Index Medicus for the WHO Eastern Mediterranean Region
with Abstracts

IMEMR Current Contents
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IMEMR Current Contents

Rationale

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

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

Scope and Coverage

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

Indexing Level

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

Organization of the IMEMR

The main body of the Index

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

Author Index

The IMEMR includes the author’s index which also indicates the subjects covered by each author.

Computer facilities

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

Availability of photocopies

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

Availability on the Internet

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

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1 Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen
Abstract: To study the correlation between enzyme linked immunosorbent assay [ELISA] and 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.

Keywords: Arthritis, Rheumatoid-diagnosis; Lupus Erythematosus, Systemic-diagnosis; Enzyme-Linked Immunosorbent Assay; Crithidia; Fluorescent Antibody Technique
Subject Index
Abdomen, Acute

diagnosis

Diagnostic laparoscopy in acute abdominal pain: 5-year retrospective series.
Al Bareeq, Reem; Bin Dayna, Khalifa
Bahrain Medical Bulletin 2007; 29 (2): 50-52 (16 ref.)
Keywords: Abdomen, Acute-etiology; Abdominal Pain-diagnosis; Abdominal Pain-etiology; Laparoscopy; Retrospective Studies
Abstract: In acute abdomen, sometimes it is difficult to achieve diagnosis by the traditional method of investigation and policy of "Wait and See." To analyze the efficacy of diagnostic laparoscopy in acute abdominal pain. Surgical department, Salmaniya Medical Centre. Retrospective study. A study of 100 consecutive cases of acute non-specific abdominal pain between September 1995 and June 2000 who had diagnostic laparoscopy. The personal characteristics were recorded along with pre-operative diagnosis and final diagnosis. The presenting symptoms and any therapeutic procedure performed were noted. One hundred patients had diagnostic laparoscopy within 48 hours of admission due to acute non-specific abdominal pain. There were 18 males and 82 females. The mean age of this group was 31 ranging from 16 to 62 years. The patients presented with various complaints which included abdominal pain in 39, pain and anorexia in 14, abdominal pain with anorexia and vomiting in 34, abdominal pain and fever in 11 and abdominal mass in 2 patients. The mean hospital stay was 3.9 days +/- 2 days [1-15 days] and the average operative time was 56.8 minutes [35-127 minutes]. A definitive diagnosis was achieved in 98 patients [98%] using diagnostic laparoscopy. Two patients had to be converted to formal open laparotomy. A therapeutic laparoscopic procedure was performed in 78 patients. The laparoscopic findings were acute appendicitis in 73 patients, pelvic inflammatory disease in 14, significant ovarian cysts in 7, endometriosis in 3, ectopic pregnancy in 2 and Meckel's diverticulitis in 1. In this study, the diagnosis was achieved through laparoscopy in 98% of cases.

Abdominal Pain

etiology

The role of endoscopy in childhood chronic abdominal pain.
El Mouzan, Mohammad; Assiri, Asaad
E-mail: drmouzan@gmail.com
King Saud University
Keywords: Abdominal Pain-diagnosis; Chronic Disease; Endoscopy, Digestive System; Signs and Symptoms, Digestive

Accidents, Traffic

classification

Analysis of road traffic crashes data: Applying the lorenz curve and associated gini index.
Bener, Abdul Bari; Farooq, Abdul Aziz
E-mail: abener@hmc.org.qa
Hamad General Hospital and Hamad Medical Corporation - Department of Medical Statistics and Epidemiology
Keywords: Case-Control Studies; Risk Factors; Safety
Abstract: It has been suggested that the summary index of the Lorenz curve and the Gini index should be used to characterize the exposure-disease association, rather than relative and attributable risks. Nevertheless, the sampling behavior of the Gini index in epidemiological settings, and the relationship between the Lorenz curve and the usual indices of risk, need to be more deeply understood. The aim of this paper was to estimate the odds and to predict the probability of a driver responsible for a Road Traffic Crash [RTC] and road traffic injury on the selected risk factors. And further to assess how these risk factors vary by gender and visualize the exposure of risk factors by applying the Lorenz curve and the Gini index. This is a prospective case-control study which included 217 cases and 217 control drivers. A structured questionnaire was designed to collect demographic information like age, gender, marital status, occupation, residential area, housing conditions, driving experience, type of car, frequency of seatbelt usage, excessive speed and other violations. The Lorenz curve and the associated Gini index are applied for characterizing and testing road traffic injuries stratified by gender. We also showed that the Gini index can itself be interpreted as a probability related to temporal clustering. In conclusion, with the increasing demand for computer technology the proposed method is well-suited for analyzing RTC data. Furthermore, the Lorenz curve and the Gini index can complement the information provided by relative and attributable risks.
Achillea

immunology

Three phenolic glycosides and immunological properties of Achillea millefolium from Iran, population of Golestan.
Yassa, N.; Saeidnia, S.; Pirouzi, R.; Akbaripour, M.; Shafiee, A.
E-mail:yasa@tums.ac.ir
Tehran University of Medical Sciences - Faculty of Pharmacy and Medicinal Plant Research Center - Department of Pharmacognosy
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 49-52 (17 ref.)
Keywords: Glycosides; Asteraceae; Flavonoids; Antibody Formation; Mice; Plant Extracts; Phenols

