Tests

Liver function tests pre and post-cholecystectomy in gall bladder stone patients.
Bashi, Ahmed Yahya Dallal; Al Kataan, Mohammad Abdul Ghffoor; Al Khyatt, Muzahim Kasem
E-mail:ahmed_dallalbashi@yahoo.com
University of Mosul - College of Medicine - Department of Medical Biochemistry
JABBS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 15-21 (16 ref.)
Keywords: Cholecystectomy; Gallstones-complications; Gallstones-surgery
Abstract: To determine the changes in some liver function tests in gall stone patients before, after one week and after one month of cholecystectomy. Sixty patients [19 males and 41 females], ages ranged from 22-79 years, were included in this study. All of them underwent cholecystectomy in either of two hospitals [Al Zahrawae General hospital and Ninevah Private Hospital] during a period of six months from 1st October 2004 to 31st March 2005. The following tests were performed: total serum bilirubin, direct serum bilirubin, alanine aminotransferase activity, aspartate aminotransferase activity, alkaline phosphatase activity, total serum protein and serum albumin. The results of the data analyzed are presented according to the intervals at which the samples were obtained from the patients as follows: Day of cholecystectomy, after one week of cholecystectomy, and after one month of cholecystectomy. There was a significant reduction in total serum bilirubin, direct serum bilirubin, alanine transaminase, aspartate transaminase activities after one month of cholecystectomy when compared to that before and after one week of operation. Meanwhile, a significant elevation in alkaline phosphatase activity after cholecystectomy in both intervals. The maximum elevation was after one week, and then it decreases significantly after one month of cholecystectomy when compared to that after one week of operation. Gall stone is an important cause of significant pathological changes in some liver profile parameters, these parameters will return toward normal after cholecystectomy. This normalization will be increased with the time.

Mastitis

Microbiology

Influence of subclinical mastitis on some reproductive parameters in Holstein-Friesian dairy cows.
Hussein, M.M.; El Agawany, A.A.; Khalil, A.A.Y.
Beni-Suef University - Faculty of Vet. Medicine - Department of Theriogenology
Veterinary Medical Journal 2009; 57 (1): 97-113 (75 ref.)
Keywords: Pregnancy, Animal; Reproduction
Abstract: Over a period of one year [Nov., 2007-Oct., 2008] a total of 1757 Holstein-Friesian cows belonging to a commercial dairy farm in Giza-Egypt were included in this investigation. Somatic cell count [SCC] as a measure of subclinical mastitis was recorded for three times in three consecutive months. Bacteriological examination was also
done for milk sample. Reproductive data including days to first insemination, number of inseminations per conception [S/C] and days open [DO] were individually recorded, also the percentage of cows conceived by 305 days in milk [DIM] and percentage of culled cows for reproductive failure were recorded. The obtained data were recorded .The animal status [parity and reproductive status] as well as the establishment and degrees of affection were also considered. The obtained results were recorded and statistically analyzed. Results revealed that, the incidence of subclinical mastitis was 31.75 and 23.79% of the total lactating non pregnant and lactating pregnant cows, respectively. Among cases of subclinical mastitis, 75% were bacteriologically positive. Coagulase-negative staphylococci, Staphylococcus aureus, Streptococcus uberis and Streptococcus dysgalactiae were the prevalent isolates. The adverse effects of subclinical mastitis on the reproductive performances in dairy herd included prolonged days to first insemination; Days open; increased number of inseminations per conception and culling rate for infertility. The establishment of subclinical mastitis during the interval to first insemination prolonged this stage while, the establishment from the first insemination to the fertile one prolonged the days open and increase the number of inseminations per conception. It could be concluded that, subclinical mastitis was associated with unfavourable effects on reproductive performance of dairy cows. Therefore, the appropriate management of lactating dairy cows to minimize the incidence of mastitis should increase the profitability of dairy herds not only by improving milk quality, reducing the use of antibiotics, reducing the amount of milk discarded, and reducing involuntary culling, but also by improving reproductive performance.

**Measles**

**epidemiology**

Epidemiology of measles outbreaks in Qatar in 2007.
Al Kuwari, M.G.; Nozzal, Z.A.; Al Khenji, A.A.
Primary health care practice

EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 186-190 (17 ref.)

Keywords: Disease Outbreaks; Retrospective Studies; Measles-Mumps-Rubella Vaccine

Abstract: While a major reduction in morbidity and mortality from measles has been achieved in Qatar since it adopted the measles elimination programme in 1997, the country has experienced small, recurrent measles outbreaks. The aim of this study was to determine the demographic and epidemiological characteristics of measles cases reported to the surveillance programme in Qatar in 2007. Of 362 confirmed cases 67.7% were among children aged 1-14 years old and 16.9% were > 15 years. A majority of cases were unvaccinated [35.9%] or had unknown or undocumented vaccination status [47.0%]. The high proportion of cases were among Pakistani nationals [39.5%] followed by Qataris 927.6%. Measles outbreaks were concentrated among the children of expatriates of Asian ethnicity with unknown vaccination status. This highlights the importance of achieving uniformly high levels of vaccination coverage in a community.

**Measles Vaccine**

**immunology**

Seroresponse to the second measles vaccine dose at school entry in Qassim province, Saudi Arabia.
Khalil, M.K.M.; Nadrah, H.M.; Al Yahla, O.A.; El Ghazali, G.
E-mail: statkhl@hotmail.com

Ministry of Health - Medical Research Administration - Department of Communicable Diseases [Vaccinology] and Research Development


Keywords: Immunization, Secondary; Immunization Schedule; Schools; Enzyme-Linked Immunosorbent Assay

Abstract: In 2001, the measles immunization schedule in Saudi Arabia was changed to 2 measles, mumps and rubella vaccine doses at 12 months and at 6 years. In this follow-up study we evaluated the seroresponse to the second measles dose before school entry. We recruited 138 children randomly from primary health care centres in Qassim; 124 children completed the study. Blood samples were collected before and 1 month after giving the second measles dose, before the age of 6 years. There was a statistically significant increase in the geometric mean titre of measles antibody, from 2205 mIU/mL before vaccination to 4723 mIU/mL after [$P = 0.0001$]. The proportion of children with positive ELISA results increased from 94.2% before vaccination to 99.2% after [$P = 0.02$], while the proportion with protective level [≥200 mIU/mL] increased from 97.1% before vaccination to 99.1% after [$P = 0.21$]. The 2-dose measles immunization schedule can produce optimum protection at school entry if high vaccination coverage is guaranteed.
**Medical Records**

An improved record system for tracing outcome of [transferred-out] DOTS patients.
Shabbir, R.; Iqbal, M.; Anwar, E.; Qadeer, E.; Ahmed, N.
E-mail: shabbiriffat@yahoo.com
King Edward Medical University - TB Research Centre
**Keywords:** Tuberculosis; Treatment Outcome; Quality Improvement

**Abstract:** This study in Pakistan aimed to develop an improved record-keeping mechanism for the DOTS programme to establish the final treatment status of patients recorded as [transferred -out]. In an intervention study in 40 DOTS diagnostics centres in Punjab province, a modification was made to the existing TB03 register. DOTS facilitators were trained to keep proper records of patients who transferred-out and transferred-in. Among 4442 registered cases, 104 patients [2.3%] transferred out of reporting centres. Correct matching of [-out and -in] patients was achieved for 74 [71.2%] patients; the remaining 30 [28.8%] were untraced. By tracing transferred-out cases, the adjusted outcome success rate increased in the intervention period from 89.6% to 90.9%.

**Medication Errors**

Medication errors in primary care in Riyadh city, Saudi Arabia.
Cooperation Council for the Arab States of the Gulf
**EMHJ - Eastern Mediterranean Health Journal** 2011; 17 (2): 156-159 (22 ref.)
**Keywords:** Physicianic, Primary Care; Primary Health Care; Cross-Sectional Studies; Drug Prescriptions

**Abstract:** Medication errors can cause a variety of adverse drug events but are potentially preventable. This cross-sectional study analysed all medication public and 5 private primary health care clinics in Riyadh city, collected by simple day. Prescriptions for 2463 and 2836 drugs from public and private clinics which were analysed using Neville et al.'s classification of prescription errors. Prescribing errors were found on 990/5299 [18.7%] prescriptions. Both type B and type C errors [major and minor nuisance] were more often associated with prescriptions from public than private clinics. Type D errors [trivial] were significantly more likely to occur with private health sector prescriptions. Type A errors [potentially serious] were rare [8/5299 drugs, 0.15%] and the rate did not differ significantly between the 2 health sectors. The development of preventive strategies for avoiding prescription errors is crucial.

**Medicine, Traditional**

Traditional medicine: perceptions and experience of medical students from Egypt and Saudi Arabia, a comparative study.
Makdoom, Naeem; Hanafi, Manal Ibrahim; Mohamed, Aida Mohey; Mubarak, Iman Ibrahim
Taibah University - Faculty of Medicine - Department of ENT
**Bulletin of Alexandria Faculty of Medicine** 2009; 45 (4): 727-737 (25 ref.)
**Keywords:** Students, Medical; Perception; Comparative Study; Curriculum

**Abstract:** In view of the increasing popularity of traditional medicine [TM], it is imperative that medical students, the health professionals of tomorrow, possess adequate knowledge on the topic. The incorporation of TM into medical curricula is handled quite differently by different institutions and countries. To assess the knowledge, attitudes and experience of Alexandria and Saudi medical students about TM and compare between them, and to identify their perceptions and opinions about applicability and the importance of its integration into the medical curriculum. This is a comparative descriptive study. A questionnaire-based cross-sectional survey was done on 489 fourth year medical students selected randomly from Alexandria medical college and 85 fourth year students selected from Taibah medical college [Saudi Arabia]. Comparison between the two groups and different variables were tested using the x2-and Mann-Whitney tests of significance, Taibah students were more aware of and believed that some of the TM modalities are useful. The two groups of students lacked knowledge about their safety and efficacy. Taibah students were significantly more experienced in TM than Alexandria students. Most of the students in the two groups believed that TM should be used in conjunction with conventional medicine and that, if given adequate training, they would incorporate it in their future medical practice. Most students in the two disciplines favored incorporation of TM into the medical curriculum and the difference was not significant. Despite being aware of the usefulness of TM, only a few medical students had pursued further knowledge. Therefore consideration for incorporation of TM in medical curriculum may be helpful and necessary.
Melatonin administration and dosage

Effect of melatonin supplementation on plasma glucose and liver glycogen levels in rats subjected to acute swimming exercise.
Kaya, Oktay; Kilic, Mehmet; Celik, Ilham; Baltaci, Abdulkerim Kasim; Mogulkoc, Rasim
E-mail: kmoktaykaya@yahoo.com.tr
Sports Firat University - School of Physical Education
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 241-244 (15 ref.)
Keywords: Blood Glucose-analysis; Liver Glycogen-analysis; Physical Conditioning, Animal; Rats; Swimming; Dietary Supplements
Abstract: The aim of the present study is to examine how melatonin supplementation affects plasma glucose and liver glycogen levels in rats subjected to acute swimming exercise. Spraque-Dawley species thirty adult male rats were allocated to 3 groups with equal number of animals: general control group which was not subjected to any procedure [Group 1], the group subjected to a 30-minute acute swimming exercise [Group 2], and the group subjected to a 30-minute acute swimming exercise after intraperitoneal [i.p.] melatonin supplementation [3 mg/kg/day] for 4 weeks [Group 3]. Blood samples collected from the experimental animals by decapitation method were analyzed in terms of plasma glucose, and glycogen levels were determined in liver tissue samples by histological method. The highest plasma glucose levels were obtained in group 2 [p<0.05]. Plasma glucose levels in groups 1 and 3 were not different. Mean liver glycogen level in group 3 was significantly higher than those in the other groups [p<0.01], while there was no significant difference between group 1 and group 2 in terms of this parameter. Results of the study demonstrate that melatonin supplementation can have a protective effect on liver glycogen reserves in rats subjected to acute swimming exercise.

Meningioma pathology

Cervical lymph node metastases from meningioma: report of two cases and treatment outcome.
Omidvari, Shapour; Nasrolahi, Hamid; Daneshbod, Yahya; Bagheri, Neda; Negahban, Shahrzad; Mohammadianpanah, Mohammad; Ahmadlooo, Niloofar; Ansari, Mansoor; Mosalaei, Ahmad
E-mail: omidvari@sums.ac.ir
Shiraz University of Medical Sciences - Nemazee Hospital - Department of Radiation Oncology
MEJC - Middle East Journal of Cancer 2010; 1 (1): 45-49 (17 ref.)
Keywords: Lymphatic Metastasis; Treatment Outcome; Biopsy; Meningioma-drug therapy; Meningioma-radiotherapy; Immunohistochemistry
Abstract: Meningioma is usually a benign central nervous system [CNS] tumor. Metastasis is rare; however if it does occur the most metastatic sites are the liver and lungs. Here, two cases of CNS meningioma with metastasis to cervical lymph nodes are reported. The first case, a 48 year-old man developed cervical lymph node metastasis nine years after primary tumor diagnosis. The second case, a 23 year-old woman with parietal lobe meningioma, developed lymph node metastasis in the neck nine months after the diagnosis of meningioma.

Meningitis, Bacterial cerebrospinal fluid

Predictors of bacterial meningitis in adult patients of South West Iran.
Alavi, Seyed Mohammad; Moshiri, Naser
E-mail: alavi1329dr@yahoo.com
Joundishapour University of Medical Sciences - Joundishapour Infectious and Tropical Diseases Research Center
Pakistan Journal of Medical Sciences 2010; 26 (2): 341-346 (19 ref.)
Keywords: Meningitis, Bacterial-diagnosis; Cerebrospinal Fluid-chemistry; Cerebrospinal Fluid Proteins; Retrospective Studies; Sensitivity and Specificity; Predictive Value of Tests
Abstract: To study the clinical and lab parameters in adult patients with suspected or confirmed bacterial meningitis [BM] to find out the usefull predictors. This was a retrospective study conducted in Razi hospital, a training center affiliated to Ahvaz Joundishapour University of Medical Sciences in Iran. All patients with meningitis aged 18 years or more between 2003 and 2007, with CSF pleocytosis and who had not received antibiotic treatment before lumbar
puncture were reviewed. Among 312 patients with CSF pleocytosis, two hundred fifteen [68.9%] had BM and ninety seven [31.1%] had aseptic meningitis [ASM]. The mean age for patients with BM was 34.7 +/- 17.7 years and for ASM was 32.2 +/- 15.5 years [P=0.22, NS]. Sixty percent of the cases of BM and 61.2% of the cases of ASM occurred in men [P=0.70, NS]. We identified the following predictors of BM: CSF-WBC count>100 per micro liter, CSF-glucose level<40 mg/dl, CSF-protein level>80 mg/dl. Sensitivity, specificity, PPV, NPV of these predictors, and LR for BM are 86.5%,52.6%,89.2%, 63.7% and 104.1 for CSF-WBC count and 72.1%, 83.5%, 90.6%,57.4% and 164.2% for CSF glucose, and 49.7%, 91.8%, 93.4%,45.2% and 104.5% for CSF protein. The CSF WBC count should not be used alone to rule out bacterial meningitis. When it is combined with other factors such as CSF glucose and protein it helps in decision making in patients suffering from bacterial meningitis.

**Menorrhagia**

**therapy**

**Oral versus rectal misoprostol in the treatment of menorrhagia.**

El Makhzangy, Ibrahim Mohamed; Hegab, Hassan Mansour

Alexandria University - Faculty of Medicine - Department of Obstetric and Gynecology

Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 721-725 (20 ref.)

**Keywords:** Misoprostol-administration and dosage; Administration, Oral; Administration, Rectal; Comparative Study; Treatment Outcome

**Abstract:** Excessive menstrual loss is a major problem. Effective medical treatments exist and its increased use will improve patient choice and provide an alternative to surgery. Evaluation of the effects of oral and rectal misoprostol in the treatment of excessive blood loss in cases of menorrhagia and comparing between both routes. Sixty women complaining of regular but heavy periods [menorrhagia] were included in the study. They were divided into two equal groups. Both groups were evaluated in two consecutive menstrual cycles. First without treatment [basal value] and the second cycle by either rectal misoprostol tablets [three times daily for the first three days of the bleeding] or by oral misoprostol tablets [one tablet three times daily for the first three days of the bleeding]. For both groups the estimated menstrual blood loss [EBL] was assessed before and after treatment using subjective and objective assessment. A highly statistically significant reduction in menstrual blood loss occurred by treatment in both groups [p<0.000]. Rectal misoprostol produced the highest reduction in the menstrual blood loss with a percent change of 53.4%, while oral misoprostol was less effective in reducing the menstrual blood loss with a percent change of 36.15% Both routes were effective in improving dysmenorrhea and reducing the number of cycle days with no significant differences between them. Both rectal and oral misoprostol are save and effective routes for reducing excessive menstrual blood loss [menorrhagia], but rectal route is more effective.

**Mental Retardation**

**psychology**

**Psychiatric disorders among mentally retarded adults in Kuwait.**

Al Mutairi, Haya A.; Al Mutairi, Sara A.

Ministry of Health - Psychological Medicine Hospital - Department of Special Education Science

Bulletin of Alexandria Faculty of Medicine 2009; 45 (4): 691-696 (27 ref.)

**Keywords:** Adult; Prevalence; Behavioral Symptoms; Mental Health Services; Questionnaires

**Abstract:** Behavior disorders can be disabling for mentally retarded adults with negative consequences for the adults, their families and paid carers. Psychiatric evaluation of adults with mentally retarded individuals remains complex because of limitations in verbal abilities, atypical clinical presentation and challenging behavior. To determine the prevalence of psychological disorders among mentally retarded personnel and the impact of gender, type of administered care and degree of mental retardation. The study design was a cross sectional descriptive one that was carried out in a day care center and another full accommodation one. The target population of the study was potentially all individuals suffering from mild or moderate degree of mental retardation aged 15-30 years in the selected facilities. The final studied sample consisted of 160 persons. A specially designed questionnaire was prepared. It included data about personal characteristics, degree of mental retardation and type of care facility, and a section about the presence of psychological disorders. In this section twelve psychological disorders were identified to be studies using a diagnostic rating scale of psychiatric disorders based on Diagnosis and Statistical Manual of Mental Disorders. Overall, 30.9% of persons with mental retardation have at least one psychiatric disorder. The most common psychological disorder was the organic brain syndrome [15.6%]followed by autism and self-injury [7.6% for each], sleeping disorders [6.9%] and sexual disorder [6.2%]. Psychological disorders were more commonly encountered among mentally retarded females than males, except for obsession, without significant differences. Institutionized mentally retarded personnel tended to significantly suffer more from organic brain syndrome [27.6% compared with 3.8%, P<0.001], self-injury [13.8% compared with 1.3%, P=0.005], sexual disorders [11.3% compared with 1.3%, P=0.018], schizophrenia [13.8% compared with 0.0%, P 0.003], and autism [13.8% compared with 1.3%, p=0.005]. Only self-injury and organic
brain syndrome were significantly associated with the severity of mental retardation. Psychiatric disorders are frequently encountered among mentally retarded individuals in Kuwait. Guidance is required on mental health services and staff training, including psychiatric treatment in community care and a model for inpatient services for mentally ill persons.

**Metformin**

**therapeutic use**

Pioglitazone versus metformin in two rat models of glucose intolerance and diabetes.