Acne Vulgaris

etiology

Acne.
Samir, Nafisa
E-mail:nafisa.samir@aku.edu
Aga Khan University - Department of Family Medicine
Keywords: Acne Vulgaris-classification; Acne Vulgaris-therapy; Pregnancy; Patient Education; Retinoids-therapeutic use; Anti-Infective Agents; Isotretinoin
Abstract: Acne is one of the commonest dermatological problems encountered in outpatient clinics. It is often associated with significant psychological trauma. The psychological effects can lead to problems like social withdrawal, lack of self confidence and sometimes even unemployment. If not addressed appropriately and promptly, acne scars can be long lasting. Therefore it is important for family physicians to educate patients about available treatment options and their expected outcomes. Topical retinoids, benzoyl peroxide and azelaic acid are effective in patients with mild to moderate comedonal acne. Topical erythromycin or clindamycin can be added in patients with mild to moderate inflammatory acne or mixed acne. A six-month course of oral erythromycin, doxycycline, tetracycline, or minocycline can be used in patients with moderate to severe inflammatory acne. Hormonal therapy is also an option in patients with moderate to severe acne. Systemic retinoids are reserved for the treatment of the most severe or refractory cases of inflammatory acne due to their poor side effect profile.

Acquired Immunodeficiency Syndrome

prevention and control

Peer education vs. health provider education in knowledge and attitude about prevention and transmission of AIDS in high school students.
Abbaspour, Zahra; Saidian, Marzeh; Abedi, Parvin
E-mail:Abbaspour_z@yahoo.com
Ahwaz Jondishapour University of Medical Sciences - Department of Nursing and Midwifery
Pakistan Journal of Medical Sciences 2007; 23 (1): 108-110 (10 ref.)
Keywords: Health Knowledge, Attitudes, Practice; Education; Adolescent; Peer Group; Students; Schools
Abstract: To compare knowledge and attitude of high school students who have thought about prevention and transmission of AIDS by peer group and health provider. This is an experimental study carried out on 417 students from six urban schools in Kerman. Group-1[n=212] received peer education, and group 2 [n=205] experiences health education. Both groups were administered, survey at three times: pre intervention and post intervention immediately after four and 6 weeks after the first post test. For both the groups eight sessions were organized about AIDS in 4 weeks. Every session lasted 30 minutes. Independent sample T test and repeated measure ANOVA were conducted to assess at baseline and after 4 and 6 weeks. Both groups had significant improvement in knowledge and attitude [p=0.000] and it was highly significant in peer education group [p=0.000]. Six weeks follow up after intervention showed that peer education was better than health provider education [p=0.000]. Education increases the knowledge and improves attitude of students about prevention and transmission of AIDS. Peer education is a more effective method than health provider for AIDS education in adolescent.
Adenylate Cyclase

Role of protein kinase C in substance P-Induced synaptic depression in the nucleus accumbens in vitro.
Matowe, W.C.; Ananthalakshmi, K.V.V.; Kombian, S.B.
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Kuwait University - Faculty of Pharmacy - Department of Pharmacy Practice, Health Science Center

Medical Principles and Practice 2007; 16 (2): 90-99 (46 ref.)
Keywords: Protein Kinases; Rats; Nucleus Accumbens; Cyclic AMP; Synaptic Transmission; Substance P; Neurotransmitter Agents

Abstract: This study set out to determine the roles of protein kinase A [PKA] and protein kinase C [PKC] signalling cascades in substance P- [SP-] mediated synaptic depression in the nucleus accumbens. We used whole-cell patch recording in rat forebrain slices to study the effects of excitatory and inhibitory modulators of PKA and PKC to determine their effects on SP-induced synaptic depression. We showed that cAMP and PKC, but not PKA, are involved in SP-induced synaptic depression. Bath application of SP [1 micro M] depressed evoked excitatory postsynaptic currents [EPSCs] by -27.50 +/- 5.6% [n = 8]. Pretreatment of slices with 10 micro M forskolin or rolipram prevented SP [1 micro M] from depressing evoked EPSCs [-0.8 +/- 6.7%, n = 6; p > 0.05 and 1.6 +/- 5.6%, n = 8; p > 0.05, respectively]. Furthermore, 8-bromo cAMP [1 mM] also blocked the effect of SP [-0.5 +/- 14.8, n = 4, p > 0.05]. However, H-89 [1 micro M] did not block the SP-induced synaptic depression [-32.3 +/- 4.0%, n = 4, p < 0.05]. By contrast, PKC inhibitors bisindolylmaleimide [1 micro M; 4.0 +/- 5.1%, n = 6; p > 0.05] and calphostin C [400 nM; -6.7 +/- 6.5%, n = 4, p > 0.05] both blocked SP-induced synaptic depression. Phorbol dibutyrate caused a synaptic depression of -33.0 +/- 5.0% and abolished the effect of SP [1 micro M, -5.9 +/- 8.6%, n = 4, p > 0.05]. Our findings demonstrate that PKC and cAMP are involved in SP-induced synaptic depression while PKA is apparently not involved. Involvement of multiple signalling pathways may reflect the fact that SP uses several intermediates to depress EPSCs.