Gad, Mohamed Z.; Ehssan, Noha A.; Ghet, Mansour H.; Wahman, Lobna F.

E-mail: mohamed.gad@guc.edu.eg

Ain Shams University - Faculty of Pharmacy - Biochemistry Department

Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 305-312 (38 ref.)

**Keywords:** Thiazolidinediones-therapeutic use; Glucose Intolerance-drug therapy; Diabetes Mellitus, Experimental; Hypoglycemic Agents-therapeutic use; Rats; Blood Glucose-analysis

**Abstract:** Insulin resistance has been implicated in the pathogenesis of type 2 diabetes. High fat diets cause insulin resistance. Both metformin and pioglitazone are considered “insulin sensitizers” and used as antihyperglycemic agents for type 2 diabetes treatment. The aim of this study is to Compare pioglitazone and metformin effects on carbohydrate metabolism and insulin sensitivity in diabetic and glucose intolerant rats on high fat diet. Male albino rats were randomized to seven groups. The 1st group received high carbohydrate diet [control]. The 2nd, 3rd and 4th groups received high sunflower oil diets for 6 weeks and either left untreated, or given pioglitazone or metformin during the last 3 weeks. The 5th, 6th, and 7th groups were made diabetic by STZ injection on day 15 of the 6 weeks-high fat diet regimen. They were either left untreated, or given pioglitazone or metformin during the last 3 weeks. High-fat diet induced glucose intolerance; represented by increase of serum glucose associated with increase in liver glucose-6-phosphatase and decreases in liver glucose-6-phosphate dehydrogenase and glucokinase activities. No significant differences were observed between pioglitazone and metformin. In diabetic rats, both pioglitazone and metformin decreased elevated serum glucose by-30%. Only metformin increased hepatic glycogen, and normalized glucose-6-phosphatase activity. On the other hand, pioglitazone normalized elevated renal glycogen content and increased glucose-6-phosphate dehydrogenase activity. High sunflower oil diet impaired glucose tolerance. Pioglitazone and metformin had comparable effects on estimates of carbohydrate metabolism and insulin sensitivity in high-fat fed rats, but different effects in diabetic rats.

**Methemoglobin**

Studies of methemoglobin concentrations of three human erythrocyte genotypes [HB AA, HB AS, and HB SS] in the presence of five anti-malarial drugs.

Chikezie, Paul C.; Monago, Comfort C.; Uwakwe, Augustine

Imo State University - Department of Biochemistry


**Keywords:** Erythrocytes-drug effects; Genotype; Antimalarials; Spectrophotometry

**Abstract:** Malaria remains the world's most devastating human parasitic infection. Our goal was to assess the capacity of increasing concentrations of five antimalarial drugs [Fansidar[tm], Halfan[tm], Quinine, Coartem[tm] and Chloroquine phosphate] to elicit the generation of methemoglobin in three human erythrocyte genotypes [HB AA, HbASandHbSS]. Spectrophotometric method was used for determination of plasma methaemoglobin concentration in the presence of 0.2 g%, 0.4 g%, 0.6 g% and 0.8 g% [w/v] of the five antimalarial drugs. The five antimalarial drugs showed a concentration dependent variability to cause the elevation of plasma methaemoglobin concentration in the three genotypes. Specifically, Coartem[tm], exhibited the highest propensity to elevate plasma methaemoglobin concentration. However, the other four antimalarial drugs showed a statistically significant [P<0.05] but minimal effect to cause elevation of plasma methaemoglobin concentration. For instance, with Hb AS blood sample and at drug concentration of 0.8g%, methaemoglobin concentrations [percentage] of 3.03 +/- 1.82, 2.65 +/- 0.45, 6.41 +/- 1.21, and 3.02 +/- 0.98 were obtained for halfan, quinine, coartem and chloroquine phosphate, respectively. The control value was 2.17 +/- 1.82% of methemoglobin. The oxidative potentials of these four antimalarial drugs and their metabolites in the red cells did not overwhelm the erythrocyte methemoglobin reducing capacity that could elicit the presentation in vitro toxic methemoglobinemia.
**Miosis**

**prevention and control**

Comparison of ketorolac tromethamine and prednisolone acetate in preventing surgically induced miosis during cataract surgery.
Suleiman, Yusuf M.; Krdoghli, Najwa F.; Ahmad, Aksam J.
Tishreen University - Al Assad Hospital - Department of Ophthalmology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 57-63 (28 ref.)

**Keywords:** Ketorolac Tromethamine-therapeutic use; Prednisolone-therapeutic use; Cataract Extraction; Prospective Studies

**Abstract:** The aim of this study was to compare the efficacy and safety of topical prednisolone acetate 1% and topical ketorolac tromethamine 0.5% in the maintenance of pupillary mydriasis during cataract surgery. Fifty patients were enrolled in this prospective, partially masked and randomised study. They were assigned to receive topical treatment with either prednisolone acetate [n=25] or ketorolac tromethamine [n=25], starting 24 hours before cataract extraction [either routine extracapsular cataract extraction or phacoemulsification]. One drop of the study medication was instilled every 6 hours for a total of 4 drops. No epinephrine was used in the intraoperative irrigation solution. Pupil diameter was measured three different times during surgery. To ensure participant safety, biomicroscopy, ophthalmoscopy, intraocular pressure, adverse events and visual acuity were also monitored. The mean pupil diameter change from the time of the pre-incision until after cortical irrigation and aspiration and lens implantation was significantly less with ketorolac than with prednisolone [P=0.003]. Consequently, mean pupil diameter after cortical irrigation and aspiration and lens implantation was significantly greater with ketorolac than with prednisolone [P<0.0001]. No significant differences between groups were observed in the pupil diameter before the first incision [P=0.244], nor after administration of a miotic agent [P=0.505]. Safety variables were comparable and no drug-related adverse events were reported. Ketorolac tromethamine 0.5% and prednisolone acetate 1% solutions were equally well tolerated without related adverse events, but ketorolac was better in preventing surgically induced miosis.

**Misoprostol**

**administration and dosage**

Sublingual versus oral misoprostol for induction of labour in prelabour rupture of membranes at term.
Malik, Humaira Zaman; Khawaja, Nuzhat Parveen; Zahid, Bushra; Rehman, Rakshanda
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2010; 20 (4): 242-245 (22 ref.)

**Keywords:** Misoprostol-therapeutic use; Labor, Induced; Fetal Membranes, Premature Rupture; Administration, Sublingual; Administration, Oral; Treatment Outcome; Randomized Controlled Trial as Topic

**Abstract:** To compare the efficacy of sublingual with oral misoprostol for induction of labour in primigravida with prelabour rupture of membranes at term. Randomized controlled trial. Department of Obstetrics and Gynaecology Unit-11, Sir Ganga Ram Hospital, Lahore, from June 2004 to January 2006. The study included 100 primigravidas with singleton pregnancy at term, having prelabour rupture of membranes and unfavourable Bishop score with no contraindication of induction of labour, vaginal delivery or misoprostol use. The cases were randomized into two equal groups, A and B. Women in the group A were given 100 micro g of misoprostol orally at an interval of 4 hours to a maximum of 2 doses while patients in the group B were prescribed the medicine sublingually [50 micro g, 4 hourly, maximum of 2 doses]. Induction to delivery interval, mode of delivery and fetomaternal complications were main outcome measures of the study. In the sublingual misoprostol group [B], 92% women delivered within 12 hours of induction while 84% of subjects delivered in this time period in oral group [A, p < 0.05]. There was no failed induction in either group. Regarding dosage, 64% of women delivered with single dose in group B while only 32% delivered with single dose in group A [p < 0.05]. The frequency of vaginal delivery was 92% in group B versus 80% in group A, while rate of caesarean section was 8% in the group B and 20% in the group A, which is statistically insignificant. No significant fetomaternal complications were seen in both groups. The efficacy of sublingual misoprostol in the dosage of 50 micro g was comparable to 100 micro g oral dose for the induction of labour in the primigravidas at term with prelabour rupture of membranes.
Motor Activity

Impact of mild physical activity on the random blood sugar among yemeni diabetic patients.
Atef, Zayed A.; Al Kumaim, Mohamed; Al Ezzy, Yehia
E-mail:zayed_atef@hotmail.com
Sanaa University - Faculty of Medicine - Department of Internal Medicine
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 9-14 (19 ref.)
Keywords: Blood Glucose; Diabetes Mellitus
Abstract: Descriptive study was carried out during the marathon of Yemeni diabetic patients as a public activity in the World Diabetes Day [WDD] to encourage the Yemeni people and educate them about the importance of physical activity, and to study the effect of walking as a mild physical activity on lowering blood sugar level. A total of 502 participants aged between 15 and 70 years, 85% males and 15% females, 352 diabetics; 8.32% type 1 and 26.29% type 2. Also 150 [29%] non diabetic participants [unknown] were included. All participants subjected to analysis of RBS at the beginning of marathon and at the end of it for most of them. After 4 km walking during 45 minutes we found that there was a significant reduction in R.B.S; it was 24.44 mg/dl, 15.80 mg/dl, and 27.19 mg/dl among all participants, type 1 and type 2 diabetic patients respectively. The significant reduction in R.B.S level after walking means that the beneficial effect of exercise can be obtained by mild to moderate exercise, since the effect seems to depend on overall energy expenditure rather than on intensity of exercise.

Multiple Sclerosis

Goris, Songul; Tasci, Sultan; Mirza, Meral; Ceyhan, Ozlem; Tekinsoy, Pinar; Sungur, Gonul
E-mail:songul200578@hotmail.com
University of Erciyes - Ataturk School of Health - Department of Medical Nursing
Pakistan Journal of Medical Sciences 2010; 26 (2): 277-281 (30 ref.)
Keywords: Urinary Incontinence; Sexual Dysfunction, Psychological; Quality of Life; Questionnaires
Abstract: This study was conducted in order to determine the effect of urinary incontinence and sexual dysfunction on the quality of life among women with Multiple Sclerosis [MS]. The descriptive study included 60 women with Multiple Sclerosis [MS]. The data were collected through a questionnaire forms designed by the researchers, Arizona Sexual Experiences Scale and Short Items Form of Health-Related Quality of Life. Chi-square, t and ANOVA test were used. Almost half of the women had urinary incontinence problem and 63.0% did not visit the doctor. It was determined that the urinary incontinence was higher in women, who were over 45 years old, married and had children, and diagnosed for 6 years and more [p<0.05]. Twenty-eight point three percent [28.3%] of the MS women had sexual dysfunction. It was determined that women with urinary incontinence had a lower quality of life and more sexual dysfunction.

Mupirocin

therapeutic use

[Does nasal decontamination reduce the incidence of infections after cardiac surgery?].
E-mail:hishamjabbour@hotmail.com
University Hospital Center - Department of Anaesthesiology
LMJ - Lebanese Medical Journal 2010; 58 (2): 65-70 (27 ref.)
Keywords: Nasal Cavity-microbiology; Thoracic Surgery; Preoperative Care; Surgical Wound Infection-prevention and control; Prospective Studies; Treatment Outcome
Abstract: Mupirocin applied to the anterior nares four times daily usually eliminates Staphylococcus aureus, including methicillin resistant, within 48 hours. Prophylactic intranasal mupirocin is safe, inexpensive and effective in reducing the overall sternal wound infection after open-heart surgery. This study was designed to determine whether decreasing nasal bacterial colonization by applying mupirocin intra nasally decreases mediastinal, sternal, pulmonary and cutaneous infections after open-heart surgery. After institutional approval and informed consent, 392 patients were included in a randomized, prospective study. Nasal cultures were taken for all patients before surgery. Patients were divided in two groups : Group I [n=190] receiving mupirocin in the anterior nares 4 times daily for 48 hours before surgery; Group II [n=202] was the control group. Patients were followed for a month after surgery. All mediastinal, sternal, pulmonary and cutaneous infections were documented and treated with appropriate antibiotics. A Student test for quantitative data and a X [2] test for qualitative data were used for statistical analysis. p<=0.05 was considered significant. The two groups had the same demographic characteristics and risk factors. Nasal carriage of Staphylococcus was 36.2% in the two groups. Neither mediastinitis nor sternitis were noticed in any of the two groups. There was no statistical difference between the groups according to the frequency of the cutaneous infections [Group I
IMEMR Current Contents Subject Index

Mycobacterium bovis

Isolation and purification

Prevalence of bovine infection with mycobacterium bovis some Egyptian Governorates.
Mossad, A.A.; Radwan, G.S.; Samaha, H.A.; Nasr, E.A.; El Battawy, E.H.
Minufia University - Faculty of Veterinary Medicine - Department of Bacteriology, Immunology and Mycology
Veterinary Medical Journal 2009; 57 (1): 35-52 (57 ref.)
Keywords: Cattle; Prevalence; Tuberculin Test; Polymerase Chain Reaction
Abstract: One hundred and thirty seven [4.6%] out of 3000 cattle at different ages from seven governorates of Egypt [Qualubia, Sharkia; Gharbia, Giza, Behira, Sohag and Ismailia] were found positive for tuberculosis by single intradermal [SID] tuberculin. Bacteriological examination of tested samples from slaughtered reactor cattle revealed the isolation and identification of Mycobacterium bovis [M. bovis] and Mycobacterium other than tuberculosis [MOTT] in 90 [65.7%] and 7 [5.1%] samples, respectively. One hundred and eight [78.83%] serum samples out of 137 tuberculin reactors were found positive for enzyme linked immunosorbent assay [ELISA] by using test. Post mortem [PM] examination of slaughtered reactor cattle revealed tuberculous visible lesions [VL] and non-VL [NVL] in 94 [68.6%] and 43 [31.4%] animals, respectively. Tuberculous lesions were observed in 41 [29.9%], 19 [13.9%], 20 [15%] and 14 [10.2%] in 137 slaughtered reactor cattle with pulmonary, digestive, mixed and generalized VL, respectively. M.bovis synthetic early secretory antigenic target 6 peptide antigen [ESAT6-p], Polymerase chain reaction [PCR] amplification assay was performed on selected tissues samples from 10 slaughtered tuberculin reactors with pulmonary, digestive, mixed or generalized VL, or NVL. Eight [80%] out of the 10 samples gave positive results with PCR assay. On the other side, only 6 [60%] and 7 [70%] of these samples were found positive for M.bovis isolation and ELISA, respectively. The results obtained in the present study point to the importance of the periodical tuberculin testing of animals, use of ELISA assays with M.bovis-specific antigens as a complimentary diagnostic tool to tuberculin test and application of PCR test for direct and rapid diagnosis of tuberculosis. Improvement of diagnostic assays for M.bovis may be of value in the effectiveness of test and slaughter eradication programs of bovine tuberculosis in governorates of Egypt.

Mycoplasma

Isolation and purification

Isolation of mycoplasma gallisepticum and mycoplasma synoviae from native, ross and lohmann chickens in hail region of Saudi Arabia.
Alkhalaf, Abdullah N.; Harbi, Khaled B.; Alshamary, H.; Hashad, M.
Qassim University - College of Agriculture and Medicine - Department of Vet. Medicine
Veterinary Medical Journal 2009; 57 (1): 67-75 (22 ref.)
Keywords: Chickens; Mycoplasma gallisepticum; Mycoplasma synoviae
Abstract: In this study, M gallisepticum and M synoviae were isolated from different breeds of chickens in Flail region of Saudi Arabia. Out of 200 samples [trachea, lungs, air sacs and synovial swabs] taken from native chickens of different ages, 100 pure mycoplasma isolates were recovered. When typed by morphological, biochemical and serological methods, 39 isolates were identified as M synoviae, 31 isolates were identified as M. gallisepticum, of 60 samples from Lohmman layers, 11 pure isolates were obtained and 6 of them were identified as M synoviae, I was M gallisepticum. of 140 samples collected from Ross chickens and breeders, only samples collected from breeders aging 8 14 weeks [40 samples] resulted in positive mycoplasma isolation. Fifteen pure mycoplasma isolates were recovered of which 3 were identified as M gallisepticum, 4 were identified as M synoviae. Tracheal samples and synovial fluids resulted in the highest isolation rates from native and Lohman chickens, respectively while synovial fluid and tracheal samples resulted in equal rates of Mycoplasma isolation from Ross chickens. Agar media containing tryptone soy agar base resulted in bigger Mycoplasma colonies and nipples.
Myelodysplastic Syndromes

diagnosis

Clinico-haematological characteristics in Pakistani patients of primary myelodysplastic syndrome according to world health organization classification.
Ehsan, Ayesha; Aziz, Mona
E-mail: ayesha_4@hotmail.com
Shaikh Zayed Postgraduate Medical Institute - Department of Haematology, Lahore
Keywords: Myelodysplastic Syndromes-blood; Myelodysplastic Syndromes-classification; World Health Organization; Age Distribution
Abstract: To assess the applicability of WHO classification on a cohort of Pakistani myelodysplastic syndrome [MDS] patients, and determine their epidemiological and clinico-pathological features. Case series. Haematology Department, Shaikh Zayed Hospital, Lahore, from April 2004 to March 2006. Forty six patients of primary MDS diagnosed by World Health Organization [WHO] criteria were included in the study by nonprobability purposive sampling. The cohort was classified accordingly and the epidemiological, clinical and haematological parametres were assessed. Descriptive statistics were used to describe the data. Forty six patients [28 males and 18 females] of primary MDS were included in the study. The mean age was 46.21 years. According to the WHO classification, 12 cases of refractory anaemia, 24 cases of refractory cytopenia with multi lineage dysplasia, 1 case of refractory cytopenia with multi lineage dysplasia and ring sideroblasts, 3 cases of MDS unclassified and 3 cases each of refractory anaemia with excess of blasts I and II were diagnosed. Symptomatic anaemia was seen in 37 cases and pancytopenia was documented in 33 cases. Dyserythropoiesis affected 41 cases. Grade III reticulosis was seen in 7 cases. ALIP was present in 13 cases. MDS presented at a young age. Refractory cytopenia with multi lineage dysplasia was the dominant disease category. Further studies are suggested for identifying the cytogenetic abnormalities and del 5q- category.

Myeloproliferative Disorders

Evolution of marginal zone lymphoma towards myeloproliferative disorder: a case report.
Arabi, Abdessamad; Brahimi, M.; Bekadja, M.A.; Saidi, D.; Touhami, H.
E-mail: abdessameddz@yahoo.fr
University Hospital 1[st] November 1954 - Department of Haematology and bone marrow transplantation
Keywords: Lymphoma, B-Cell, Marginal Zone; Prognosis; Flow Cytometry; Molecular Biology

Myxoma

diagnosis

Aggressive angiomyxoma of scrotum presenting as an Inguinal Hernia.
Rehman, Safia; ul Muqim, Rooh; Gul, Tamjed; Wazir, Mohammad Aziz; Zarin, Muhammad
E-mail: dr_safiarehman@hotmail.com
Khyber Teaching Hospital - , Surgical C Unit
Pakistan Journal of Medical Sciences 2010; 26 (2): 478-481 (12 ref.)
Keywords: Myxoma-pathology; Hernia, Inguinal-diagnosis; Scrotum-pathology
Abstract: Aggressive Angiomyxoma [AAM] is a rare mesenchymal tumor with a locally aggressive course. The most common location is in the pelviperineal region and occurs mostly in females of childbearing age. In males, it is extremely rare and thus is apt to be mistakenly diagnosed as an inguinal hernia or hydrocele. We report a case of 45 year old man who had right sided scrotal swelling for about four years. It was diagnosed as an inguinal hernia clinically. On further investigations, it was found to be a soft tissue tumor of the scrotum. The patient underwent scrotal exploration. At surgery, a huge lobulated gelatinous mass surrounding the right testicle was found. The mass was excised including the testicle and sent for histopathological analysis. Histologic examination of the excised mass revealed a nonencapsulated lesion composed of sparse spindle-shaped cells and a myxoid stroma with a prominent vascular component. The cells showed focal and weak positivity for desmin. The findings were thus consistent with aggressive angiomyxoma of the scrotum. The margins of the specimen were clear. The patient we report has so far done well with no evidence of recurrence.
Necrobiotic Disorders

diagnosis

An unusual skin presentation of necrobiotic xanthogranuloma.
Dilnawaz, Mansoor
E-mail: mdilnawaz@gmail.com
Pilgrim Hospital - Department of Dermatology

Keywords: Skin Manifestations; Xanthogranuloma, Juvenile; Paraproteinemias-diagnosis; Prognosis

Abstract: A well appearing 73-year-old Caucasian lady presented with a long-standing history of yellowish atrophic lesions on her limbs and trunk. The lesions were asymptomatic. These were found to be consistent with the diagnosis of Necrobiotic Xanthogranuloma [NXG] on histology. The reported patient did not have the characteristic skin changes and instead had unusual lesions reminiscent of morphea not described in the literature. She reported no associated systemic symptoms.

Neoplasms

epidemiology

Cancer epidemiology in Lebanon.
Shamseddine, Ali I.; Musallam, Khaled M.
American University of Beirut Medical Center - Hematology and Oncology Division - Department of Internal Medicine
MEJC - Middle East Journal of Cancer 2010; 1 (1): 41-44 (10 ref.)

Keywords: Registries; Sex Distribution; Incidence; Risk Factors; Age Distribution; Early Detection of Cancer; Breast Self-Examination

Abstract: The main obstacle facing cancer preventive strategies worldwide is a lack of well conducted epidemiological studies to guide local and international efforts for disease control. In Lebanon, long due political strain has added yet another obstacle to the development of methodologies aiming to collect data on cancer epidemiology. However, through several efforts dated from the 1960s the picture is becoming clearer. We herein review the outcome of all such efforts and their interpretation as a guide for future preventive strategies.

Trend of childhood cancers in Iraq after the two gulf wars.
Lafta, Riyadh K.; Abdulrazaq, May R.; Al Shujairi, Tariq A.
E-mail: riyadhlafta@yahoo.com
Mustansiriya University - College of Medicine
JABHS - Journal of the Arab Board of Health Specializations 2010; 11 (1): 48-54 (33 ref.)

Keywords: Prevalence; Age Distribution; War

Abstract: This study was conducted to find out the rates of childhood malignancies in Baghdad hospitals, and to study the changes in the trend of these diseases in three periods of time after the first and the second Gulf war. This hospital based record study was conducted during the period from February through June 2007 in the two main centers of childhood oncology in Baghdad; Children Welfare Teaching Hospital, and Child's Central Teaching Hospital. All the records of patients [age between 0-15 years and diagnosed as having malignant diseases during the following three periods] were included. The first period includes the years [1990, 1991], the second period [1997, 1998], and the third period includes the years [2004, 2005]. The total sample was 2013 patients; 1172 males and 841 females; 462 patients were diagnosed in the first period, 688 in the second and 863 patients in the third period. The study showed a slight increase in the rate of childhood malignancies over the three periods [3.46, 3.52, and 4.04] /100000/ year respectively. There was an increase in the number of cases in all age groups especially patient's age less than 5 years. The male: female ratio was 1.4:1 with no significant change through the 3 periods. Leukemia was the most common childhood malignancy followed by lymphoma and solid tumors [1202, 421, and 332] patients respectively. The majority of patients live in the middle region of Iraq with the highest frequency from Baghdad. There is an increase in the survival percentage [9.9%, 25.5%, and 32.4%] and decrease in fatality percentage over the three periods [41.3%, 32.4%, and 27.9%] respectively. There is an increase in the rate of childhood cancer in Iraq during the studied period, with no detectable changes in the trend regarding the type, and geographical distribution.
Nutrition Assessment

Anthropometric assessment of nutritional status and socio-demographic characteristics in children up to 2 years of age.
Shahid, Anjum; Ramzan, Afroze; Memon, Ashfaque
National Institute of Child Health - PMRC Specialized Research Centre on Child Health
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 10-13 (22 ref.)

Keywords: Nutritional Status; Anthropometry; Cross-Sectional Studies; Questionnaires; Socioeconomic Factors; Malnutrition

Abstract: Malnutrition is one of the major causes of morbidity and mortality in children. It is important to realize that normal length and weight being attained at 1 year of age, would predict the nutritional status at 3 years of age. To assess the nutritional status and the associated socio-demographic characteristics in supposedly healthy children of up to 2 years of age and highlight the importance of anthropometric measurements in routine child health care. A crosssectional study using purposive sampling technique was conducted on children attending well baby clinic of National Institute of Child Health, Karachi during the year 2003-2005. Anthropometric measurements i.e. height and weight, were measured and a standard questionnaire was used to interview the mothers regarding sociodemographic background information after a verbal informed consent and ensuring confidentiality. Height for age, weight for age and weight for height of the children were compared with the National Centre of Health Statistics [NCHS] reference population of the United States, and Z-score < -2 SD were considered as stunted, under weight and wasted respectively. Data was analyzed using SPSS software package. We observed stunting in 22%, wasting in 15% and under weight in 31.6% children. Majority of children with low weight were between 19 - 24 months of age. Regarding socioeconomic status of the households, 53.8% had family income less than Rs6000 /month and almost 50% had a family size of 6-10 persons. Parents’ education to the level of illiteracy [father, 27% and mother, 40%] and incomplete immunization [20%] were other associated factors for stunting, wasting and under weight. About 32% of children up to 2 years of age in the selected population were under weight, followed by stunting [22%]. Anthropometric measurement of children is a useful in routine child care settings as it will facilitate early identification and timely interventions for emerging health problems.

Obesity

complications

Salameh, P.; Barbour, B.
E-mail:psalameh@ul.edu.Ib
Lebanese University - Faculty of Public Health

Keywords: Diabetes Mellitus-epidemiology; Body Mass Index; Blood Glucose; Overweight-complications; Questionnaires; Cross-Sectional Studies; Comorbidity; Risk Assessment; Students

Abstract: Obesity-associated diabetes in adolescents is increasing throughout the world. In this study, body mass index and capillary blood glucose were measured in a randomly selected sample of adolescents from 3 Lebanese private schools. Obesity was evaluated according to international Obesity Task Force cut-offs. Out of 300 students, 18.7% were at risk of obesity 3.0% were obese. Random glycaemia level was >/= 140 mg/dL in 10.3% of students. In those fasting, 10.5% had glucose intolerance and 3.5% had diabetes. Glucose levels were significantly higher in overweight versus normal weight individuals: 86 [SD 13] versus 96 [SD 16] mg/dL. Among the normal weight group 8.6% had abnormal glycaemia while among those who were overweight 37.0% had abnormal glycaemia. Lebanese school students have high rates of overweight and of obesity-associated diabetes and glucose intolerance.

epidemiology

The association between obesity and blood pressure among adolescents in Dubai, UAE.
Bin Zaal, Afra A.; Musaiger, Abdulrahman O.; D'Souza, Reshma
Ministry of Health - Department of Preventive Medicine
Pakistan Journal of Medical Sciences 2010; 26 (2): 271-276 (27 ref.)

Keywords: Blood Pressure; Body Mass Index

Abstract: To investigate the association between obesity and the risk of elevated blood pressure [BP] in adolescents in Dubai, United Arab Emirates [UAE]. Representative sample of 661 adolescents aged 12 to 17 years were selected by means of a multistage stratified random sampling technique. The mean body mass index [BMI] of males was higher than that of females at all ages except at 13 years of age, where the females had higher mean BMI values [24.1kg/m2] compared to males [21.9 kg/m2]. Males had higher levels of systolic blood pressure [SBP] [117.1mm Hg-126.8 mm Hg] than females [109.2mmHg-117.1mmHg]. The prevalence of high SBP increased as the weight increased, as 50% of
males with high SBP were obese, compared with 62.5% among females. Male and female adolescents with elevated SBP were 5 times [95% CI 2.3, 9.7] and 16 times [95% CI 3.5, 17.3] respectively, more likely to be obese compared to those with normal SBP. Similarly, those with elevated diastolic blood pressure [DBP] were two times [95% CI 1.1, 4.4] and four times [95% CI 1.6, 8.5] more likely to be obese compared to those with DBP in the normal range. The high prevalence of obesity among adolescents in Dubai and its association with high BP calls for urgent action to prevent and control obesity in this age group.

**Olfactory Bulb**

**ultrastructure**

Morphological and quantitative features of mitral cells in the rat olfactory bulb after administration of propranolol.

Khilji, Muhammad Saad; Tahir, Mohammad; Jafari, Fahim Haider

E-mail: saadkhilji@gmail.com

University of Health Sciences - Islamabad Medical and Dental College - Department of Anatomy


**Keywords:** Olfactory Bulb-drug effects; Propranolol; Rats, Sprague-Dawley; Olfactory Bulb-anatomy and histology

**Abstract:** To determine the cytoplasmic morphological changes in the mitral cells and quantitative changes [number of mitral cells and thickness of mitral cell layer in microns] in the rat olfactory bulb after administration of propranolol. Experimental study. The Department of Anatomy, University of Health Sciences, Lahore, from January 2006 to January 2007. Twenty samples were obtained from two randomly divided groups of rats, each comprising 10 animals for control and experimental work respectively. Each group was treated with normal saline [5 ml/kg] and propranolol [1 mg/kg] respectively for one month. The skull was fixed in 20% formalin for 10 days and decalcified in 10% formalin/10% nitric acid. The olfactory bulb along with olfactory cortex was dissected. After processing, 10 microns thick sections were obtained. The slides were stained with Hematoxylin and Eosin and Bielschowsky’s silver stain [Glees-Marsland modification] and studied under light microscope. The morphology, quantitative analysis of mitral cell layer and the number of mitral cells were studied in the histological study and compared using t-test with significance at p < 0.05. In the propranolol treated group changes observed in the morphology of the mitral cells included presence of cytoplasmic vacuoles at the periphery of the cells. There was significant increase in the thickness of mitral cell layer and number of the mitral cell in the propranolol treated group [p < 0.05]. This study showed morphological and quantitative changes in the olfactory bulb in response to treatment with propranolol, hence it has implications in odour induced learning.

**Oral Health**


E-mail: swt_f@yahoo.com

Tehran University of Medical Sciences - Faculty of Dentistry

EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 243-249 (15 ref.)

**Keywords:** Dental Caries-epidemiology; Dental Health Surveys; DMF Index; Prevalence; Needs Assessment

**Abstract:** A second nationwide survey in 2004 aimed to describe the oral health status of children in the Islamic Republic of Iran and to provide baseline data for the organization and evaluation of the national oral health promotion programme. WHO pathfinder sampling procedures were used to select representative samples of children aged 3, 6, 9 and 12 years. Data on decayed/missing/filled teeth, caries-free rates and treatment needs were collected from 18 946 children using WHO standard methods. The mean dmft/DMFT indices were 1.9/- for 3-year-olds, 5.0/0.2 for 6-year-olds, 3.6/0.9 for 9-year-olds and 0.6/1.9 for 12-year-olds. Significant differences in dental caries prevalence were found according to sex, province, urban/rural residence, family income and parents’ level of education.
Orbit

surgery

A combined surgical and prosthetic approach for the successful management of a mutilated eye socket: a case report.
Prithviraj, D.R.; Khare, Sumit; Gupta, Anish; Shruthi, D.P.
Government Dental College and Research Institute - Department of Prosthodontics and Implantology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 129-132 (6 ref.)
Keywords: Orbit-injuries; Prostheses and Implants; Reconstructive Surgical Procedures-methods
Abstract: Facial disfigurement through the loss of an eye due to a road traffic accident can be devastating for the patient and may leave few options for an ophthalmologist, especially if the situation demands urgency. In the present case report, the patient had a major accident, which resulted in the severe disruption of the socket. The requirements of the prosthodontist regarding the morphology of the socket guided the ophthalmologist to undertake reconstructive surgery. The prosthesis was then fabricated such that both its longevity and the morphology of the socket were safe guarded.

Orthodontics, Interceptive

education

Impact of an educational leaflet on parents’ knowledge and awareness of children’s orthodontic problems in Shiraz.
Oshaghi, M.; Danei, S. Momeni; Ghahremoni, Y.; Pojouhi, N.; Boushehri, S. Ghodsi
E-mail:momenish@sums.ac.ir
Shiraz University of Medical Sciences - Faculty of Dentistry - Shims Orthodontic and Educational Research Centre, Department of Orthodontics
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 121-125 (22 ref.)
Keywords: Parents; Knowledge; Awareness; Malocclusion; Questionnaires; Prospective Studies; Teaching
Abstract: Raising parents’ awareness about dentofacial malocclusions is important for avoiding delays in seeking treatment. The aim of the present research was to assess the impact of an educational leaflet on parent's knowledge and awareness of orthodontic malocclusion in children. Parents of 533 7-9-year-old schoolchildren were randomized into a leaflet group who received an educational leaflet and a control group with no leaflet. Pre-and post-intervention test scores on a questionnaire about orthodontic problems were compared. Differences between post- and pre-test scores were significantly higher in the leaflet group than the control group for the total score and the domain on general awareness of orthodontic problems. Scores on the domain of knowledge of referral intervals did not differ significantly. Information leaflets may be useful for increasing parents’ awareness of orthodontic problems in children.

Osteoma, Osteoid

diagnosis

Osteoid osteoma of the patella presenting as chronic anterior knee pain case report and review of the literature.
Mehdinasab, Seyed Abdol Hossein; Sarrafan, Nasser; Alvavinejad, Pooyan
E-mail:hmehdinasab@yahoo.com
Jondishapur University of Medical Sciences - Imam Khomeini Hospital - Department of Orthopedic surgery
Pakistan Journal of Medical Sciences 2010; 26 (2): 490-493 (27 ref.)
Keywords: Patella-pathology; Knee Joint-pathology; Pain-etiology; Osteoma, Osteoid-radiography; Tomography, X-Ray Computed
Abstract: Osteoid osteoma is a benign bone forming tumor with a characteristic radiographic appearance. Femur and tibia is the frequent site of involvement. Osteoid osteoma in the patella is a rare condition of which only a few cases have been reported in the literature. Non-specific knee pain, difficulty to distinguish nidus, and lack of typical sclerotic bone formation in plain radiographs cause a delay in diagnosis. We report a 15 years old girl with anterior left knee pain since 1.5 year. Imaging findings and biopsy of the lesion confirmed osteoid osteoma. The pain was relieved after surgical resection of the tumor and patient was symptom free with no evidence of recurrence at 12 months after surgery.
Overweight

epidemiology

Prevalence of overweight and obesity and associated risk factors in urban primary-school children in Babol, Islamic Republic of Iran.
Hajian Tilaki, K.O.; Sojjodi, P.; Razavi, A.
E-mail: drhojian@yahoo.com
Babol University of Medical Sciences - Babol Faculty of Medicine - Department of Social Medicine and Health
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 109-114 (29 ref.)
Keywords: Obesity-epidemiology; Risk Factors; Students; Schools; Urban Population; Questionnaires; Cross-Sectional Studies; Body Mass Index; Prevalence
Abstract: Childhood obesity is a major public health problem globally because of changes in lifestyles. We assessed the prevalence of overweight/obesity and associated factors in urban schoolchildren in Babol in a cross-sectional study of 1000 schoolchildren aged 7-12 years. Weight and height were measured and data on sports activities and leisure time physical activities were collected by questionnaire. Overweight/obesity were assessed by comparing body mass index [BMI] values to the BMI index for age and sex percentiles set by CDC, Atlanta. The prevalence of obesity and overweight was 5.8% and 12.3% respectively. The prevalence was significantly lower in girls compared with boys [age-adjusted OR= 0.69, 95% CI: 0.50-0.96] and higher among private-school educated children compared with public-school educated students [age adjusted OR = 2.17, 95% CI: 1.47-3.18]. For each additional score of leisure time physical activity, the age-adjusted OR decreased significantly.

Pain

etiology

[Chronic pain in children and adolescents: a review].
Huijer, Huda Abu Saad
American University of Beirut - School of Nursing - Faculty of Medicine
LMJ - Lebanese Medical Journal 2010; 58 (2): 105-110 (45 ref.)
Keywords: Chronic Disease; Pain-epidemiology; Pain Measurement; Family; Pain-drug therapy; Pain-therapy
Abstract: Chronic pain in children has been increasing in prevalence and studies have provided evidence that it impacts the functional/physical aspects of the children's life and their psychological and emotional well-being. Family caregivers of children and adolescents with chronic pain suffer a great sense of burden affecting their emotional, social, and family functioning. The problem is also exacerbated by the additional financial burden secondary to increased physician consultation and medication use. A better understanding of pain in children is needed in order to gain insight in the etiology. The aim of the following article is to provide a review of the literature on the prevalence of chronic pain in children and adolescents and the factors associated with it.

Pancreatic Neoplasms

genetics

Differences in molecular pathologic characteristics of pancreatic adenocarcinoma between Egyptian and Moroccan patients.
Robinson, Sara; Soliman, Amr S.; Karkouri, Mehdi; Omer, Hoda Gad; Greenson, Joel R.
University of Michigan - School of Public Health - Department of Epidemiology
MEJC - Middle East Journal of Cancer 2010; 1 (1): 27-36 (17 ref.)
Keywords: Pancreatic Neoplasms-pathology; Adenocarcinoma-genetics; Pathology, Molecular; Mutation-genetics; Genes, ras
Abstract: Pancreatic cancer has not been well studied, especially in developing countries. We studied the variations in genetic mutations in pancreatic adenocarcinoma between Egyptian and Egyptian populations. The molecular pathology of 30 tumors from a large hospital in Casablanca, Morocco were examined and compared with the findings of 44 tumors from the Gharbia Governate in Egypt. K-ras mutations in codons 12 and 13 in addition to p53 mutations in exons 5-8 were evaluated. Overall, differences in the rates of K-ras mutations were not statistically significant [48.00 and 34.69%, respectively]; however differences in rates of p53 mutations were statistically significant with p53 mutations more common in Moroccan tumors than in Egyptian tumors [46.67 and 16.28%, respectively]. G ->T mutations of the K-ras gene were most commonly seen Egyptian tumors, whereas G -> A mutations were the most
common type of mutations in Moroccan tumors. Logistic regression analysis showed that a p53 mutation in any exon as well as a p53 mutation in exon 5 predicted the country of residence and those mutations occurred more frequently in Moroccan patients. Our study shows that differences exist within the Arab population in the molecular pathology of both the K-ras and p53 genes. Further studies are necessary to clarify the differences in molecular pathways of pancreatic cancer in the Middle East and to investigate the role of environmental and/or genetic factors related to those pathways.

**Paternity**

A long-term baby mix-up case in the Eastern Mediterranean region.

Tug, A.; Ozguven, H.D.

E-mail:aysimtug@yahoo.com

University of Ankara - Faculty of Medicine - Department of Forensic Sciences

EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 257-259 (7 ref.)

**Keywords:** DNA Fingerprinting; Parents; Family; Adaptation, Physiological

**Patient Satisfaction**

Satisfaction of patients staying in day surgery clinic from nursing services.