Air Pollution

adverse effects

Estimation of number of death associated with exposure to excess ambient PM[10] air pollution.
Giri, D.; Murthy, V.K.; Adhikary, P.R.; Khanal, S.N.
Kathmandu University - Department of Mathematical Sciences
International Journal of Environmental Science and Technology 2007; 4 (2): 183-188 (8 ref.)
Keywords: Mortality; Air Pollutants; Particulate Matter

Abstract: The respirable particle matter [PM10] concentration in urban areas has been a chronic cause concern and principal reason for increased morbidity rate among resident population. The present study aimed at estimating a discrete event like mortality rate associated and attributable to excess particulate matter pollution in the Kathmandu Valley area. The Government of Nepal conducts air monitoring of particulates at its air monitoring site network covering valley area. Adopting the data available with respect to PM10 and with several other considerations like cutoff value for PM10, mean annual concentration, demographic data of valley, exceedance to the reference cutoff value, attributable fraction evolution and computation relative risk attributable to PM10 was computed. Assumption was made about the relative risk of long-term average PM10 exposure on natural mortality estimated and reported from a previous study. The estimation or mortality rate in our case was 0.95% after all these considerations and computation. This implies that 95 deaths out of 10,000 deaths are due to particulate pollution existing in the Kathmandu Valley Area.

Alanine Transaminase

blood

Evaluation of abnormal liver tests in an asymptomatic patient.
Ahmed, Furqaan
E-mail:furqaan@hotmail.com
University of California Davis Medical Center - Division of Gastroenterology and Hepatology
Keywords: Aspartate Aminotransferases-blood; Liver Function Tests; Alkaline Phosphatase; Liver Diseases-diagnostics

Abstract: Abnormal liver tests are often discovered incidentally in asymptomatic individuals who undergo routine liver testing. Mild liver test abnormalities may be of limited clinical significance or may reflect significant underlying liver disease. In the evaluation of a patient with abnormal liver tests, a thorough history, physical examination, and recognition of patterns of liver test abnormalities may help narrow the differential diagnosis and allow focused and cost effective diagnostic testing to identify the most likely cause of liver injury. The most common causes of transaminase elevations include viral hepatitis, nonalcoholic fatty liver disease [NAFLD] and drug and alcohol-induced liver injury. Patients with persistent unexplained liver test abnormalities, advanced liver disease, and liver disease requiring specialized management should be referred to a gastroenterologist.
**Alzheimer Disease**

**physiopathology**

Decreased handgrip strength and increased hip osteoporosis in patients with Alzheimer's disease.

Ayhan, Figen; Soyupek, Feray; Tonuk, Burak; Gokoglu, Figen; Yorgancioglu, Rezan

E-mail: figenardic@gmail.com

Ankara Education and Research Hospital - Department of Physical Medicine and Rehabilitation

Neurosciences 2007; 12 (2): 140-144 (32 ref.)

**Keywords:** Hand Strength; Osteoporosis; Hip Joint; Case-Control Studies; Depression

**Abstract:** To evaluate the causes of disability in the musculoskeletal system, and depression in patients with Alzheimer's disease [AD] and healthy controls. A case-controlled study in which healthy elderly patients [n=56] and patients with AD [n=75] attending the Geriatric Rehabilitation Unit of Ankara Education and Research Hospital, Department of Physical Medicine and Rehabilitation were compared on several measures of disability including handgrip strength, knee x-rays graded for osteoarthritis, dual-energy x-ray absorptiometry results for osteoporosis, and depression scores in the training period of 2003-2004. Handgrip strength values were significantly lower in patients with AD compared to the controls [19.4 versus 37 pounds force]. Osteoporosis in the femoral neck was also more prominent in patients with AD compared to controls [T-scores: -2.1 versus -1.2]. Handgrip strength was moderately correlated with femoral neck T-scores [r=0.6, p=0.001]. Strategies should be developed to protect patients with AD from osteoporosis and reduced muscle strength.

**Amyloidosis**

Pulmonary amyloidosis in a patient with lymphocytic interstitial pneumonia.

Ahamed, Mohamed Firoze; Giampitri, E.A. Zevallos; Al Shamy, Abdul Rahman

E-mail: dr_firoze@yahoo.com

King Abdulaziz Medical City - King Khalid National Guard Hospital - Medical Imaging

Annals of Saudi Medicine 2007; 27 (1): 40-44 (10 ref.)

**Keywords:** Lung Diseases, Interstitial; Tomography, X-Ray Computed; Immunohistochemistry; Plasma Cells

**Anesthesia Recovery Period**

Comparison of recovery after anesthesia with remifentanil infusion versus halothane in children undergoing strabismus surgery.

Parish, Masoud; Mahmoodpoor, Ata; Rasuli, Susan; Asadnasab, Sheida; Sanaie, Sarvin

Nikookary Hospital - Department of Anesthesiology and Intensive Care

Neurosciences 2007; 12 (2): 120-123 (15 ref.)