Ozlu, Zeynep Karaman; Ozer, Nadide; Arslan, Sevban; Cantekin, Isin

E-mail:zynp_krmnzl@hotmail.com

Ataturk University - Health Sciences Faculty

Pakistan Journal of Medical Sciences 2010; 26 (2): 438-443 (19 ref.)

**Keywords:** Nursing Services; Nursing Service Hospital; Ambulatory Surgical Procedures-nursing; Questionnaires

**Abstract:** To examine day surgery patients’ satisfaction levels with nursing services using Scale of Patient Perception of Hospital Experience with Nursing [PPHEN]. The study design was descriptive. Data were collected by the researcher in the Day Surgery clinic of a university hospital in Turkey. Participants with literacy were 18 years old and older. The sample included 148 patients agreeing to participate in the study. Data were collected using a questionnaire including socio-demographic questions for patients and PPHEN Scale, Turkish Version adapted to Turkish by Coban. The data were assessed through descriptive statistics, t-test, Man-Whitney U Test and Kruskal Wallis variance analysis. When PPHEN point averages according to age were compared, the point average for the age group of 66 years and above was 72.78 [SD=8.28], for the age group of 19 to 40, 68.26 [SD=11.6]; and the difference between these points was found statistically significant [P=0.041]. For PPHEN point averages according to patients’ educational backgrounds, it was 70.50 [SD=10.19] for primary school graduates, 64.57 [SD=15.97] for university graduates; and the difference was found statistically significant [P=0.000]. In this study, it was, in general, found out that the patients were satisfied with the nursing services.

**Pericarditis, Constrictive**

**microbiology**

Rapidly progressive effusive constrictive pericarditis caused by methicillin sensitive staphylococcus aureus [MSSA].

Akhtar, Naveed; Khalid, Ayesha; Ahmed, Waqas; Rasheed, Khalid

E-mail:samraakhtar@hotmail.com

Shifa International Hospital - Department of Cardiology


**Keywords:** Staphylococcus aureus; Methicillin; Pericardial Effusion-microbiology; Thoracic Injuries-complications

**Abstract:** Effusive-constrictive pericarditis is a clinical syndrome characterized by concurrent pericardial effusion and pericardial constriction, where constrictive hemodynamics are persistent after effusion is drained. It may present at any point along the clinical course, from the occurrence of an effusion to the development of chronic pericardial constriction. We refer an unusual case of effusive constrictive pericarditis developing rapidly within days, following purulent pericarditis secondary to chest trauma.
Perinatal Mortality

Perinatal Mortality contributors in singleton gestation.
Sajjad Ur Rahman
E-mail:srahman4@hmc.org.qa
Hamad Medical Corporation - Women's Hospital
Keywords: Birth Weight; Gestational Age; Infant, Premature

Phacoemulsification

adverse effects

Completing phaco following anterior capsular tear.
Little, Brian
Moorfields Eye Hospital NHS Foundation Trust
Keywords: Phacoemulsification-methods; Capsulorhexis; Lens Capsule, Crystalline-injuries
Abstract: A primary tear-out of the capsulorhexis or a later anterior capsule tear occurs in less than 1% of phacoemulsification procedures [Marques et al., 2006]. It is a relatively uncommon complication but a hazardous and important one, although comparatively little has been published on its management. With the nucleus still in the bag at this stage, the surgeon is faced with the sizeable challenge of completing surgery without propagating a wrap-around tear to the posterior capsule. These are perilous conditions to face, but by using the right techniques the surgeon can still prevail. There is a clear set of principles that are based on self-knowledge of the surgeon’s own skills and experience, combined with their understanding of how to control the forces acting on the tear and the tolerances of the capsular bag to surgical manipulation. Applying these principles in practice has enabled the development of a range of techniques now available to safely remove the nucleus under these challenging conditions. However, by far the most important principle of all is that if in doubt, not to proceed.

Pharmacogenetics

[Pharmacogenetics and personalized medicine: the future for drug prescribing].
Mitri, Zahi; Esmerian, Maria O.; Simaan, Joseph A.; Sabra, Ramzi; Zgheib, Nathalie K.
American University of Beirut - Faculty of Medicine - Department of Pharmacology and Therapeutics
LMJ - Lebanese Medical Journal 2010; 58 (2): 101-104 (27 ref.)
Keywords: Individualized Medicine; Toxicology; Polymorphism, Genetic; Genotype
Abstract: Pharmacogenetics, the study of interindividual variations in DNA sequence related to drug response, aims at the optimization of treatment regimens based on each patient’s unique genetic makeup. Currently, there is a trend towards moving away from the concept of “one drug fits all” to a rather more individualized and personalized medicine. The goal is to define the appropriate drug dose that maximizes efficacy and minimizes toxicity in each individual patient. An example of genotyping for CYP2C9 genetic polymorphisms in patients receiving oral anticoagulants is provided. In spite of its inherent challenges, we hope that pharmacogenetic research and clinical applications expand to improve healthcare outcomes in Lebanon and worldwide.

Physician's Practice Patterns

Determinants of physicians’ medication prescribing behaviour in primary care in Riyadh city, Saudi Arabia.
King Ahadulaziz Medical City - College of Medicine - Department of Medical Education
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (2): 160-166 (23 ref.)
Keywords: Drug Prescriptions; Behavior; Primary Health Care; Physicians, Primary Care; Questionnaires; Knowledge
Abstract: This study in Saudi Arabia explored the determinants of physicians' prescribing behaviour in primary care in Riyadh city. A self-administered questionnaire designed to explore factors influencing prescribing [sociodemographic factors; practice access to educational materials; pharmaceutical company representatives, and patients factors] was completed by 87 PHC physicians. A factor analysis of 56 variables extracted 7 factors that explained 46% of the variance. Of these, 4 components positively related to perceived good prescribing behaviour could be summarized as:
clinical experience of physicians; use of educational materials for continuous updating of medical knowledge; enhanced levels of continuing medical education and willingness to involve patients in decision-making; and working as a team using pharmacists for consultation and emphasizing the role of medical education. The other 3 factors derived from the analysis were less easy to interpret and may have been statistical anomalies [or measurement errors].

**Physician-Patient Relations**

"I found it on the internet": preparing for the e-patient in Oman.
Masters, Ken; Ng’ambi, Dick; Todd, Gail
E-mail: kmasters@ithealthed.com
IT Health Ed
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 169-179 (52 ref.)

**Keywords:** Internet; Education, Medical; Diffusion of Innovation; Communication

**Abstract:** In the Information Age, the communication patterns between doctor and patient are changing. Using Everett Rogers' theory of Diffusion of Innovations, this paper begins by examining the diffusion of the Internet in the world and in Oman. It then considers the emergence of e-patients. The characteristics of e-patients are described in some detail. The paper ends by describing steps that should be taken when teaching medical students in Oman so that they can be prepared for e-patients.

**Plant Extracts**

**pharmacology**

Analgesic and antiinflammatory activity of methanolic extract of acalypha indica linn.
Rahman, M. Aminur; Bachar, Sitesh C.; Rahmatullah, Mohammed
University of Development Alternative - Department of Biotechnology and Genetic Engineering
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 256-258 (15 ref.)

**Keywords:** Analgesics-pharmacology; Euphorbiaceae-chemistry; Mice; Rats

**Abstract:** Previous phytochemical analysis of methanolic extract of Acalypha indica L. has indicated the presence of steroid, flavonoid and terpenoid types of compounds. Since these compounds are of pharmacological interest, coupled with the use of this plant in traditional medicine, prompted us to check A. indica L. for possible analgesic and antiinflammatory activities. The methanolic extract of A. indica L. showed statistically significant [P<0.001] analgesic activity in mice in a dose-dependent manner. A sustained and significant [P<0.001] inhibition of carrageenan-induced inflammation of rat paw was observed with 125 mg/kg and 250 mg/kg body weight. The methanolic extract of A. indica L. also demonstrated antiinflammatory effect in a dose-dependent manner. Maximum inhibition by the extract was observed at 250 mg/kg body weight after three hours of ingestion, which was comparable to that of the standard drug phenylbutazone at a dose of 100 mg/kg body weight. The obtained results provide a support for the use of this plant in traditional medicine.

Antifungal activity of dodonaea viscosa jacq extract on pathogenic fungi isolated from superficial skin infection.
Pirzada, A.J.; Shaikh, W.; Usmanghani, K.; Mohiuddin, Ejaz
E-mail: aj_pirzada@hotmail.com
University of Sindh - Institute of Botany

**Keywords:** Sapindaceae; Antifungal Agents-pharmacology; Dermatomycoses-microbiology; Fungi-drug effects

**Abstract:** Antimicrobial activity of solvent extracts of leaves and shoot of Dodonaea viscosa Jacq have been determined against fungi, Aspergillus niger, Aspergillus flavus, Paecilomyces varioti, Microsporum gypseum, and Trichophyton rubrum causing skin diseases. All crude extracts were found to be effective against tested fungi. However chloroform has strong inhibition activity against fungi as compared to ethanol, methanol, ethylacetate and aqueous extracts. More over in present study some basic elements have been analyzed, Al, Ca, Cu, Fe, Mg, Mn, P, S and Zn from the medicinal plant Dodonaea viscosa Jacq. by using atomic absorption spectrophotometry and UV spectrophotometry. The medicinal plant Dodonaea viscosa Jacq contains considerable amount of elements which have therapeutic effects in skin diseases.

Bioactivity of major components from the seeds of bunium persicum [boiss.] fedtch.
Sharififar, Fariba; Yassa, Narguess; Mozaffarian, Valiolah
E-mail: fsharififar@Kmu.ac.ir
Kerman University of Medical Sciences - School of Pharmacy - Department of Pharmacognosy
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 300-304 (19 ref.)

**Keywords:** Apiaceae-chemistry; Seeds-chemistry; Antioxidants-pharmacology; Oils, Volatile-pharmacology
Abstract: Zire Kermani [Bunium persicum] is an Iranian plant which is commonly used as antispasmodic, carminative, anti obesity and lactagogue. The essential oil and different extracts of the seeds of this plant were evaluated for antioxidant activity by three complementary methods: DPPH assay, beta-carotene bleaching and ammonium thiocyanate methods. The oil and methanolic extract of B. persicum exhibited the highest antioxidant activity with IC50=23.4 +/- 1.6 and 45.7 +/- 3.6 micro gmL-1 in DPPH assay and the most inhibition of beta-carotene oxidation and lipid peroxidation. The GC/MS analysis of the essential oil of B. persicum indicated the gamma-Terpinene [46.1%] and cuminaldehyde [15.5%] as the major components of the oil. Furthermore the active methanol extract of the plant was fractioned by column chromatography to afford several fractions, of which in more purification, kaempferol, caffeic acid and p-coumaric acid were found to be the antioxidant components of this extract. These results confirm the in vitro antioxidant and radical scavenging activity of the essential oil and methanolic extract of B. persicum, which warranty the use of the plant in many traditional uses.

Hypoglycaemic activity of ethyl acetate fraction of the leaf extract of Telfairia occidentalis.
Eseyin, O.A.; Ebong, P.; Eyong, E.U.; Umoh, E.; Agboke, A.
E-mail:femieseyin2@yahoo.co.uk
University of Uyo - Faculty of Pharmacy
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 341-343 (18 ref.)
Keywords: Plant Leaves-chemistry; Diabetes Mellitus, Experimental; Cucurbitaceae; Rats, Wistar; Hypoglycemic Agents-pharmacology
Abstract: The leaf of Telfairia occidentalis has been found to possess hypoglycemic or antihyperglycemic effect. The hypoglycemic principle of the leaf is yet to be isolated. The aim of this study is to evaluate the hypoglycemic activity of some fractions of ethanolic leaf extract of Telfairia occidentalis in rat as a step toward activity directed isolation of the hypoglycemic component. Ethanolic leaf extract was successively extracted with ethyl acetate, butanol and ethanol to obtain ethyl acetate, butanol and ethanol fractions [I-III]. The residue was taken as fraction IV. 250 mg/kg of the various extracts were orally administered to normoglycaemic and alloxan-induced diabetic albino rats. Blood glucose concentration was evaluated at 0, 1, 2 and 4 hours after treatment with One Touch glucometer. None of the fractions reduced glucose concentration in normoglycaemic rats, while only ethyl acetate fraction lowered glucose concentration significantly at 2 and 4 hours [49.7 and 39.0%] compared to control value of 74.9 and 69.7%, respectively, in the diabetic rats. The results showed that the hypoglycemic component of the ethanolic leaf extract of the plant is contained in the ethyl acetate fraction.

Plant Gums

administration and dosage

Investigation and comparison of colon specificity of novel polymer khaya gum with guar gum.
Prabhu, Prabhakara; Ahamed, Nisara; Matapady, Harish Nairy; Ahmed, Mohd. Gulzar; Narayanacharyulu, R.; Satyanarayana, D.; Subrahmanayam, E.V.S.
E-mail:prahuprashu@rediffmail.com
NGSM Institute of Pharmaceutical Sciences - Department of Pharmaceutics
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 259-265 (11 ref.)
Keywords: Polymers-administration and dosage; Colon-metabolism; Meliaceae; Budesonide-administration and dosage; Galactans-administration and dosage; Rabbits; Rats; Tablets; Drug Carriers
Abstract: To investigate the colon specificity of novel natural polymer khaya gum and compare with guar gum. Release profile of tablets was carried out in presence and absence of rat cecal contents. The fast disintegrating core tablets of budesonide, were initially prepared by direct compression technique. Later, these tablets were coated with khaya gum or guar gum. After suitable pre compression and post compression evaluation, these tablets were further coated using Eudragit L-100 by dip coating technique. X-ray images were taken to investigate the movement, location and the integrity of the tablets in different parts of gastro intestinal tract in rabbits. The release profiles revealed that khaya gum or guar gum, when used as compression coating, protected the drug from being released in the upper parts of the gastro intestinal tract to some extent but the enteric coated formulations completely protected the drug from being released in the upper parts of the gastro intestinal tract, and released the drug in the colon by bacterial degradation of gums. It was found that both the polysaccharide polymers exhibited different release profiles in presence and absence of rat cecal contents. However, further enteric coat helped in targeting the drug to colon very effectively. Better dissolution models revealed the colon specificity of polysaccharides and alone can not be used either for targeting the drug to the colon or for sustaining or controlling the release of drug.

Plants, Medicinal

Organosulfur compounds and possible mechanism of garlic in cancer.
Omar, S.H.; Al Wabel, N.A.
E-mail:syedharisomar@gmail.com
Al Qassim University - College of Pharmacy
Keywords: Garlic; Sulfur Compounds-pharmacology; Anticarcinogenic Agents-therapeutic use; Neoplasms-prevention and control; Anticarcinogenic Agents-pharmacology
Abstract: Garlic [Allium sativum], a member of the family Liliaceae, contains an abundance of chemical compounds that have been shown to possess beneficial effects to protect against several diseases, including cancer. Evidence supports the protective effects of garlic in stomach, colorectal, breast cancer in humans. The protective effects appear to be related to the presence of Organosulfur compounds, predominantly allyl derivatives, which also have been shown to inhibit carcinogenesis in forestomach, esophagus, colon, mammary gland and lung of experimental animals. The exact mechanisms of the cancer-preventive effects are not clear, although several hypotheses have been proposed. Organosulfur compounds modulate the activity of several metabolizing enzymes that activate [cytochrome P450s] or detoxify [glutathione S-transferases] carcinogens and inhibit the formation of DNA adducts in several target tissues. Antiproliferative activity has been described in several tumor cell lines, which is possibly mediated by induction of apoptosis and alterations of the cell cycle. Organosulfur compounds in garlic are thus possible cancer-preventive agents. Clinical trials will be required to define the effective dose that has no toxicity in humans.

Scrubinating the aqueous extract of leaves of Pedalium murex for the antiulcer activity in rats.
Banji, David; Singh, Jaideep; Banji, Otilia J.F.; Shanthamurthy, M.
E-mail:davidbanji@gmail.com
Nalanda College of Pharmacy - Department of Pharmacology
Keywords: Plant Extracts-pharmacology; Anti-Ulcer Agents-pharmacology; Rats
Abstract: Peptic ulcer is manifested largely due to an alteration in lifestyle and diet. The antulcer efficacy of the aqueous extract of leaves of Pedalium murex on ethanol induced gastric lesions was investigated in our studies. This has been substantiated by ascertaining the content of total acid, acid volume, total protein, ulcer index and glutathione. Ulceration was induced in 36 hours fasted rats by the administration of 80% ethanol [1ml/kg] orally. The reference standard [famotidine, 3mg/kg] and aqueous extract of leaves of Pedalium murex in doses of 50, 100, 200mg/kg was given to different groups, one hour before the administration of ethanol. Marked gastric mucosal lesions were observed with ethanol. A perceptible elevation in ulcer index, total acidity, acid volume, total protein and diminution of glutathione was observed. Pretreatment with aqueous extract of leaves of Pedalium murex particularly at a dose of 200mg/kg in a single schedule and 100mg/kg for 15 and 30 days treatment annihilated these alterations and elevated the level of glutathione. Therefore the aqueous extract of leaves of Pedalium murex could be regarded as a favorable antulcerogen which could be attributed to its content of flavonoids and mucilage.

toxicity

Assessment of acute toxicity and reproductive capability of a herbal combination.
Riaz, Azra; Khan, Raifeeq Alam; Ahmed, Shadab; Afroz, Syeda
University of Karachi - Faculty of Pharmacy - Department of Pharmacology
Keywords: Reproduction-drug effects; Phytotherapy; Lethal Dose 50; Fertility; Pregnancy; Mice
Abstract: The drug under investigation is an herbal combination of Withania somnifera, Tribulus terrestris, Mucuna Pruriens and Argyreia speciosa which has been used for several years of its bio-stimulating, revitalizing and fertility enhancing effects. Present preclinical study is specifically designed to access the safety and efficacy of the product. The result of acute oral toxicity reveals that product is safe up to the dose of 5000mg/kg. The effects of study related to reproductive capability of drug on both sex reveals increase in reproduction rate up to two generations i.e. F0 and F1.

Polycystic Ovary Syndrome

Leptin levels in relation to marital status and neuroendocrine function in Iraqi females with polycystic ovary syndrome.
Khalaf, Ban H.
Al Mustansriya University - College of Pharmacy - Department of Pharmacotherapy
SPJ - Saudi Pharmaceutical Journal 2010; 18 (1): 41-44 (34 ref.)
Keywords: Leptin-blood; Luteinizing Hormone-blood; Follicle Stimulating Hormone-blood; Prolactin-blood; Marital Status
Abstract: The present study was designed to evaluate the relationship between serum leptin levels and the hormones related to fertility in Iraqi females with polycystic ovary syndrome [PCOS] and marital status. This study was conducted during the period from July to December 2007. Twenty-four women [12 married and 12 unmarried] with PCOS and not maintained on any type of therapy were included in the study. Twelve healthy and normal ovulatory women with an age range matched with that of PCOS women were included. After an overnight fasting, blood samples were drawn from all women at random days. While in those with regular menstrual cycles, blood samples were obtained during the follicular phase of the cycle, except for samples utilized for the assay of progesterone that performed in the day 21 of the cycle [luteal phase]. After preparation of serum, the levels of leptin, luteinizing hormone
[LH], follicle-stimulation hormone [FSH], progesterone, testosterone and prolactin were analyzed. Both groups of PCOS patients showed significantly lower levels of serum leptin, while prolactin, LH and FSH and testosterone were significantly elevated compared to controls. No significant differences were reported among PCOS patients with different marital status. In conclusion, impaired plasma leptin levels in PCOS women were associated with impaired endocrinological parameters related to fertility.

**Comparison of metformin and cyproterone-estriadiol compound effect on hs C-reactive protein and serum androgen levels in patients with poly cystic ovary syndrome.**

Aghamohammadzadeh, Nasser; Aliasgarzadeh, Akbar; Baglar, Leila; Abdollahifard, Seddigheh; Bahrami, Amir; Najarifpour, Farzad; Niafar, Mitra

Tabriz University [Medical Sceneries] - School of Medicine - Department of Endocrinology

*Pakistan Journal of Medical Sciences* 2010; 26 (2): 347-351 (26 ref.)

**Keywords:** Metformin; Cyproterone Acetate; C-Reactive Protein-drug effects; Androgens-blood; Drug Combinations; Estradiol-analogs and derivatives

**Abstract:** The aim of this study was comparison of the effects of Metformin and Cyproterone-estriadiol compound on serum androgens and highly sensitive C-reactive protein levels. Sixty patients with Poly Cystic Ovary Syndrome [PCOS] were enrolled in this study conducted during a period of 16 months from December 2004 to March 2006. Thirty subjects were in each group and treated with Metformin one gram per day or Cyproterone-estriadiol compound 21 days monthly and at the beginning and after 3 and 6 months, weight, height, testosterone, dehydroepiandrosterone sulfate [DHEA-S] and hs-CRP levels were measured. Mean age of patients was 23.5 +/- 8.7 years with the range of 15 to 49 years. In both groups significant decreases in DHEA-S levels and in Cyproterone-estriadiol compound group a significant decrease in testosterone levels were seen after 6 months, but there were no significant decrease on hs-CRP levels. Comparison of two groups showed that there were no significant differences in the effects of these two drugs on serum testosterone, DHEA-S and hs-CRP levels. In our study the level of hs-CRP at the beginning of treatment were significantly higher in patients who were overweight and obese. Also we found that Cyproterone-estriadiol compound causes significant decrease at the level of hs-CRP in overweight and obese patients. The results of this study are different from those of previous studies about beneficial effects of Metformin on hs-CRP levels but are similar to the results of studies that revealed probably obesity and overweight has important role in inducing inflammation and increasing CRP levels.

**Polyps**

**pathology**

Location, size and clinical symptoms of uterine polyps.

Barati, M.; Masihi, S.; Ilkhan, S.

E-mail:brati_m@yahoo.com

Imam Khomayni Hospital - Department of Obstetrics and Gynecology

*Pakistan Journal of Medical Sciences* 2010; 26 (2): 380-383 (9 ref.)

**Keywords:** Polyps-diagnosis; Uterus-pathology; Hysteroscopy; Metrorrhagia-diagnosis; Cross-Sectional Studies

**Abstract:** In this study we tried to find relationship between location, size and clinical symptoms of uterine polyps. Our cross sectional study was performed during the year 2008 in Ahwaz Imam Khomayni Hospital. Patients who underwent office hysteroscopy were evaluated and those with hysteroscopic diagnosis of polyp were entered in the study. Hysteroscopic findings of location and size of polyps and clinical presentations of Abnormal Uterine Bleeding [AUB] dysmenorrhea, infertility, discharge, spotting plus discharge were evaluated. One hundred and twenty four patients were evaluated. The most common location of polyp and clinical presentation were cervical canal and AUB, respectively. Polyp sizes of equal or less than 1 cm are commonly seen in cervical canal and cornea and more than 1 cm polyps are commonly found in uterine cavity and near internal os. In this study we showed that location of polyp is important in clinical presentation. Patients presented with AUB had polyps more common in uterine cavity, patients with spotting plus discharge had polyps more in cervical canal.
Postoperative Hemorrhage

prevention and control

Reducing post operative bleeding after tonsillectomies in children by modifying the monopolar diathermy technique: a study of 1500 patients.

Gooda, M. Rafique; Sheikh, Irshad; Suleri, Azam
E-mail:mrgooda_2000@yahoo.com
Hamdard University - Hamdard College of Medicine and Dentistry - Department of ENT and Head and Neck Surgeon
Pakistan Journal of Medical Sciences 2010; 26 (2): 434-437 (25 ref.)

Keywords: Tonsillectomy; Diathermy-methods; Prospective Studies

Abstract: To evaluate the effects of modifications of the present technique of monopolar diathermy tonsillectomy on the incidence of post operative bleeding and compare them with international data for tonsillectomies done without modifications. This is a prospective, longitudinal experimental study. Fifteen hundred patients were studied from January 2000 to January 2008. Patient's age ranged from five to fifteen years. All patients underwent tonsillectomies by modified monopolar diathermy method. The incidence of postoperative bleeding was assessed. Two patients developed significant secondary haemorrhage, which is defined as requiring a return to the operating theater for the control of bleeding. One patient with secondary bleed required blood transfusion in addition to a return to the operating theater. Five patients developed minor secondary bleed that was controlled by conservative means. Two patients developed reactionary bleeding that was controlled in the operating room before return of the patient to the bed. Modifications in the existing technique produces a significantly lower incidence of post operative bleeding from the tonsillar fossae and compares well than those reported in the international literature.

Postpartum Hemorrhage

prevention and control

Simple technique of uterine compression sutures for prevention of primary postpartum hemorrhage during caesarian section.

Nahar, Shamsun; Nargis, Shamim Fatema; Khannam, Merina
E-mail:dr_hasan@yahoo.com
Victory Nursing and Infertility Management Centre - Department of Obstetrics and Gynaecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 319-323 (11 ref.)

Keywords: Suture Techniques; Sutures; Cesarean Section; Treatment Outcome

Abstract: To report our clinical experience of the effect of applying simple technique of uterine compression sutures to prevent primary postpartum hemorrhage in atonic uterus developed during caesarian section. The use of simple uterine compression sutures in atonic uterus during caesarian section was reviewed within the period of January 2006 to March 2008 in a tertiary obstetric unit in three Medical College. It is a descriptive observational study. In atony uterus, first to treat fundal compression, used Intravenous or Intramuscular uterotonic drugs followed by per-rectal use of misoprostol and observed 10-15 minutes and then applied simple technique of uterine compression sutures. Age of patients ranged from 15-40 years. 49 patients were primiparae and 54 patients were multiparae. Indications for caesarian section were previous caesarian section 21 [20%], large baby head to disproportion 23 [22%], obstructed labour and prolonged labour 29 [28%], twin pregnancy 16 [15.5%], polyhydromnios 4 [3.8%], abruptio placenta 4 [3.2%], placenta preavia accreta 7 [6.5%]. All cases were maintained with post-operative 10 units oxytocin for 8 hours. Two patients needed one unit blood transfusion after surgery. No post-operative excessive bleeding was observed. There was no alteration of uterine involution and lochial discharge. In followed up cases subsequent pregnancy were 12 [11.6%]. Extreme degree of uterine compression may leads to uterine anatomic damage. Simple compression technique is surgically easy, with life saving potential, offers relative safety, time saving and can be managed by trainee doctors after some experience.
**PPAR gamma agonists**

Pioglitazone, a ppar-gamma ligand inhibited the nicotinamide streptozotocin induced sperm abnormalities in type-2 diabetic wistar rats.

Rabbani, Syed Imam; Devi, Kshama; Khanam, Salma
Al-Ameen College of Pharmacy - Department of Pharmacology
Pakistan Journal of Pharmaceutical Sciences 2010; 23 (3): 326-331 (30 ref.)

**Keywords:** Spermatozoa-drug effects; Diabetes Mellitus, Type 2-metabolism; Niacinamide-toxicity; Thiazolidinediones-pharmacology; Rats, Wistar; Streptozocin-toxicity

**Abstract:** Oxidative stress due to chronic hyperglycemia is known to cause infertility in diabetic patients. Pioglitazone [PIO], a PPAR-gamma ligand is known to possess the antioxidant property however, its role on the oxidative stress mediated germinal damage in Type-2 diabetes mellitus [T2DM] is poorly studies in the literature. In this study, the effect of PIO [1 and 10 mg/kg, p.o. daily for 4 weeks] was evaluated against the nicotinamide [NA-230 mg/kg, ip] and streptozotocin [STZ-65 mg/kg, ip] induced changes in sperm abnormality and antioxidant status in Wistar rats. The effect of PIO on the male reproductive cells was studied by determining the sperm shape abnormality and sperm count in the experimental T2DM. The antioxidant profile was studied by estimating the serum lipid peroxidation [LPO], glutathione [GSH] and glutathione peroxidase [GPx] levels. The higher dose of PIO [10 mg/kg] significantly [P<0.001] reduced the sperm shape abnormality and increased the sperm count [P<0.001], besides decreasing [P<0.05] the LPO and enhancing the GSH and GPx levels in the diabetic rats. However, the lower dose of PIO [1 mg/kg] produced inhibitory [P<0.05] effect against the changes induced by T2DM in the sperm shape abnormality and GSH levels. alpha tocopherol tested as alpha standard antioxidant agent prevented [P<0.001] the NA-STZ mediated alterations in sperm abnormalities and antioxidant enzyme levels. The results suggest that the inhibitory effect of PIO against the T2DM induced sperm abnormality could be related to its antioxidant property.

**Pregnancy Outcome**

The comparative study of pregnancy outcomes in primiparous and multiparous women with increasing age.

Nooritajer, Maryam; Aghamohammadi, Azar
E-mail:maryamnoorytajer@yahoo.com
Islamic Azad University Branch of Islamshahr - Faculty of Basic Sciences
Pakistan Journal of Medical Sciences 2010; 26 (2): 430-433 (13 ref.)

**Keywords:** Parity; Women; Age Factors; Retrospective Studies

**Abstract:** To compare the pregnancy outcomes in primiparous women and multiparous [more suitable word for our population] women over 35 and below 35 years. This is a descriptive comparative study which enrolled 1021 pregnant women and pregnancy outcomes were compared in 4 groups of primiparous and multiparous women over and below 35. To analyze the inputs using SPSS software, the 2 test, Fisher, Odds-Ratio and logistic regression with forward method were used. In primiparous women, there is a statistically significant relation between the age over 35 and preeclampsia, gestational diabetes, preterm labor, cesarean section and low birth weight. In multiparous women, there is a significant relation between age of over 35, preeclampsia and low birth weight. In the women over 35 years parity is effective on the measure of preeclampsia and cesarean delivery. Mother's increased age can be an independent factor for pregnancy outcomes. The primiparous women are more likely to be affected by age. As a matter of fact the aged women can have a natural vaginal delivery with a term infant and the over age mustnt be a contraindication for pregnancy.

**Pregnant Women**

Beliefs and practices of Iranian pregnant mothers regarding vitamins and minerals.
Mashayekhi, S.O.; Dilmaghanizadeh, M.; Fardiazar, Z.; Bamdad Moghadam, R.; Ghandforoush Sattari, M.
E-mail:mashayekhis@yahoo.co.uk
National Public Health Management Centre - Department of Pharmacology and Toxicology
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 203-207 (26 ref.)

**Keywords:** Vitamins; Minerals; Health Education; Culture; Questionnaires

**Abstract:** The objective of this descriptive study was to examine the vitamin and mineral supplements safety beliefs and practices of Iranian pregnant women. Data were collected from 400 randomly chosen women. More than 50% of the participants believed that taking vitamins and minerals during pregnancy was safe; 87% reported taking iron during pregnancy; of which 71.7 % reported their doctor as the main recommender; 21.8% reported first trimester as the most beneficial time for iron supplementation, 13.0% second trimester and 3.0% third trimester. Although an appropriate intake of vitamins and minerals can assure health in pregnancy, excess can be harmful. Educational programmes for women of childbearing age are necessary.
Prenatal Care

Habib, F.; Hanafi, M.I.; El Sogheer, A.
Taibah University - College of Medicine - Department of Obstetrics and Gynaecology
Keywords: Primary Health Care; Cross-Sectional Studies
Abstract: This study evaluated antenatal care [ANC] services for pregnant women attending primary health care centres in Medina city, Saudi Arabia in 2009. A cross-sectional survey collected data on ANC tasks performed at visits by 394 pregnant women attending 7 clinics. ANC was assessed in 3 domains: clinical assessment [at the initial visit and return visit], health promotion and care provision. The mean duration of initial visits was 10.3 [SD 2.3] minutes and of return visits was 9.1 [SD 1.1] minutes. Overall performance on ANC tasks was fair. The significant predictors of ANC performance of tasks were: size of population served per centre; presence of more than 1 physician carrying out ANC at the centre; physician's age, mother tongue, nationality and qualifications; and woman's education and employment status. Having more physicians available for ANC in primary care centres could improve the standard of care.

psychology

Antenatal care seeking behaviour among slum mothers: a study of Rajshahi city corporation, Bangladesh.
Rahman, Mahfuzar; Islam, Rafiqul; Rahman, Mosfequr
University of Rajshahi - Department of Population Science and Human Resource Development
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 50-56 (15 ref.)
Keywords: Behavior; Mothers; Poverty Areas; Immunization Programs-utilization
Abstract: The study aimed to identify the important effects of some selected variables in antenatal care [ANC] seeking behaviour among slum mothers. The data for the study were collected in 2006 from 700 mothers in the slum areas of Rajshahi City Corporation [RCC], Bangladesh. The results indicate that tetanus toxoid [TT] is relatively widespread in slum areas of RCC. Serious health implications were observed for the mothers and their children who lived in the study areas because more than half of the respondents [56.1%] were not assisted at their last childbirth by any health professional. The respondents were too poor to buy iron tablets/syrup and vitamin tablets/syrup during their last pregnancy. The application of a logistic regression model suggested that demographic and socio-economic factors were associated with ANC seeking behaviour among slum mothers. Respondents' education, place of treatment, husband's occupation, family's income, and exposure to mass media had highly significant effects on mothers seeking medical checkups during their last pregnancy.

Publications

A comparative analysis of writing scientific references manually and by using endnote bibliographic software.
Skaik, Younis Abed Al Wahhab M.
E-mail:yskaik@hotmail.com
Al Azhar University - Faculty of Applied Medical Sciences - Department of Laboratory Medicine
Pakistan Journal of Medical Sciences 2010; 26 (2): 498-499 (3 ref.)
Keywords: Writing; Databases, Bibliographic; Authorship; Information Systems; Handwriting; Correspondence as Topic

Publication audit for the year 2009 and revised guidelines for authors of Pakistan Journal of Medical Sciences.
Jawaid, Shaukat Ali
E-mail:pjms@pjms.com.pk
Pakistan Journal of Medical Sciences 2010; 26 (2): 500-502 (4 ref.)
Keywords: Management Audit; Journalism, Medical; Authorship
**Purkinje Cells**

**Effects of sodium nitrite-induced hypoxia on cerebellar Purkinje cells in adult rats.**
Zaidi, Zeenat F.
E-mail:zeenatzaidi@hotmail.com
King Saud University - Faculty of Medicine - Department of Anatomy
Pakistan Journal of Medical Sciences 2010; 26 (2): 261-266 (38 ref.)
**Keywords:** Hypoxia; Brain; Sodium Nitrite; Rats

**Abstract:** To explore the changes in Purkinje cells in adult rats after inducing chemical hypoxia by sodium nitrite
Adult male albino rats, weighing 180-200 gm were used in this study. The animals were fasted for three hours prior to
drugs administration. One hour after sodium nitrite [75 mg/kg] subcutaneous injection, rats were decapitated. The
brains were removed and placed overnight in fixative containing 10% formalin. Cerebellum were paraffin-embedded for
hematoxylin and eosin staining and cut at 5 micro m in the coronal plane. Fifty Purkinje cells along the line of cells from
two randomly chosen portions of each section were counted at a magnification of x20. Cells in a total of five sections
were counted to compute the ratio of damaged cells to intact neurons. There was no marked difference in the general
appearance and thickness of the cerebellar cortices of the control and the sodium nitrite treated rats. The principal
findings in the treated group were that almost all the Purkinje cells showed autolytic changes. Their arrangement as a
single layer was also deranged in certain areas. Some areas showed complete loss of Purkinje neurons. Sodium
nitrite-induced hypoxia results in severe damage to the Purkinje neurons.

**Referral and Consultation**

**Re: the trend to seek a second opinion abroad among cancer patients in Oman: challenges and opportunities.**
Chopra, Pradeep
E-mail:Choprradeep@gmail.com
Sultan Qaboos University Hospital - Department of Surgery
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 276-277 (2 ref.)
**Keywords:** Neoplasms; Family

**Retinal Vein Occlusion**

**drug therapy**

**Early avastin management in acute retinal vein occlusion.**
Mehany, Shaaban A.; Mourad, Khaled M.; Shawkata, Ahmad M.; Sayeda, Mohammed F.
El-Minia University - El-Minia Faculty of Medicine - Department of Ophthalmology
Saudi Journal of Ophthalmology 2010; 24 (3): 87-94 (39 ref.)
**Keywords:** Antibodies, Monoclonal-therapeutic use; Treatment Outcome; Prospective Studies

**Abstract:** To evaluate the safety, functional and anatomical effects of intravitreal Avastin [bevacizumab] in treatment
of recent retinal venous occlusion. Prospective interventional series non-comparative study. Department of
Ophthalmology, Faculty of Medicine, El-Minia University, Egypt. The study included 30 eyes of 30 patients with recent
retinal venous occlusion of less than 3 months duration 12 eyes [40%] of patients with central retinal vein occlusion
[CRVO] and 18 eyes [60%] with branch retinal vein occlusion [BRVO] were injected with intravitreal bevacizumab 1.25
mg [0.05 ml] of commercially available bevacizumab [Avastin; Genentech, Inc., San Francisco, CA] at a concentration
of 25 mg/ml as a primary treatment. The mean number of injections was 2.7 [range, 1-6 injections] 8-8 weeks intervals
and follow-up for 12 months [range, 913 months]. Patients underwent visual acuity testing [VA] as functional
assessment. Anatomically, optical coherence tomography [OCT] is used for measurement of central retinal thickness
[CRT] to detect macular edema [ME], fundus photography and fluorescein angiography [FA] to detect venous
tortuosity, optic disc edema and surface wrinkling rather than ME. All finding at baseline and each follow-up visit were
reported. The mean age of all patients was 65.3 years +/- 8.5 [range, 55-82 years], 20 males and 10 females patients.
The mean baseline VA was 20/240 [log MAR 1.08 +/- 0.52] and improved to 20/60 [log MAR 0.48 +/- 0.32] with
statistically significance difference change [P<0.001]. The mean baseline CRT was 455 micro m +/- 126 [range, 386-610],
decreased to 356 micro m +/- 118 [range, 296-418] after 1 month with statistically significance difference change
[P<0.02] and to 402 micro m +/- 170 [range, 338-468] after 6 months [P<0.067] and to 250 micro m +/- 48
[range, 200-298] at last follow-up with statistically significance difference change from the baseline [P<0.001]. There
were great proportional decrease in venous tortuosity, optic disc edema and surface wrinkling after 1 month of
injection. Neither systemic nor intraocular adverse events were reported. Intravitreal Avastin [IVA] is safe well tolerated,
effectively improve VA, fundus picture and stabilize anterior segment neo-vascular activity in patients with recent retinal
venous occlusion.
Retinoblastoma

ultrasonography

Ultrasonography in diagnosis of retinoblastoma.
Arif, Muhammad; Kundi, Niamat Ullah Khan
E-mail: arifmdn@yahoo.com
Kust Institute of Medical Sciences - Department of Ophthalmology
PJMR - Pakistan Journal of Medical Research 2010; 49 (1): 18-20 (11 ref.)
Keywords: Retinoblastoma-diagnosis; Early Detection of Cancer; Tomography, X-Ray Computed
Abstract: Retinoblastoma is a common childhood malignant intraocular tumor. Early detection and urgent treatment enhances survival in terms of sight and life. Ultrasonography has emerged as an indispensable tool for its examination and diagnosis. To evaluate the reliability of ophthalmic Ultrasonography as a diagnostic tool for retinoblastoma in children. Eye [A] unit department of Ophthalmology, Khyber Teaching Hospital, Peshawar, Pakistan, from January, 2007 to January, 2009. Patients with suspected clinical features of retinoblastoma were admitted in referral center for retinoblastoma. After recording history, patients underwent investigations which included Ultrasonography later supported by examination under anesthesia and C.T Scan orbit and brain. Treatment was offered following initial diagnosis. A total of 25 children were initially diagnosed as retinoblastoma and were admitted in Eye [A] unit during the last 2 years. There were 16 males and 9 females. There were 16 unilateral and 9 bilateral cases. On ophthalmic Ultrasonography, out of 34 eyes [25 patients], 33 [97%] revealed calcification and high reflectivity. Later a C.T Scan orbit and brain was also done. Histopathological confirmation was carried out in 17 enucleated eyes of 25 patients; where 9 patients had bilateral disease, 4 specimens were lost and 4 patients had intracranial extension and therefore enucleation was not advised in this group. Ophthalmic ultrasound is an easy, reliable and non invasive method for the diagnosis of retinoblastoma.