**Keywords:** Strabismus-surgery; Child; Halothane; Piperidines; Anesthetics, Intravenous; Prospective Studies; Double-Blind Method

**Abstract:** To compare recovery after anesthesia with remifentanil infusion versus halothane for strabismus surgery. This study was performed from September 2004 to March 2005 in Tabriz Nikookary Hospital, Tabriz, Iran on children aged 2-12 years scheduled for strabismus surgery randomized in to 2 groups of 25 patients each: the H group in which anesthesia was maintained with halothane and the R group in which anesthesia was maintained with remifentanil. There was no meaningful difference in extubation time after discontinuing drugs between the 2 groups [p=0.14]. However, there was a significant difference in the time of purposeful movements, proper oxygenation, consciousness, and discharge from the post anesthetic care unit between the 2 groups, all being shorter in group R. Also in group R, the time to spontaneous breathing return was longer, cases of neuromuscular reversal were fewer and cases of limb movements were more than group H. Maintenance of anesthesia with remifentanil in children aged 2-12 years undergoing strabismus surgery provided desired hemodynamic status and shorter time of discharge criteria.

**Antibodies, Antinuclear**

**immunology**

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

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

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

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

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

**Abstract:** To study the correlation between enzyme linked immunosorbent assay [ELISA] and immunofluorescent [IF] anti-dsDNA antibody measurement in different diseases. One hundred and forty sera from patients with systemic lupus erythematosus [SLE, n=40], rheumatoid arthritis [RA, n=30], disease control [n=40] and from healthy control
subjects \(n=30\) were included. Using the ELISA, serum anti-dsDNA was detected in 24/40 [60\%] SLE, 5/30 [16.6\%] RA, 9/40 [22.5\%] disease controls and 1/30 [3.3\%] of normal healthy controls. When IF assay was employed, anti-dsDNA 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-dsDNA antibodies in clinical laboratories and, these antibodies are not unique to SLE.

**Antibodies, Antiphospholipid**

**blood**

High frequency of IgM antiphospholipid antibodies in young Iranian patients with stroke.

Saadatnia, Mohammad; Zare, Mohammad; Haghighi, Sassan; Tajmirriahi, Marzieh; Hovsepian, Silva

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Isfahan University of Medical Sciences and Health Services - Al Zahra Hospital - Division of Neurology

*Neurosciences* 2007; 12 (2): 124-126 (31 ref.)

**Keywords:** Cerebrovascular Accident-immunology; Brain Ischemia; Immunoglobulin G; Immunoglobulin M; Antibodies, Anticardiolipin

**Abstract:** To investigate the presence of IgG and IgM types of anticardiolipin [aCL] and antiphospholipid [aPL] antibodies in younger Iranian patients with ischemic stroke. Both IgG and IgM types of aPL [cardiolipin, anti phosphatidyl inositol, anti phosphatidyl serine, anti phosphatidic acid and beta 2-glycoprotein I [B2-GPI]] and aCL alone [cardiolipin and B2-GPI] were measured in 117 patients with ischemic stroke [aged <45 years] during an 18-month period from September 2002 to March 2004 in Al-Zahra Hospital, Isfahan, Iran. The demographic, clinical, and laboratory characteristics of patients with a positive titer were recorded. Seven men and 16 women [23 patients, 19.6\%] had increased IgG types of aPL antibodies. Increased titers of IgM and IgG were found in 19 [82.6\%] and 6 [26\%] patients for aPL antibodies and in 15 [83.3\%] and 8 [44.4\%] cases for aCL alone. Despite European studies, high titers of IgM aPL antibodies found in a large number of patients can be caused by the presence of unknown triggering factors [infections or poisons], that are more prevalent in developing countries compared to developed countries. This hypothesis remains to be investigated further.

**Anticonvulsants**

**adverse effects**

Tiagabine induced non-convulsive status epilepticus in a patient without history of epilepsy.

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*Neurosciences* 2007; 12 (2): 152-154 (15 ref.)

**Keywords:** Status Epilepticus-chemically induced; Nipecotic Acids; Epilepsy

**Abstract:** Cases of non-convulsive status epilepticus [NCSE] induced by tiagabine [TGB] were occasionally reported. Almost all had a prior history of epilepsy. We describe here, the clinical and EEG findings in a patient, without history of seizures, who after the start of TGB developed NCSE. A 53-year-old man with history of paranoid schizophrenia, presented with “alteration of his mental state”. Three weeks early, TGB was added to his psychiatric regimen. On the second day of admission, he became unresponsive with a blank stare. Concomitant EEG showed abundant sharp and slow wave complexes. The episode lasted for 4 hours and was aborted by the intravenous administration of lorazepam. The TGB was discontinued without recurrence of subsequent seizure activity. This case supports the contention that TGB can induce NCSE in subjects not previously known to have seizures.

**Antitubercular Agents**

**toxicity**

Hepatotoxicity with antituberculosis drugs: The risk factors.

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*Pakistan Journal of Medical Sciences* 2007; 23 (1): 33-38 (30 ref.)

**Keywords:** Liver-drug effects; Tuberculosis; Risk Factors; Prospective Studies; Cohort Studies

**Abstract:** To assess the severity and frequency of hepatotoxicity caused by different antituberculosis [ATT] drugs and to evaluate whether concurrence of risk factors influence the antituberculosis drug induced hepatotoxicity. This prospective cohort study was conducted in Medical Unit-V and OPD department of Civil Hospital Karachi from July 2004 to July 2005. A total of 339 patients diagnosed of active tuberculosis infection with normal pretreatment liver function were monitored clinically as well as biochemically. Their data were collected on proforma and patients were treated with Isonized, Rifampicin and Pyrazinamide. Duration after which derangement in function, if any, occurred and time taken for normalization was noted. Treatment was altered as needed, with exclusion of culprit drug.
Finally data was analyzed by SPSS version 10.0. ATT induced hepatotoxicity was seen in 67 [19.76%] out of 339 patients. Females were more affected as compared to males [26.3% vs. 19.7%]. BMI [kg/m2] of 91% of diseased group were less than 18.5 [p<0.01] most of them were anemic having low albumin level suggestive of lean body mass. Hepatotoxicity was more severe in AFB smear positive patients. Concomitant use of alcohol, paracetamol and low serum cholesterol were proved as predisposing factors. Isoniazid [37 patients [55.21%], p<0.01] was the main culprit followed by Rifampicin [23 patients, 34.21%] and Pyrazinamide [7 patients, 10.5%]. Most of the patients [61%] developed the hepatotoxicity within two weeks of starting antituberculosis therapy with mild to moderate alteration in ALT and AST. ATT-induced hepatitis is significantly more frequent and more severe in patients with hepatotoxicity risk factors.

Anxiety Disorders

[Serum lipids in patients with mixed anxiety depressive disorder].
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 36-41 (24 ref.)
Keywords: Lipids-blood; Depressive Disorder; Depressive Disorder, Major; Cross-Sectional Studies
Abstract: Psychiatric disorders especially depression has known association with coronary artery disease but the relationship with other psychological conditions still obscure. To evaluate the lipids profile in patients with anxiety and depressive disorder. This cross-sectional study was performed on 100 patients arranged in four groups using random sampling. Group 1 [25 patients] with major depressive disorder; group 2 [25 patients] with generalized anxiety disorder; group 3 [25 patients] with mixed anxiety and depression; and group 4 [25 patients] as control group. Data was collected using a questionnaire including demographic information, past history of patient, and also Beck and Kettel questionnaire. Blood samples were collected to measure total cholesterol, triglycerides, HDL and LDL-C. The data were analyzed using SPSS10 and t-test, X\[2\], and ANOVA tests. Out of 100 patients, 75% were females. Means of TC [226.75+/-45.35], TG [189.37+/-69.84], HDL-C [45.51+/-10.48] and LDL-C [150.35+/-36.65] were higher in mixed anxiety depressive disorder. Regarding the data obtained in our study, high lipid levels were found in mixed anxiety depressive disorder. To reduce the chance of atherosclerosis, measurement of lipids level in such patients is recommended.

Appendicitis

diagnosis

Diagnostic value of anorexia in acute appendicitis.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 68-70 (11 ref.)
Keywords: Anorexia; Abdominal Pain-etiology; Abdomen, Acute-etiology; Cross-Sectional Studies; Prospective Studies; Acute Disease
Abstract: Acute appendicitis is the most common cause of acute abdominal pain. Early diagnosis and management decrease morbidity and mortality. Diagnosis is usually based on clinical data; history and physical examination. Anorexia is present in almost all cases. In the absence of such symptoms, the probability of the disease decreases. This study was designed to determine sensitivity and specificity of anorexia in diagnosis of acute appendicitis. All cases of acute abdominal pain admitted in Shahid Rahnemoon and Aafshar hospitals Yazd Iran with primary diagnosis of acute appendicitis during 10 months were evaluated. History of anorexia was recorded and the patients were followed up to determine definite diagnosis by pathology report. Out of a total of 465 cases, 400 [86%] cases were confirmed of appendicitis. Three hundred thirty five [83.75%] of these patients and 49 [75.34%] of other patients had anorexia [P value =0.09]. Sensitivity was 83.75% and specificity was 24.61%. Positive predictive value was 87.2% and Negative predictive value was 19.8%. Anorexia increases probability of appendicitis but its absence cannot rule out diagnosis of acute appendicitis.

Arthritis, Rheumatoid

blood

Differential expression of rheumatoid factor-associated cross-reactive idiotypes in Iranian seropositive and seronegative patients with rheumatoid arthritis.
Mosayebi, Ghasem; Mageed, Rizgar A.; Gharagozloo, Soheila; Shokri, Fazel
Tehran University of Medical Sciences - School of Public Health - Department of Immunology
IBJ - Iranian Biomedical Journal 2007; 11 (1): 7-13 (32 ref.)
Keywords: Rheumatoid Factor; Arthritis, Rheumatoid-immunology; Immunoglobulin Idiotypes; Immunologic Factors
**physiopathology**

Assessment of autonomic function in patients with rheumatoid arthritis using spectral analysis and approximate entropy method.