Rh-Hr Blood-Group System

genetics

Non-invasive prenatal determination of fetal rhd genotyping from maternal plasma: a preliminary study in Pakistan.
Mohammed, Nuruddin; Kakal, Fatima; Somani, Mehreen; Zafar, Wajiha
E-mail: nuruddin.badrudin@aku.edu
The Aga Khan University Hospital - Department of Obstetrics and Gynaecology
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2010; 20 (4): 246-249 (20 ref.)
Keywords: Prenatal Diagnosis; Fetus; Genotype; Mothers; Plasma; Cross-Sectional Studies; Reverse Transcriptase Polymerase Chain Reaction
Abstract: To determine the accuracy of the non-invasive pre-natal real-time polymerase chain reaction based fetal RhD genotyping from maternal plasma. Cross-sectional study. Juma Health Sciences Research Laboratory, The Aga Khan University Hospital, Karachi, from July to December 2008. Cell-free plasma DNA from 21 D-negative women with D-positive spouse between 20-39 weeks of gestation was tested for the presence of exon 5 region of RhD gene using real-time polymerase chain reaction. beta-globin was employed as the house-keeping gene. Sensitivity and specificity of the real-time PCR-based non-invasive fetal RhD genotyping was obtained by calculating proportion of the D-positive fetuses that were D-positive at birth as well. Of the 21 D-negative women 13 and 8 neonates were determined to be D-positive and D-negative, respectively, by serologic studies on cord blood samples at birth. RhD status was correctly determined in 17 of 21 cases. There were three false-positive and one false-negative results. The sensitivity and specificity of the assay was 92.3% [95% CI: 62.1, 99.6] and 62.5% [95% CI: 25.9, 89.8], respectively. The positive and negative predictive value of the assay was 80% [95% CI: 51.4, 94.7] and 83.3% [36.5, 99.1], respectively. These preliminary results demonstrate the feasibility of non-invasive pre-natal diagnosis of fetal RhD status of D-negative mothers in Pakistan.
Rhinitis, Allergic, Personal

therapy

Comparative study of efficacy of mucosal electrocautery versus submucosal diathermy for the treatment of inferior turbinate hypertrophy of nose.
Chand, Gian; Kumar, Sanjay; Khemani, Asudo Mal
E-mail: drgianchandcharai@ymail.com
Sindh Government Hospital - Department of ENT
Pakistan Journal of Medical Sciences 2010; 26 (2): 454-457 (10 ref.)
Keywords: Hypertrophy; Treatment Outcome; Turbinates-pathology; Rhinitis, Vasomotor-therapy; Retrospective Studies; Diathermy; Electrococagulation
Abstract: To compare the efficacy of submucosal electrocautery versus submucosal diathermy for the surgical treatment of inferior turbinate hypertrophy of nose and to analyze the outcome of both treatment options. Retrospective study was done in 100 cases at the department of otolarnyology, head and neck surgery department JPMC and PMCH Nawabshah, form January 2007 to July 2008. The patients suffering from inferior turbinate hypertrophy were included in this study having ages between 20 to 35 years. Demographic data were obtained from the patient files at the Hospital and were compiled for result. Among one hundred patients which were evaluated and surgically treated, 30 cases were of allergic rhinitis, 28 cases of vasomotor rhinitis, 22 cases were of chronic hypertrophic rhinitis and rest of 20 cases had mild septal deviation. The results were evaluated for the patients, pre-, post-operative symptoms and clinical findings. Submucosal diathermy was found more successful in relieving the patients’ symptoms and decreasing the size of the inferior turbinates as compared to mucosal electrocautery.

Rhinitis, Allergic, Seasonal

drug therapy

Montelukast versus nigella sativa for management of seasonal allergic rhinitis: a single blind comparative clinical trial.
Ansari, Munawar Alam; Ansari, Noor Alam; Junejo, Sameen Afzal
E-mail: dr.mnwr@gmail.com
Liaquat University of Medical and Health Sciences - Department of Pharmacology and Therapeutics
Pakistan Journal of Medical Sciences 2010; 26 (2): 249-254 (23 ref.)
Keywords: Nigella Sativa; Phytotherapy; Quinolines-therapeutic use; Treatment Outcome
Abstract: To compare the therapeutic role of leukotriene receptor blocker Montelukast with N. Sativa seeds in seasonal allergic rhinitis patients. Comparative uncontrolled single blind clinical assessment was carried out over forty seven untreated adult patients torment from seasonal allergic rhinitis and staring for outpatient management. All patients were chosen from different primary care health centers, registered and were divided in a single-blind approach to obtain Montelukast, 10 mg/day, group I [n=24] and 250 mg/day of N. Sativa, group II [n=23] orally for two weeks. Patients joined-up the study has completed the therapeutic plan. Montelukast and N. Sativa both demonstrated a significant and early decrease in daytime as well as ophthalmic symptoms, while montelukast showed diminished and late effects on nighttime symptoms when compared with N. Sativa. In addition montelukast has also been showing to cause drug allied side effects like headache, dizziness and heart burn. It would come into view that N. Sativa is safe and thoroughly free from threat of adverse effects. So it is a liable management alternative for seasonal allergic rhinitis patients.

Schistosomiasis

history

[Schistosomiasis in Morocco: from discovery to after elimination].
Barkia, H.; Barkia, A.; Nhammi, H.; Belghyti, D.
E-mail: h_barkia@yahoo.com
Ibn Tofail University - Research Unit for Comparative Parasitology - Laboratories for Biology and Parasitology
EMHJ - Eastern Mediterranean Health Journal 2011; 17 (3): 250-256 (10 ref.)
Keywords: Schistosomiasis-prevention and control; Schistosomiasis-transmission
Abstract: This paper outlines the history of schistosomiasis in Morroco and the efforts made to eliminate it from the country. Since it was first diagnosed in 1914 in Marrakesh, schistosomiasis remained for decades a public health
problem in Morocco. A national control programme was launched in 1982 and it led to a considerable reduction in the incidence and morbidity associated with the disease. Consequently, the programme shifted from disease control to an elimination process launched in 1994. This process aimed to eliminate the disease transmission by the end of 2004 and has helped to clear all known foci. Today, the challenge is to maintain schistosomiasis elimination and to be certified schistosomiasis-free by the World Health Organization.

Schools, Medical

Afghanistan and Oman: personal reflections on a profound contrast.
Foster, Ken
E-mail: kwinfer@gmail.com
Kabul General Hospital

SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 144-147 (7 ref.)
Keywords: Education, Medical; Learning; Geography; Delivery of Health Care

How do we define a medical school?: reflections on the occasion of the centennial of the Flexner Report.
Karle, Hans
E-mail: mjournal@squ.edu.om
Health Sciences Sultan Qaboos University - College of Medicine

SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 160-168 (20 ref.)
Keywords: Education, Medical; Privatization

Abstract: A century after the Flexner Report on medical education in North America, which revolutionised the training of medical doctors all over the world, it is time to revisit this famous document and analyse symptoms and signs of a return to pre-Flexnerian conditions. With the ongoing mushroom growth over the last decades of small, proprietary educational institutions of low quality and driven by for-profit purposes, medical education is in a threatened position. This trend is of general international interest because of the increasing migration of medical doctors. There is a need for discussion of what should be the rational criteria and basic requirements for establishing new medical schools.

Sepsis

epidemiology

Incidence of late onset neonatal sepsis in very low birth weight infants in a tertiary hospital: an ongoing challenge.
Al Faleh, Khalid M.
E-mail: kfaleh@ksu.edu.sa
King Saud University - King Khalid University Hospital - Neonatal Intensive Care Unit

SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 227-230 (13 ref.)
Keywords: Infant, Newborn; Infant, Very Low Birth Weight; Incidence; Age of Onset; Hospitals; Incidence

Abstract: Late onset neonatal septicaemia [LONS] is one of the major causes of morbidity and mortality in very low birth weight [VLBW] infants. The main objective of this study was to investigate the rate of LONS in the Neonatal Intensive Care Unit [NICU] of King Khalid University Hospital [KKUH] in Riyadh, Saudi Arabia over a three year period and compare it to international standards. To determine the incidence of LONS, a retrospective study was undertaken and premature infants with a birth weight less than 1250 g were included, giving a total of 273 infants. Their bacterial profile and the antimicrobial susceptibility of the isolates were investigated, and the changes in trends over the study period studied. 91.5% of included infants [217/237] had 1 or more blood cultures obtained beyond the second day of life. 41% [98/237] of included infants had at least one episode of proven sepsis. The majority [71.4%] of first episode sepsis was caused by Gram-positive organisms. Coagulase negative Staphylococcus accounted for around 80% of all Gram-positive infections. Gram-negative pathogens accounted for 24.5% of the late onset infections while fungal organisms were responsible for 4%. The rate of LONS was high and exceeded internationally reported rates in our tertiary care NICU. Gram-positive organisms continue to be major causative isolates. High priority should be placed on preventative steps to control nosocomial sepsis.
Skin Diseases, Vesiculobullous

diagnosis

Use of direct immunofluorescent microscopy in the diagnosis of vesiculobullous disorders of skin.
Rizvi, Shoaib Raza; Sadiq, Saleem
E-mail:shoaibraza8@yahoo.com
Sindh Institute of Urology and Transplantation - Department of Histopathology
Pakistan Journal of Medical Sciences 2010; 26 (2): 411-415 (16 ref.)

Keywords: Fluorescent Antibody Technique, Direct; Retrospective Studies

Abstract: To determine the relative frequencies of various vesiculobullous disorders of skin in our patients and the morphological and direct immunofluorescent patterns of these disorders. This retrospective study was carried out in the Department of Pathology, Basic Medical Sciences Institute, Jinnah Postgraduate Medical Centre, Karachi, Pakistan on all the cases of vesiculobullous disorders of skin diagnosed in the department from January 2002 to June 2007. All the skin biopsies received during the study period were reviewed and cases of vesiculobullous disorders were selected for detailed study. Direct immunofluorescent [DIF] staining was done on these cases using fluorescein isothiocyanate conjugate [FITC] labelled antibodies for IgG, IgA, IgM, C3c and Fibrinogen. The data was analysed statistically using SPSS software. A total of 62 DIF proven cases of vesiculobullous disorders of skin were studied. Pemphigus vulgaris [PV] was found to be the most frequent disorder [32.25%] followed by bullous pemphigoid [BP] with a frequency of 27.42%. The relative frequencies of pemphigus foliaceus [PF], dermatitis herpetiformis [DH], childhood bullous pemphigoid [CBP] and chronic bullous dermatosis of childhood [CBDC] were 20.96%, 6.45%, 4.83% and 6.45% respectively. One case each of IgA pemphigus [IgAP] and herpes gestationis [HG] were seen. IgA pemphigus can only be diagnosed after having observed the immunofluorescence pattern of this disorder. Definitive diagnosis of certain blistering lesions of skin requires the DIF microscopy. However, in special circumstances it needs to be reinforced with either salt split skin technique or immune electron microscopy.

Smoking

epidemiology

Prevalence and correlates of tobacco use among grade 8-10 students in Peshawar, Pakistan.
Shaikh, M.A.; Hunt, B.P.
E-mail:masoodali1@yahoo.com
Independent Consultant

Keywords: Prevalence; Students; Tobacco Use Disorder-epidemiology

[Tobacco: its control is urgently needed].
Kinj, Nadeem
E-mail:dk01@aub.edu.lb
American University Hospital
LMJ - Lebanese Medical Journal 2010; 58 (2): 122-124

Keywords: Smoking-prevention and control; Awareness; Smoking Cessation; Developing Countries

Abstract: Smoking is a chronic disease that kills five million yearly. Nicotine is responsible for the addictive part. Smoking is quite neglected, due to its predominance in poor and underdeveloped countries. Available smoking cessation programs have a limited role to play. Fighting tobacco dependence requires a multidisciplinary approach involving awareness campaigns, enforcing no smoking laws in public places, raising taxes and careful watching of our kids not to get addicted.
Snake Venoms

history

Could deadly snake venom save lives?
Banerjee, Yajnavalka; Bayoumi, Riad; Farook, Seyad M.S.
E-mail:yaj@squ.edu.om
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Biochemistry
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 142-143 (2 ref.)
Keywords: Snake Venoms-therapeutic use; Captopril-history

Somatoform Disorders

The concept of somatisation: a cross-cultural perspective.
Al Busaidi, Zakiya Q.
E-mail:zakiyaq@squ.edu.om
Sultan Qaboos University Hospital - Department of Family Medicine and Public Health
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 180-186 (47 ref.)
Keywords: Cross-Cultural Comparison; Review Literature as Topic; International Classification of Diseases; Diagnostic and Statistical Manual of Mental Disorders
Abstract: Somatisation is generally defined as the tendency to experience psychological distress in the form of somatic symptoms and to seek medical help for these symptoms, which may be initiated and/or perpetuated by emotional responses such as anxiety and depression. Somatisation has been recognised as a commonly encountered problem, especially in primary health care, contributing to frequent use of medical services and to frustration in both the patient and the doctor. In recent years, there has been a great deal of dissatisfaction with the terminology and classification of somatisation, and the way this definition is applied to non-Western cultures. This dilemma pertains to different aspects of the definitions, mainly their usefulness, adequacy and applicability. This article aims to review the literature on the development of the concept of somatisation and how this definition is applied from a cross-cultural aspect.

Soybeans

Effect of soybean diet on serum lipids an lipoproteins of postmenopausal women.
Ghafarzadeh, Masoumeh; Namdari, Mehrdad
E-mail:namdari_m@yahoo.com
Lorestan University of Medical Sciences - Department of Gynecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 407-410 (15 ref.)
Keywords: Diet; Lipids-blood; Lipoproteins-blood; Postmenopause; Women
Abstract: To investigate the effect of soybean on serum lipids and lipoproteins in hypercholesterolemic postmenopausal women. One hundred participants were included and divided randomly into two arms. One arm received two grams of soy every day, while the other group received similar shaped capsules filled with placebo. Subjects and outcome assessors were kept blind to the contents of the capsules. Serum cholesterol, triglyceride and low-and high-density lipoproteins were measured before and after the intervention. The two groups were similar in their baseline characteristics. We observed no favorable changes in lipid profile in either of the two groups. The two arms of the study responded similarly to the intervention and no statistically significant difference was observed between these responses. This double-blind randomized controlled trial does not support the hypothesis that the use of soybean improves serum lipid constituents in postmenopausal women having hypercholesterolemia.

Stomach

abnormalities

Pyloric duplication cyst: a rare congenital anomaly.
Rathore, Altaf Hussain; Hussain, Riaz; Rathore, Farhan
E-mail:foundationhospital@hotmail.com
Foundation Hospital
Pakistan Journal of Medical Sciences 2010; 26 (2): 494-496 (17 ref.)
Keywords: Cysts-diagnosis; Cysts-surgery; Stomach-surgery

Abstract: Pyloric duplication cyst is one of the rarest congenital anomalies. We present such a case in a boy of 6-1/2 years old who was treated by us successfully. The theories of its embryogenesis, mode of presentations, diagnosis and treatment are discussed.

Stress, Psychological

Stress in postgraduate trainee doctors of public and private Universities of Karachi.
Mumtaz, Yasmin; Jahangeer, Ashraf; Habib, Adnan; Adnan, Sarai; Mumtaz, Zara
E-mail: zafar_duhs@yahoo.com
Dow University of Health Science - Department of Community Medicine
Pakistan Journal of Medical Sciences 2010; 26 (2): 420-425 (20 ref.)
Keywords: Physicians; Universities; Cross-Sectional Studies; Teaching; Private Sector; Public Sector; Training Support

Abstract: To evaluate and compare stress level of Postgraduate trainee doctors in public and private sector Medical Universities. A comparative cross sectional study was conducted at Dow University of Health Sciences and Agha Khan University Hospital Karachi among Postgraduate Medical trainee who are doing FCPS, MCPS, and DCPS from Jan. 2008-Dec. 2008. A total of 207 doctors were selected by non-probability convenience sampling technique. Main outcome was major stress level of Medical trainees or resident. Out of the total 207 trainee doctors 62.3% were found to be under stress. Proportion of females with stress was 66.3%. Most of the married PGs 67.2% had high stress level. A large proportion almost 69.7% of doctors who were in stress belonged to low income group. This study did not find any statistical significance of stress with respect to different demographic and socioeconomic variable that were age, gender, monthly income, specialty and university. The stress level of Postgraduate trainees in both the universities was found to be high. The stress was found to be high among female trainees but no risk factor showed significant association with stress. Every effort should be made to help the future healers in understanding the symptoms of stress and ways to deal with it effectively and safely.