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**Neurosciences** 2007; 12 (2): 136-139 (14 ref.)  
**Keywords:** Autonomic Nervous System; Entropy; Spectrum Analysis

**Abstract:** To assess the effect of rheumatoid arthritis [RA] on autonomic function of a group of RA patients in comparison with a normal control group by measuring the frequency gain response of the 2 groups. Also, to determine whether the duration of RA correlated with measures of heart rate variability signal [HRV] using an approximate entropy index [ApEn]. We evaluated 52 patients with RA, and 51 matched healthy subjects at the Arthritis Center, Johns Hopkins Hospital, Maryland, United States during 2004 and 2005. We measured breathing at different rates, and the HRV signal derived from ECG. The auto-power and cross power spectra between HRV signal and breathing signal at different breathing rates was calculated, and the frequency gain response for both groups was obtained. The ApEn, described as a measure of regularity of HRV, was calculated for both patients with RA and the healthy control subjects. Both frequency gain response and ApEn measure were reduced in patients with RA in comparison with the control group. The power spectra of patients with RA showed a reduced high frequency [HF] value and higher low frequency for control subjects. However, the ApEn measure was significantly reduced in longer RA duration patients. These findings suggest that the spectral analysis of HRV signal using breathing at different frequencies may detect an unbalance of the autonomic system of patients with RA, especially with increasing the sympathetic activity [higher low frequency] and reducing the parasympathetic tone [reduced frequency gain response], which can lead to sudden death in patients with RA. The ApEn may be a marker of RA stage.

**pharmacology**

[The effect of ascorbic acid on morphine withdrawal syndrome signs in rats].

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**Journal of Qazvin University of Medical Sciences and Health Services** [The] 2007; 10 (4): 25-31 (18 ref.)  
**Keywords:** Morphine Dependence; Substance Withdrawal Syndrome; Rats; Narcotics

**Abstract:** Recent studies indicate that the glutamatergic and dopaminergic systems are also involved in morphine withdrawal syndrome. Ascorbic acid [AA] released from glutamatergic neurons, modulates the synaptic action of dopamine and glutamate as well as behavior. To determine the effects of ascorbic acid on morphine withdrawal syndrome signs [MWS]. 30 Male rats [250-300gr] were tested in 5 groups as: 1] control group [n=6] received 3% sucrose in tap water; 2] dependent group received morphine [0.1, 0.2, 0.3, 0.4 mg/ml for a period of 48h, and 0.4 mg/ml for further days up to 21st day] and 3% sucrose in tap water; 3,4,5] morphine-AA groups which received morphine and AA [100, 500, 1000mg/kg IP, every 48h] for evaluating the effects of OA on MWS. At the end of training period, all groups received naloxone [2mg/kg IP] and MWS were studied for 30 minute. Our results showed that IP application of AA [100, 500, 1000 mg/kg] can remarkably attenuate many signs [but not all] of morphine withdrawal syndrome, dose dependently. Based on data obtained in present study, AA can attenuate the expression of withdrawal behaviors in rats.

**Asthma**

**physiopathology**

Expired breath condensate hydrogen peroxide concentration and pH for screening cough variant asthma among chronic cough.

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**Annals of Thoracic Medicine** 2007; 2 (1): 18-22 (50 ref.)  
**Keywords:** Cough; Hydrogen Peroxide; Hydrogen-Ion Concentration; Chronic Disease; Breath Tests; Exhalation; Cross-Sectional Studies

**Abstract:** The reported studies suggest a role for eosinophils in the pathogenesis of cough variant asthma. In the present study, the expired breath condensate level of hydrogen peroxide and pH were determined in patients with cough variant asthma and compared to subjects with classical asthma, with chronic cough nonasthmatic and healthy control. Twenty-seven patients with cough variant asthma, 43 patients with classical asthma, 32 patients with chronic cough and 27 healthy subjects were studied in a cross-sectional study. Hydrogen peroxide concentration was significantly higher in cough variant asthma as compared to chronic cough nonasthmatic patients and healthy control subjects, while pH level was significantly lower in cough variant asthma as compared to chronic cough nonasthmatic patients and healthy control subjects. However, there was no significant difference in expired breath condensate...
hydrogen peroxide and pH between cough variant asthma and classical asthma. In conclusion, hydrogen peroxide concentration and pH of expired breath condensate may be used as noninvasive markers to differentiate cough variant asthma from chronic cough.

**New insights into the pathophysiology of the small airways in asthma.**

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Keywords: Lung Diseases; Inflammation; Hypersensitivity
Abstract: Asthma is a lung disease characterized by inflammation and remodeling of the airways, which leads to airflow obstruction and symptoms of wheeze, chest tightness, cough and dyspnea. It is now widely accepted that airway inflammation and remodeling occur not only in the central airways but also in the small airways and even in the lung parenchyma. Inflammation of the distal lung can be observed even in mild asthmatics with normal or noncompromised lung function. Moreover, the small airways and the lung parenchyma can produce many Th2 cytokines and chemokines involved in initiation and perpetuation of the inflammatory process. In addition, the distal parts of the lung have been recognized as a predominant site of airflow obstruction in asthmatics. In fact, the inflammation at this distal site has been described as more severe when compared to the large airway inflammation, and evidence of remodeling in the lung periphery is emerging. Recognition of asthma as a disease of the entire respiratory tract has an important clinical significance, highlighting the need to also consider the distal lung as a target in any therapeutic strategy for effective treatment of this disease.

**Astrocytoma**

**diagnosis**

Use of AgNOR index in grading and differential diagnosis of astrocytic lesions of brain.

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Pakistan Journal of Medical Sciences 2007; 23 (2): 206-210 (30 ref.)
Keywords: Astrocytoma-pathology; Brain Neoplasms; Nucleolus Organizer Region; Glioblastoma; Neoplasm Staging; Prospective Studies
Abstract: This study was conducted to see the importance of AgNOR staining in grading and differential diagnosis of Astrocytic lesions. It was a descriptive and prospective study conducted in Department of Pathology King Edward Medical University, from June-December 2002. AgNOR staining was performed on 60 randomly selected brain specimens of Astrocytic lesions including Astrogliosis and Astrocytoma. AgNOR count, size and dispersion were normal in Astrogliosis, low in Pilocytic Astrocytoma, high in grade II, higher in grade III and highest in grade IV. AgNOR counts of different grades of astrocytoma [2.97+/–0.96, 3.97+/–0.43, 6.01+/–2.74 and 8.01+/–3.56] were significantly [P< 0.01] greater as compared with counts of normal brain [0.40+/–0.01], and reactive gliosis [0.60+/–0.01]. There was no statistical difference in normal brain tissues and inflammatory lesions of the brain. AgNOR size and dispersion were of higher grade in significantly greater proportion in malignancy as compared to benign conditions. [P <0.05]. AgNOR size and dispersion were normal in Astrogliosis. Typing of AgNOR count, size and dispersion was found to be an important marker in grading and differential diagnosis of Astrocytic lesions, especially in Astrogliosis and low grade Astrocytoma.

**Attention Deficit Disorder with Hyperactivity**

**epidemiology**

Attention deficit hyperactivity syndrome: An update on assessment and management.

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Pakistan Journal of Medical Sciences 2007; 23 (1): 9-15 (37 ref.)
Keywords: Attention Deficit Disorder with Hyperactivity-eti ology; Disease Management; Attention Deficit Disorder with Hyperactivity-therapy; Child Psychiatry; Methylphenidate-therapeutic use
Abstract: Attention Deficit Hyperactivity Disorder [ADHD] is the most common neurodevelopmental disorder of childhood and makes up 30-40% of referrals to child mental health practitioners. It is associated with significant impairments and frequently persists in adulthood. Because of limited numbers of trained child Psychiatrists in Pakistan, most of these children present to paediatricians and Adult Psychiatrists. Competency in diagnosis and treatment of ADHD requires in depth understanding of its presentation, comorbidities and various management options. An attempt has been made in this write up to review ADHD along with update on Assessment and Management issues in accordance with International Guidelines. This manuscript was prepared following detailed search on various databases including Pubmed, Psychinfo as well as information on websites of American Association of Child and Adolescent Psychiatry [AACAP] and National Institute of Clinical Excellence, [NICE] UK.
**Benzene Derivatives**

Statistical analysis of main and interaction effects during the removal of BTEX mixtures in batch conditions using wastewater treatment plant sludge microbes.

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**Keywords:** Sewage; Waste Disposal, Fluid; Data Interpretation, Statistical

**Abstract:** Biodegradation has proved to be a versatile technique to remediate benzene, toluene, ethyl benzene and xylene [BTEX] mixtures in contaminated soil and groundwater. In this study, a mixed microbial culture obtained from a wastewater treatment plant was used to degrade liquid phase BTEX, at initial concentrations varying between 15 to 75 mg/l. Experiments were conducted according to the 2k-1 fractional factorial design to identify the main and interaction effects of parameters and their influence on biodegradation of individual BTEX compounds in mixtures. The removal efficiencies of these compounds varied between 2 to 90% depending on the concentration of other compounds and also on their interaction effects. A statistical interpretation of the results was done based on the Fishers variance ratio [F] and probability [P] values. Though all the main effects were found significant [P < 0.05] at the 5% confidence level, the interactions between benzene and toluene and benzene and xylene concentrations were also found to be statistically significant and play a major role in affecting the total BTEX removal.

**Biliary Atresia**

**diagnosis**

Sonographic evaluation of the triangular cord sign in the diagnosis of biliary atresia, confirmed with needle liver biopsy.

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*Pakistan Pediatric Journal* 2007; 31 (1): 30-33 (9 ref.)

**Keywords:** Liver-pathology; Biopsy, Needle; Biliary Atresia-ultrasonography; Ultrasonography

**Abstract:** Neonatal cholestasis continues to present a diagnostic challenge for pediatric surgeons. Various diagnostic protocols are available, often involving invasive procedures which are generally not available in the district general hospitals. The objective of this study is to evaluate the role of Triangular Cord sign [TC sign] on ultrasound for the prompt and easy diagnosis of biliary atresia in infants. A prospective study was planned. Patients with positive TC sign underwent needle liver biopsy for confirmation. Infants with neonatal cholestasis were referred from the gastroenterology department. Abdominal ultrasound was performed with 3-6MHz convex and 6-10MHz linear transducers on Core Vision, Toshiba by a single paediatric radiologist and results were correlated with needle biopsy of the liver interpreted by the histopathologist. Thirty nine Infants with cholestatic jaundice underwent ultrasound and biopsy. Twenty patients were diagnosed on ultrasound as biliary atresia on the basis of positive triangular cord sign and 18 of them were confirmed on biopsy.