Stress in the medical profession and its roots in medical school.
Al Lamki, Lamk
Sultan Qaboos University - College of Medicine and health Sciences
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 156-159 (17 ref.)
Keywords: Schools, Medical; Medicine; Human epidemiology

A comparative study of perceived stress among female medical and non-medical university students in Dammam, Saudi Arabia.
Al Dabal, Badria K.; Koura, Manal R.; Rasheed, Parveen; Al Sowielem, Latifa; Makki, Suhair M.
E-mail: badria-al.dabal@hotmail.com
Dammam University - College of Medicine - Department of Family and Community Medicine
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 231-240 (18 ref.)
Keywords: Students, Medical; Students; Universities; Cross-Sectional Studies; Questionnaires

Abstract: The objective of this study was to investigate any differences between female undergraduate medical and non-medical students for: 1) prevalence and causes of perceived academic stress, and 2) changes in physical, mental, psychological and emotional health as well as life-style since starting college studies. A cross-sectional study was conducted at Dammam University, Dammam, Saudi Arabia, in January 2008. All 319 pre-clinical female medical students were included in the study and 297 non-medical students from the College of Applied Studies and Community Services [CASCS] were selected by stratified random sampling. The study instrument was a questionnaire on the "Influence of Studying on Students' Health". More medical students [48.6%] reported being frequently stressed due to studies than CASCS students [38.7%, P <0.01]. Unsuitable teaching methods, an unsatisfactory study environment, and fear of failure in examinations were more frequently mentioned by medical than non-medical students [P <0.05]. While underlying social problems were significantly more common in medical students, economic problems were more prevalent among CASCS students [P <0.05, P <0.05]. More medical than non-medical students reported a worse status of physical and mental health, anxiety and depression and negative life-style changes since initiation of the college programme. Medical students were at higher risk of physical and mental health problems than non-medical students due to academic stress. Since a substantial proportion of CASCS students also experienced academic stress, we recommend that a student support committee be established for both colleges to provide counselling and guidance in healthy ways to cope with stress.
**Strongyloidiasis**

**diagnosis**

A case of gastric and duodenal strongyloidiasis.

Al Sajee, Dhuha M.A.; Al Hamdani, Aisha

E-mail:d.alsaji@yahoo.co.uk

Sultan Qaboos University Hospital - Department of Pathology

**SQUMJ - Sultan Qaboos University Medical Journal** 2010; 10 (2): 262-265 (7 ref.)

**Keywords:** Stomach-parasitology; Duodenum-parasitology; Strongyloides Stercoralis; Albendazole-therapeutic use

**Abstract:** Strongyloides stercoralis is a nematode parasite which causes a protracted asymptomatic intestinal infection. It is considered a life threatening condition in immunocompromised patients when hyperinfection is associated with disseminated disease. The diagnosis by routine stool examination is very limited since the larval output in stools is very low. We present the case of a 52 year-old Omani man from Salalah, in the southern region of Oman, with a 15-year history of type 2 diabetes mellitus and recently discovered to have hairy cell leukaemia, who complained of nausea, abdominal pain, loss of appetite and loss of weight. An oesophagogastroduodenoscopic biopsy was obtained and histopathologic examination revealed gastrointestinal strongyloidiasis.

**Students, Medical**

[Health habits and vaccination status of Lebanese residents: are future doctors applying the rules of prevention?]  

Hage, Nasr C.; Sayegh, J.; Abi Rizk, G.

E-mail:drnasr@yahoo.com

University of Saint-Joseph [USJ] - Department of Family Medicine

**LMJ - Lebanese Medical Journal** 2010; 58 (2): 91-96 (31 ref.)

**Keywords:** Motor Activity; Life Style; Health Behavior; Vaccination-utilization

**Abstract:** There has never been a nationally representative survey of medical students' personal health-related practices, although they are inherently of interest and may affect patient-counseling practices. This study evaluated the health practices and the vaccination status of first year residents working at the academic hospital Hotel-Dieu de France. The medical files of all medicine and surgery residents in their first year of specialization between the years 2005 and 2008 were reviewed. These residents were required to go through a preventive medical visit at the University Center of Family and Community Health. One hundred and nine residents [109] were included in the study; 68 [62.39%] were male and 41 [37.61%] were female with a mean age of 26 years. Only 6 residents [5.50%] practiced physical activity according to international guidelines [more than three times a week for more than 30 minutes each time]. Most residents [n=76; 69.73%] used to skip one or two meals especially breakfast and as a consequence 30 male [44.11%] and 4 female [9.75%] students were overweight, with a statistical difference between the two sexes [Fisher test, p-value=0.001]. Twenty-eight residents [25.69%] were smokers with a male predominance. Fourteen residents of both genders [12.84%] drank alcohol regularly [>3 times a week] and 71 [65.14%] had a drink occasionally [once a month or less]. Only 25 residents [23%] of the cohort had a complete and up-to-date immunization status. The immunization gap was basically against measles, mumps, rubella [MMR] and diphtheria, tetanus, poliomyelitis [dT Polio]. Ninety-nine residents [90.83%] had full immunization against hepatitis B with an adequate response in 78 residents [71.56%]. This study showed that our residents did not always have a healthy lifestyle especially when it comes to physical activity and eating habits. They also lacked an adequate vaccination. Interventions should take place in order to promote healthy life style and to improve their vaccination status.

**Substance-Related Disorders**

**epidemiology**

[A rapid situation assessment [RSA] study of alcohol and drug use in Lebanon].

Karam, Elie G.; Ghandour, Lilian A.; Maalouf, Wadie E.; Yamout, Karim; Salamoun, Mariana M.

E-mail:egkaram@daraac.org

Balamand University - School of Medicine - Department of Psychiatry and Clinical Psychology

**LMJ - Lebanese Medical Journal** 2010; 58 (2): 76-85 (30 ref.)

**Keywords:** Alcohol-Related Disorders-epidemiology; Smoking; Cannabis; Heroin; Schools; Universities; Cross-Sectional Studies

**Abstract:** Research on substance use and misuse in Lebanon is scarce and, when available, focuses on a specific substance or a limited segment of the population. The objective of this Rapid Situation Assessment [RAS] study was to
survey the use of multiple substances in diverse segments of the Lebanese population. A multi-method and multi-sample survey was conducted to collect quantitative and qualitative data from the academic sector [high school and university students], substance users in treatment or under arrest [prison, detention], and non-institutionalized “street” users. Age of first use of substances started as early as 9 years in the youth sample. Moreover, 12% of the high school students reported smoking one or more packs of cigarettes per day and 9% of the university students met criteria for DSM-IV alcohol abuse. Cannabis represented the most commonly used illicit drug in both high school and university students, and tranquilizers were the most frequently misused medicinal substance. Heroin was responsible for 50% of the treatment admissions, followed by cocaine [20%], and alcohol [20%]; heroin was also the most common substance of arrest. Recidivism was almost the rule for heroin users across all treatment settings. Unperceived need for treatment was the most common reason for not seeking treatment in non-institutionalized drug users [47.6%]. Injecting drug use was a common behavior noted within substance using populations, in treatment and non-institutionalized [about 50% of them], with a high rate of needle sharing practices. About half of all patients in treatment had a history of police arrests, and about one-third of those in prison ever received prior treatment for substance use. The study points towards a growing trend for substance use problems in early adolescence that warrants close monitoring. Further investigation of these patterns is needed since the Lebanese population might have specific pathways of abuse. There is a need to bring together various health, legislative, and academic stakeholders for a continuous appraisal of data from substance abuse studies as evidenced by the recent, although slow, progress in the fields of legislation and treatment that follow such concerted efforts.

**Surgery, Computer-Assisted**

*Image guidance surgery: is it useful to the orbital surgeon?*

Durairaj, Vikram D.
University of Colorado - School of Medicine - Department of Ophthalmology and Otolaryngology
*Saudi Journal of Ophthalmology* 2010; 24 (3): 67-68 (2 ref.)

**Keywords:** Orbit-surgery

**Survival Analysis**

*Parametric modelling of survival following HIV and AIDS in the era of highly active antiretroviral therapy: data from Australia.*

Nakhaee, F.; Law, M.
E-mail: fnakhaee@kmu.ac.ir
Kerman University of Medical Sciences - Faculty of Health - Department of Biostatistics and Epidemiology

**Keywords:** Models, Statistical; HIV Infections; Acquired Immunodeficiency Syndrome; Anti-Retroviral Agents

**Abstract:** Parametric survival models have not previously been applied to survival following a diagnosis of HIV/AIDS in Australia. Four different parametric models—exponential, Weibull, log-normal and log-logistic—were applied to data both on HIV-positive cases and on cases diagnosed with AIDS collected through the national HIV/AIDS surveillance system. Using likelihood based goodness-of-fit criteria the Weibull model was found to be the best-fitted model for predicting survival following a diagnosis of HIV infection without and with a diagnosis of AIDS. Several covariates—age, sex, combined HIV exposure category, CD4 cell counts, antiretroviral treatment and AIDS-defining illnesses—were included in the parametric model to predict factors associated with future mortality. Predicted deaths were in agreement with the observed deaths following HIV infection and AIDS. The Weibull model will be applied for future projections of deaths from HIV/AIDS.

**Technetium Tc 99m Sestamibi**

**diagnostic use**

*Diagnostic accuracy of [99m]TC-MIBI for breast carcinoma in correlation with mammography and sonography.*

Tunio, Mutahir Ali
E-mail: drmutahirtonio@hotmail.com
Radiation Oncology Sindh Institute of Urology and Transplantation [SIUT]
*JCPS - Journal of the College of Physicians and Surgeons Pakistan* 2010; 20 (4): 289 (4 ref.)

**Keywords:** Carcinoma, Ductal; Breast-diagnosis; Carcinoma, Ductal, Breast-Radionuclide Imaging; Carcinoma, Ductal, Breast-ultrasoundography; Mammography; Ultrasonography, Mammary; Biopsy
**Thelileria**

**Parasitology**

Detection of Thelileria infection in dromedary camels.
El Maghrbi, A.A.; Hosni, M.M.
Alfatah University - Faculty of Vet. Medicine - Department of Microbiology and Parasitology

**Veterinary Medical Journal** 2009; 57 (1): 53-58 (20 ref.)

**Keywords:** Prevalence; Camels; Ticks; Erythrocytes; TEB p pretein, hyalomma dromedarii

**Abstract:** Camels are important source of meat and wool. These products depend mainly on the general health conditions which are affected by infection with several diseases such as blood parasites. The examination was done on 215 camels by Giemsa stained blood films prepared from the blood collected from imported camels slaughtered at three slaughter house in Tripoli-Libya [February July 2008]. Out of 215 examined camels, 14 [6.5%] were infected with Thelileria spp. The morphology of the detected Thelileria in the erythrocytes was oval forms. The main size measured 1.3 x 0.4 micro m. The schizonts inside the lymphocyte were irregular in shape and showed varying number of red granules. Hyalomma dromedarii were identified from the camels infected with Thelileria.

**Thyroid Function Tests**

The diagnostic yield of thyroid function tests and their cost-effectiveness in the student clinic at Sultan Qaboos University: retrospective chart review.
El Shafie, Kawther; Al Shaqsi, Asila; Al Mahrouqi, Badriya; Al Lawati, Hadia; Ganguly, Shyam S.; Al Adawi, Samir; Al Shafaee, Mohammed
E-mail:kawther@squ.edu.om

Sultan Qaboos University - College of Medicine and Health Sciences - Department of Family Medicine and Public Health

SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 215-220 (25 ref.)

**Keywords:** Cost-Benefit Analysis; Retrospective Studies; Students; Universities

**Abstract:** To assess the significance of requesting thyroid function tests [TFT] and their cost effectiveness for specific and non-specific symptoms of thyroid disease in a specific population in Oman. A retrospective chart review study was conducted in the student clinic at Sultan Qaboos University in Oman in the year 2007-2008. It included all patients [N=319] of both sexes for whom TFTs were requested. The patients' main complaints and the final diagnoses were collected from their medical records. The most common presentations for which TFTs were requested were irregular periods [n=82]; fatiguability [n=49], palpitations [n=39]; weight changes [n=22]; hair changes [n=20]; sensation of heat and cold [n=18]; diarrhoea and constipation [n=13], and neck swelling [n=13].The most common diagnoses reached in relation to these complaints were polycystic ovarian syndrome [n=51]; iron deficiency anaemia [n=42]; anxiety and depression [n=11] : thyroid disease [n=18], and no specific diagnosis [n=193]. The percentage of thyroid diseases among females [7.1%] compared to males [1.2%] was statistically significant [P <0.05]. Thyroid disease accounted for 61.5% of those patient with neck swelling, 7.7% of those with palpitations, 4.1% of those with fatigue, 3% of those with other complaints, and 1.2% of those with irregular periods. The cost of the tests was around 20,000 US dollars. TFT is necessary for those presenting with neck swelling, but restraint should be used in administering the test for those complaining of palpitations or fatigue. Additionally, irregular periods have little link with TFT abnormality.

**Thyroid Neoplasms**

Pathology

Multiple bone metastases in a patient with differentiated thyroid cancer [DTC]: complete resolution following thyroidectomy and four ablation doses of 1-131.
Elshafie, Omayma T.; Hussein, Samir; Al Hamdani, Aisha; Bererhi, Haddia; Woodhouse, Nicholas J.Y.
E-mail:omayma0@hotmail.com

Sultan Qaboos University Hospital - Departments of Medicine

SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 101-105 (13 ref.)

**Keywords:** Thyroid Neoplasms-complications; Neoplasm Meta stasis; Thyroid Neoplasms-radiotherapy; Thyroid Neoplasms-surgery; Bone Neoplasms; Iodine Radioisotopes-therapeutic use

**Abstract:** Multiple bone metastases from a differentiated thyroid cancer are usually incurable. We report the case of a young Omani woman who presented with 8 discrete skeletal lesions three years after a total thyroidectomy. Following four ablation doses of I-131 she has remained in clinical and biochemical remission for over five years. An extraordinary aspect of this case was the persistent refusal of her husband to use contraception either for himself or his...
wife. This resulted in her treatment being delayed for more than 6 years during which time the patient delivered and breastfed four additional healthy babies.

**Thyrotoxicosis**

**radiotherapy**

Re: radiation exposure levels in family members of Omani patients with thyrotoxicosis treated with radiiodine [I-131] as outpatients.
Ravichandran, Ramamoorthy; Al Saadi, Amal
E-mail: ravichandranrama@rediffmail.com
National Oncology Center
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (1): 138-141 (6 ref.)
**Keywords:** Radiation Injuries; Maximum Allowable Concentration; Family; Iodine Radioisotopes-adverse effects

**Timolol**

**therapeutic use**

Evaluation of the role of timolol 0.1% gel in myopic regression after laser in situ keratomileusis.
El Awady, Hatem E.; Ghanem, Asaad A.; Gad, Mohamed A.
Mansoura University - Faculty of Medicine
Saudi Journal of Ophthalmology 2010; 24 (3): 81-86 (12 ref.)
**Keywords:** Timolol-administration and dosage; Myopia; Keratomileusis, Laser In Situ; Prospective Studies; Treatment Outcome
**Abstract:** To evaluate the efficacy of the concomitant administration of antiglaucoma medications namely timolol 0.1% gel in cases with myopic regression after myopic laser in situ keratomileusis [LASIK]. Prospective observational clinical trial. Ninety five eyes of 75 patients were included in this study prospectively. The mean myopic regression was 1.29 +/- 0.83 diopters [range-0.5 to-4.62] after myopic LASIK. The eyes were divided into two groups: 50 eyes administrated timolol 0.1% gel once daily for 12 months [treated group], and 45 eyes were age matched [control group]. We assessed the amounts of myopic regression in terms of changes in the refraction [spherical equivalent and astigmatism], intraocular pressure [IOP], pachymetry and the refractive power of the cornea measurements for all participants. The refractive error and visual acuity were similar between the two groups at baseline. The treated group had an improvement in spherical equivalent significantly from -1.29 +/- 0.83 to -0.94 +/- 1.07 diopters [P=0.012]. Astigmatism was changed from -0.94 +/- 0.53 to -0.86 +/- 0.60 diopters but this change was not statistically significant [P=0.20]. The IOP was decreased significantly from 12.6 +/- 1.9 to 9.0 +/- 1.1 mm Hg [P<0.001]. Central corneal thickness was changed from 425.6 +/- 19.86 to 429 +/- 18.1 micro m but not statistically significant [P=0.56]. The central corneal power decreased significantly from 37.2 +/- 1.8 to 36.4 +/- 1.3 diopters [P<0.05]. Timolol 0.1% gel was effective for reduction and improvement of myopic regression especially the spherical errors after myopic LASIK.

**Tooth**

**growth and development**

Dental maturity amongst various vertical and sagittal facial patterns.
Sukhia, Rashna H.; Fida, Mubassar
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2010; 20 (4): 225-228 (20 ref.)
**Keywords:** Face-anatomy and histology; Cross-Sectional Studies; Retrospective Studies
**Abstract:** To compare the mean dental maturity amongst three vertical facial patterns [short, average and long anterior facial heights] and also amongst two sagittal facial patterns [skeletal class I and II] in orthodontic patients. Cross-sectional analytical study. The Aga Khan University Hospital, Karachi, from August to October 2008. Data was retrospectively retrieved from pretreatment orthodontic records of patients who visited the orthodontic clinic. The sample was divided into three vertical groups, namely short, average and long anterior facial types, and two sagittal groups, namely skeletal class I and II. Dental development was assessed using the Demirjian's system. One way ANOVA and independent sample t-test were used to find any difference in dental maturity amongst vertical and sagittal facial patterns, respectively. There was no statistically significant difference in dental maturity amongst the three vertical facial patterns [p=0.111] and also amongst the two sagittal groups [p=0.975]. Statistically significant gender dimorphism [p < 0.001] was seen amongst boys and girls for dental maturity with girls being more advanced than boys.
in their dental development. Dental maturation in the three vertical and the two sagittal groups showed no statistically significant difference in our studied population sample and thus need no variations in treatment initiation timings. However, girls should be treated earlier as they are dentally more advanced than boys.

**Tracheostomy**

**An evaluation of the quality of life in patients with tracheostomy.**

Gul, Nur Dilek; Karadag, Ayise
Hacettepe University Adult Hospital - Department of Ear, Nose and Throat Clinic
Pakistan Journal of Medical Sciences 2010; 26 (2): 444-449 (21 ref.)

**Keywords:** Quality of Life; Nursing Care; Questionnaires

**Abstract:** To evaluate the quality of life in patients with tracheostomy. All the patients, who have had tracheostomy operations between 1998-2009 at a University Hospital, Turkey, constitute the population of the study [70 patients]. The data have been collected between June-July 2009 by using the Short Form 36 Quality of Life Scale [QoL]. It has been determined that the QoL scores of patients, whose life span with tracheostomy is three months to one year, who have received chemotherapy or radiotherapy, have difficulties in breathing and eating are lower in the various sub-dimensions of the QoL scale. Together with this, it has been determined that the scores of patients who can perform their tracheostomy care independently, have no complications, use esophageal speech, whose sense of smell has not been impaired, and state that their physical appearance has not been affected are higher in the various sub-dimensions the Quality of Life [QoL] scale. Tracheostomy has a profoundly negative impact on quality of life.

**Trial of Labor**

**Magnetic resonance pelvimetry for trial of labour after a previous caesarean section.**

Gowri, Vaidyanathan; Jain, Rajeev; Rizvi, Syed
E-mail:gowrie61@hotmail.com
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Obstetrics and Gynaecology
SQUMJ - Sultan Qaboos University Medical Journal 2010; 10 (2): 210-214 (14 ref.)

**Keywords:** Pelvimetry; Cesarean Section; Pregnancy, Retrospective Studies; Magnetic Resonance Spectroscopy; Delivery, Obstetric

**Abstract:** To stratify the magnetic resonance [MR] pelvimetric diameters according to mode of delivery and establish possible reference values for pelvic diameters and outlet index for trial of labor after a previous caesarean section. This is a retrospective study of 125 patients at Sultan Qaboos University Hospital who underwent MR pelvimetry prior to a trial of vaginal delivery after a previous caesarean section between May 2001 and October 2003. Sagittal inlet, Transverse inlet, interspinous diameter, sagittal outlet and transverse outlet diameters were measured in all patients. The mean diameters were stratified according to delivery modality [vaginal delivery or caesarean section]. The outlet index [sum of interspinous, sagittal outlet and intertuberous diameters], biparietal diameter of the foetus and head circumference were compared in women who delivered by caesarean section or vaginally. All the diameters except sagittal inlet, were significantly larger [P < 0.05] in women who delivered normally as compared with those who had a caesarean section for any indication. The mean outlet index in the spontaneous delivery group with vertex presentation 31.89 +/- 2.05, was significantly larger than that of the elective and emergency caesarean section, which were 29.69 +/- 1.85 and 30.62 +/- 1.80 respectively. The mean head circumference was also found to be significantly larger in the caesarean section deliveries. An outlet index of 31.89 +/- 2.05 and the pelvic diameters, transverse inlet 12.56 +/- 0.80cm, sagittal outlet 10.54 +/- 1.00 cm, interspinous diameter10.46 +/- 0.89cm, and intertuberous diameter [transverse outlet] 10.89 +/- 1.02cm are useful cut-off points for vaginal delivery in our population.

**Trigonella**

**Antineoplastic effect of Fenugreek [Trigonella Foenum Graecum] seed extract against acute myeloblastic leukemia cell line [KG-1].**

Alizadeh, Shaban; Jahanmehr, Seyed Abdol Hamid; Ardjomand, Ali Reza; Rezaian, Mostafa; Dargahi, Hosejn; Einolahi, Nahid; Sadrossadat, Monjreh
E-mail:aHzodehs@slna.tums.ac.lr
Tehran University of Medical Sciences - Faculty of Allied Medical Sciences - Hematology and Blood Banking department
IJBC - Iranian Journal of blood and Cancer 2009; 1 (4): 139-146 (50 ref.)

**Keywords:** Plant Extracts-therapeutic use; Leukemia, Myelocytic, Acute-drug therapy; Treatment Outcome; Apoptosis; Antifibrinolytic Agents

**Abstract:** Treatment of cancer patients using conventional chemotherapy causes serious side effects and, at best, merely extends the patient's lifespan by a few years. The potential of alternative therapies may therefore be of great benefit in cancer control. The effect of Trigonella Foenum Graecum seed extract has been previously reported on
some neoplastic cells. Here, its effect is evaluated on human acute myeloblastic leukemia cell lines. The cell line KG-1 was treated with various concentrations of Fenugreek seeds extract with various durations. Cellular enumeration, viability test, staining and light microscopy, and apoptosis induction were evaluated. Results showed significant cytotoxic effect of Fenugreek seeds extract against this cell line which resulted in growth inhibition, cell death and morphological changes. Apoptosis induction was not considerable. Fenugreek seeds extract did not change the count and morphology of normal lymphocytes. Applying herbal medicines could be an effective and safe treatment for leukemia. To our knowledge, this is the first study that suggests significant chemotherapeutic effects of Fenugreek seeds against these cell lines.

**Tuberculosis, Meningeal**

**Diagnosis**

**Modified kenneth jones criteria for diagnosing tuberculous meningitis in children.**

Anwar, Muhammad; Ahmad, Ameer; Ahmad, Fiaz; Mazhar, Attaullah

*JCPSP - Journal of the College of Physicians and Surgeons Pakistan* 2010; 20 (4): 258-261 (20 ref.)

**Keywords:** Cross-Sectional Studies; Tuberculosis, Meningeal-cerebrospinal fluid; Early Diagnosis

**Abstract:** To evaluate accuracy of modified Kenneth Jones scoring criteria (MKJSC) as a screening tool to diagnose tuberculous meningitis in children. Cross-sectional study. Paediatric Medicine, Unit-1, Bahawal Victoria Hospital, Bahawalpur, from May 2006 to March 2007. A total of 100 children admitted through emergency in Paediatric Medicine, Unit-I, were included who were having fever and features suggestive of central nervous system (CNS) infection. Lumbar puncture was done in all patients after written consent. Findings of lumbar puncture were taken as gold standard for the diagnosis of IBM. MKJSC was applied on each patient and accuracy determined against the gold standard. Out of 100 children, 47 were diagnosed as IBM on the basis of CSF results. All children had scored 0-7 or above according to MKJSC. A score 1-2, 3-4, 5-6 and 7 or more was obtained in 23, 25, 30 and 22 children respectively. Children who had scored 5 or more received ATT. Accuracy of MKJSC was calculated to be 91%. MKJSC is a simple and accurate tool to improve tuberculous meningitis case detection rate in children.

**Tuberculosis, Pulmonary**

**Drug therapy**

**Drug resistance pattern in multidrug resistance pulmonary tuberculosis patients.**

Rao, Nisar Ahmed; Irfan, Muhammad; Soomro, Mir Muhammad; Mehfooz, Zeeshan

E-mail:nisar.rao@aku.edu

*Ojha Institute of Chest Diseases - Department of Pulmonology*


**Keywords:** Tuberculosis, Multidrug-Resistant; Retrospective Studies; Microbial Sensitivity Tests

**Abstract:** To evaluate the frequency of drug resistance profiles of multidrug resistant tuberculosis (MDR-TB) isolates of pulmonary tuberculosis patients, against both the first and the second line drugs. An observational study. The multidrug resistant tuberculosis (MDR-TB) ward of Ojha Institute of Chest Diseases, Karachi, from 1996 to 2006. Culture proven MDR-TB cases (resistant to both isoniazid and Rifampicin) were retrospectively reviewed. Susceptibility testing was performed at the clinical laboratory of the Aga Khan University. Sensitivity against both first and second line anti-tuberculosis drugs was done. Susceptibility testing was performed using Agar proportion method on enriched middle brook 7H10 medium [BBL] for Rifampicin, Isoniazid, Streptomycin, Ethambutol, Ethionamide, Capreomycin and Ciprofloxacin. Pyrazinamide sensitivity was carried out using the BACTEC 7H12 medium. During the study period MTB H37Rv was used as control. Out of total 577 patients, all were resistant to both Rifampicin and Isoniazid [INH]. 56.5% isolates were resistant to all five first line drugs. Resistances against other first line drugs was 76.60% for Pyrazinamide, 73% for Ethambutol and 68.11% for Streptomycin. Five hundred and ten [88%] cases were MDR plus resistant to one more first line drug. Forty [07%] isolates were MDR plus Quinolone-resistant. They were sensitive to Capreomycin but sensitivity against Amikacin and Kanamycin were not tested. There were high resistance rates in MDR-TB to remaining first line and second line drugs. Continuous monitoring of drug resistance pattern especially of MDR isolates and treatment in specialized centers is a crucial need for future TB control in Pakistan.
Tumor Lysis Syndrome

etiology

Spontaneous tumor lysis syndrome: a case report and review of literature.
Hashem, Ashraf Ahmed Hussein; Dowod, Tarek Abdel Hameed Mostafa; Abdelmajeed, Mohsen Mahmood
E-mail:alsaadani64@hotmail.com
Ministry of Health - Adan Hospital - Medical Department
Pakistan Journal of Medical Sciences 2010; 26 (2): 458-463 (19 ref.)
Keywords: Tumor Lysis Syndrome-diagnosis; Tumor Lysis Syndrome-drug therapy; Kidney Failure-etiology; Hyperkalemia; Uric Acid-blood; Prostatic Neoplasms-complications
Abstract: We report a case of spontaneous tumour lysis syndrome [STLS] in a patient with disseminated hormonal refractory cancer prostate. Tumour lysis syndrome [TLS] complicating Non-Hematological malignancy is infrequent and STLS is a very rare occurrence in solid tumor. Clinicians should keep in mind the possibility of STLS in patients with solid tumor and should have the experience to interpret the clinical and laboratory tests to identify it and rapidly initiate its management.

Urinary Bladder Neoplasms

genetics

CTLA-4 Exon one +49 A/G gene variants in patients with superficial and invasive bladder cancer: a study in southern Iran.
Aminsharifi, Alireza; Ghaderi, Abbas; Naeimi, Siroms; Khezri, Abdolaziz; Agahi, Neda; Aminiarr, Amir; Zamiri, Nima
Shiraz University of Medical Sciences - Department of Urology
Keywords: Urinary Bladder Neoplasms-immunology; Antigens, CD; Polymorphism, Genetic; Genotype
Abstract: Cytotoxic T-cell lymphocyte antigen 4 [CTLA-4] is a member of the superfamily of immunoglobulins that are mainly expressed by activated T cells. It is established that blockade of CTLA-4 receptors leads to the enhancement of an immune response. Different polymorphisms of the CTLA-4 gene have been described which cause increased susceptibility to various malignancies such as lymphoma or multiple myeloma. Considering that bladder cancer is one of the most prevalent cancers worldwide, we have evaluated the role of CTLA-4 gene polymorphism at position +49 A/G in the formation or progression of bladder cancer in southern Iran. A total of 226 individuals between February 2005 and June 2006 were included and placed into two subgroups: patients diagnosed with bladder cancer and a control group. Demographic data and risk factors were collected from both groups. The DNA of all subjects was extracted from their blood samples. Different genotypes of the CTLA-4 gene were determined using the restriction fragment length polymorphism [RFLP] technique and data were compared in both groups by using Pearson's chi-square test. The prevalence of AA, AG and GG genotypes at position 49, according to the PCR-RFLP method, were 57.5%, 37.2% and 5.3% in the control group, respectively. In the patient group, the prevalence of these genotypes was: AA in 57.5%, AG in 32.7% and GG in 9.8%. Statistical analysis of data showed no significant difference in both groups [P value=0.40]. Also there was no correlation between different genotypes of the CTLA-4 gene and invasiveness of the disease in our cases. Although polymorphism of the CTLA-4 gene at position 49 of exon-1 increases susceptibility to several malignancies, our study showed no relationship between polymorphism at this position and genetic susceptibility to the development of bladder cancer, nor was there any association with disease progression.

Urinary Diversion

methods

Outcomes of transurethral and suprapubic urinary diversion following hypospadias repair in children.
Osifo, Osarumwense David; Azeez, Abiodun Luqman
E-mail:Leadekso@yahoo.com
University of Benin - Teaching Hospital - Paediatric Surgery Unit
Pakistan Journal of Medical Sciences 2010; 26 (2): 329-334 (18 ref.)
Keywords: Hypospadias-surgery; Treatment Outcome; Prospective Studies; Cystostomy
Abstract: To determine the outcomes and efficacy of transurethral urinary diversion/stenting with size six feeding
tube and that of suprapubic cystostomy after hypospadias repair in children. An 8-year prospective experience at the University of Benin Teaching Hospital on the outcomes of suprapubic urinary diversion [2000-2002] and transurethral diversion/stenting [2003-2007] after hypospadias repair in children. During the study period, a total of 196 children had urinary diversion following hypospadias repair, 69 [35.2%] suprapubic and 127 [64.8%] transurethral. They were aged between 6 months and 12 years. Children who had transurethral diversion were relatively younger [mean age 2.3 +/- 2.1 years] compared to suprapubic [3 +/- 3.8 years]. Although anchorage to the glans penis and bed restriction in 115 [93.6%] children were required, urinary diversion was more effective, postoperative complications were rare, no trigone irritation, and excellent cosmetic results [121 [95.3%]] were recorded following transurethral diversion with a size six feeding tube. Conversely, the creation of suprapubic cystostomy increased operation and hospitalization duration with higher incidences of trigone irritation, 28 [4.6%], fistula formation, 18 [26.1%], catheter blockage, 10 [14.5%], soiling of operation site with urine and fewer number of children [48 [69.6%]] with excellent cosmetic results. Transurethral urinary diversion/stenting with a size six feeding tube was very effective and gave better results than suprapubic cystostomy. The feeding tube is cheap, readily available and may provide a better means of post hypospadias repair urinary diversion in children where an ideal transurethral paediatric catheter is not available.

**Urological Manifestations**

Prevalence of lower urinary tract symptoms among men in a rural district of western Turkey.

Unsal, Alaettin; Ayranci, Unal; Tozun, Mustafa
Eskisehir Osmangazi University - Medical Faculty - Public Health Department

**Pakistan Journal of Medical Sciences** 2010; 26 (2): 294-299 (28 ref.)

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

**Abstract:** The aim was to determine the prevalence of lower urinary tract symptoms [LUTS] in men aged 40 years or older, as well as to compare characteristics of patients with and without LUTS. The paper is a cross-sectional survey conducted on men with LUTS in a district of western Turkey between November 1st and December 31st. The questionnaire was filled in by a face to face method, and consisted of the men’s socio-demographic characteristics, LUTS related characteristics, and the questions pertaining to international prostate symptom score [IPSS]. The prevalence of LUTS was 51.5%. The comparative analyses between patients who had and those who did not have LUTS showed that patients in settlement area Kaymaz, those aged 70 and over, those with primary school education and below, those who were married, those who had recurrent UTI, those who were using medicines continuously, those with a history of previous surgery, those with family history of LUTS had a higher prevalence of LUTS. In conclusion the number of the respondents having LUTS was common among men in this region of Turkey.

**Uterine Prolapse**

Evaluation of a modified surgical technique for correction of vaginal and uterine prolapse in bovine.

Hussien, M.M.; Abdel Fattah, M.; Khalil, A.A.Y.; Sedeek, A.M.
Beni-Suef University - Faculty of Vet. Medicine - Department of Theriogenology

**Veterinary Medical Journal** 2009; 57 (1): 115-131 (47 ref.)

**Keywords:** Pelvic Organ Prolapse-surgery; Cattle Diseases

**Abstract:** This study was carried out on 81 cows [48 vaginal and 33 uterine prolapses] and 83 buffalo-cows [53 vaginal and 30 uterine prolapses] belonging to 8 commercial dairy farms located in Beni-Suef, El-Menia and El-Fayoum provinces in the period from January 2006 to December 2008. A modified surgical technique and epidual analgesic regimen were applied on the investigated animals and compared with the field traditionally used technique. A total of 81 cases of prolapses from 3330 calveings [243%] were recorded, 48 cases [1.44%] of them were vaginal prolapse and 33 cases [0.99%] were uterine prolapse. Concerning buffalo cows, out of 1680 calvings, a total of 83 cases [4.94%] had prolapses, including 53 cases [3.15%] vaginal prolapse and 30 cases [1.78%] uterine prolapse. The incidence of reproductive tract prolapse was higher in multiparous aged cows [93.75% and 87.88% vaginal and uterine prolapse, respectively] than in primiparous cows [6.25% and 12.12% vaginal and uterine prolapses, respectively] and also higher in cows with poor body condition scores [1.66% vaginal and 1.10% uterine] than in well fed animals with good body condition score [1.05% vaginal and 0.91% uterine]. Buffalo cows showed the same trend. About 4.583% of cows with vaginal and 33.33% of cows with uterine prolapse were previously suffered from vaginal prolapse, while only 16.66% of cows with vaginal and 12.12% of those with uterine prolapse were previously suffered from uterine prolapse. This indicated that uterine prolapse is not a heritable condition, and it is not likely to reoccur, and there is no need to cull the cow as long as she breeds back, controversial to vaginal prolapses that reoccur and are heritable and needs culling of the cow and her heifer offspring. The investigated fertility parameters in unaffected animals were better than females affected with prolapses, although better non significant differences were detected with modified method than traditional ones. The incidence of postoperative complications in groups of animals treated with the modified technique were significantly [p<0.01] lower than in animals treated with traditional technique. Concerning the survival rate of the affected animals, higher percentages were recorded after using the modified technique. In general, the prognosis was
favorable for uncomplicated cases. In conclusion, early hygienic interference and prompt treatment using the modified technique may be imperative to improve the prognosis by reducing the postoperative complications and increasing the future fertility of affected animals.

Venous Thrombosis

genetics

Methylenetetrahydrofolate reductase C677T mutation and 4G/5G plasminogen activator inhibitor-I polymorphism in a child with deep vein thrombosis.
Eshghi, Peyman; Pour, Kourosh Goudarzi; Aghakhani, Roxana
E-mail: peyman64@yahoo.com
Shaheed Beheshti University of Medical Sciences - Department of Pediatric Hematology/Oncology
Keywords: Venous Thrombosis-enzymology; Plasminogen Activator Inhibitor 1-genetics; Polymorphism, Genetic; Mutation-genetics

Vesicovaginal Fistula

etiology

Intra vaginal wooden foreign body causing multiple internal fistulae and bladder stone in a 12 years girl.
Jan, Iftikhar Ahmad; Arif, Khurrum; ul Haq, Anwar; Gondal, Mudassar; Orakzai, Hazratullah
E-mail: iftikharjan@gmail.com
National Institute of Rehabilitation Medicine - Department of Pediatric Surgery
Pakistan Journal of Medical Sciences 2010; 26 (2): 470-473 (10 ref.)
Keywords: Foreign Bodies-complications; Vagina-pathology; Urinary Bladder Calculi
Abstract: Vaginal foreign bodies in girls may be accidental, self-inflicted or secondary to child abuse. These may cause a number of complications like Infections, abscess formation, intestinal perforation, vaginal discharge and internal fistulae. We are presenting a case of a 13 years old girl who presented with a supra-pubic mass and dysuria. X-ray showed a radio-opaque shadow in pelvis. The child was admitted in medical ward with the diagnosis of bladder stone and UTI. She was pouring frank pus from the vagina. On rectal digital examination a hard foreign body was felt in the rectum. Investigations revealed that she had a large pelvic collection, a sharp wooden Foreign Body [FB] extending from the rectum through the vagina in to the urinary bladder forming a bladder stone. Patient also developed recto-vaginal and vesico-vaginal fistulae. Foreign body was removed along with the bladder stone, pelvic abscess drained and colostomy was performed. Later repair of vesico-vaginal fistula were performed, recto-vaginal fistula closed spontaneously and colostomy closed. Patient became fully continent for urine and feces after completion of surgical procedures. A careful history from the child revealed that she had inserted the foreign body herself as a self-exploring practice.

Profile of women who experienced vesicovaginal fistula due to obstetric trauma.
Rafi, Junaid
E-mail: drjunaidrafi@hotmail.com
Department of Obstetrics and Gynaecology
Pakistan Journal of Medical Sciences 2010; 26 (2): 499 (1 ref.)
Keywords: Wounds and Injuries; Delivery, Obstetric-adverse effects; Correspondence as Topic

Wounds and Injuries

Injury patterns from road traffic accidents.
Khan, Zaka U.; Al Asiri, Khaled M.; Iqbal, Javaid
E-mail: zaka@doctors.org.uk
Armed Forces Hospital - Department of Trauma and Orthopaedics
Pakistan Journal of Medical Sciences 2010; 26 (2): 394-397 (9 ref.)
Keywords: Accidents, Traffic; Prospective Studies; Causality
Abstract: To report the pattern of injuries from high speed road traffic accidents [RTA] in the Southern Region of Saudi Arabia. In this prospective criteria based one year study; data was collected upon arrival of patients to the
accident and emergency department. The patients were grouped into two, with fractures [Group-1] and without [Group-2]. A total of 1513 patients were included, 628 in Group-1 and 885 in Group-2. There were 1356 male and 157 female patients in total. Majority were in the younger age group, drivers and front seat passengers. Fewer were using restraints and more reported driving with high speeds in group-1 compared to group-2. Most accidents occurred during 12:00 hrs to 24:00 hrs in both groups. Although most of the causative factors of Road traffic accidents in this region of Saudi Arabia are similar to the rest of the world; some remain unique to the region.
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*Last update June 2011*
Appendix III

List of EMR Journals Indexed in IMEMR

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_Last update June 2011_