**Bioelectric Energy Sources**

**economics**

An environmental and economic analysis for reducing energy subsides.

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**Keywords:** Financing, Government; Environment; Economics

**Abstract:** This paper estimates the trend of total energy subsidies from year 2003 [that is 16.68% of GDP] and running a model, predicts that energy subsidies will reach to 20% of GDP by 2019 if subsidies continue. Also environmental damage costs of energy consumption have been entered the model [Environmental Cost-Benefit Analysis Model: ECBA Model] in addition to the vast amounts of subsidies. So damages caused by energy consumption as air pollution and Green House Gases have been considered as an attempt to internalize energy cycle externalities. Using an ECBA Model which considers changes in level of social welfare and environmental quality as probable benefits, the Benefit/Cost ratio for running price reform policy under two scenarios has been analyzed and calculated. The analysis shows that reducing energy subsidies for each energy form is considerably beneficial. Apart from the environmental benefits, the increase in prices can be a base for a redistribution of income within the poor deciles of economy and this policy would increase the government revenue and economic growth in long-term.
Birds

Identification of fish-eating birds.
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International Journal of Environmental Research 2007; 1 (2): 88-95 (18 ref.)

Keywords: Fishes; Breeding; Wetlands

Abstract: There are 61 species in 14 families of fish-eating birds in Iran. The fish-eating birds of the north of Iran belong to 41 species in 10 families which include 67.2 percent of total fish eating bird species and 71% of fish-eating bird's family of Iran. Resident birds constitute 13% of the fisheating birds of the Caspian Sea coasts and the rest are migratory in autumn and winter. There exist 3 globally threatened species of fish-eating birds of the world at the north of Iran, which are Oxyura leucocephala, Phalacrocorax pygmeus, and Pelecanus crispus wintering in the south coast wetlands of the region. Seventeen percent of the fish-eating birds of the north of Iran are aquatic, 5% terrestrial and 78 % wading. The Phalacrocorax carbo and Phalacrocorax pygmeus are wintering and breeding migratory in the wetlands of the region, which feed in the fish ponds and wetlands. The main habitats of fish-eating birds are Miankaleh and Amirkelayeh wildlife refuge, Anzaly marsh and Gomishan Ramsar Sites. Oxyura leucocephala, Phalacrocorax pygmeus and Pelecanus crispus are protected species in Iran and the rest are not allowed to be eaten by Islamic rule, for the same reason they are not being threatened by Muslim men.

Bleomycin

therapeutic use

Intralesional bleomycin injection- A primary therapy for peripheral lymphangiomas.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 220-222 (8 ref.)

Keywords: Bleomycin-administration and dosage; Lymphangioma-therapy; Injections, Intralesional; Sclerosing Solutions; Child; Prospective Studies

Abstract: To evaluate the efficacy of intralesional Bleomycin Injection [IBI] as a primary therapy for peripheral lymphangiomas in children. A prospective study was conducted at NICH Karachi from January 2003 to December 2005. Patients with peripheral lymphangiomas were included in the study. Exclusion criteria included previously treated lymphangiomas, infected lesions, intra-thoracic and intra-abdominal lesions. Thirty three patients were included in the study. All were treated with Intralesional Bleomycin Injection [IBI]. After aspiration of fluid from the lesion, 0.5 mg/kg of Bleomycin diluted in saline was administered at different sites into the lesion. Depending upon the size of lesion and age of patient, procedure was performed in operating theatre under local or general anesthesia. Reduction in size was seen in 90% cases [n=29], out of them 30% [n=10] showed near complete disappearance and 63% [n=21] showed good response. Two patients [6%] showed poor response and they underwent surgery. Few patients had minor complications like fever, pain, redness and increase in the size after injection. All these complications were managed conservatively with symptomatic treatment and no patient required hospitalization. IBI is an effective therapy for lymphangiomas, with results comparable to surgical excision. It has the added advantage of avoiding inadvertent injury to vital structures, scarring and other complications of surgery. We recommend it as a primary therapy for all peripheral lymphangiomas.

toxicity

Development and time - course of bleomycin-induced pulmonary fibrosis in NMRI mice.
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DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 1-6 (18 ref.)

Keywords: Bleomycin-adverse effects; Mice; Pulmonary Fibrosis-chemically induced

Blood Glucose

analysis

Validity of fasting blood sugar on the day of surgery compared with the preinduction blood glucose level in type II diabetic patients.
Parish, Masoud; Mahmoodpoor, Ata; Sanaie, Sarvin
Nikookary Hospital - Department of Anesthesiology
Pakistan Journal of Medical Sciences 2007; 23 (2): 202-205 (11 ref.)

Keywords: Preoperative Care; Diabetes Mellitus, Type 2; Surgery; Prospective Studies
Abstract: It is necessary that the diabetic patients who are scheduled for elective surgery, be operated as the first cases, but usually it is not possible due to large number of surgeries. The aim of this study was to compare the fasting blood sugar [FBS] on the morning of operation day with pre-operative blood glucose level. Prospective, hospital based study conducted during September 2004-July 2005. Nikookary Hospital, Tabriz Medical Science University, Iran. One hundred patients scheduled for ophthalmic surgery, were enrolled in this study. The levels of fasting and preoperative blood sugar [by lab and glucometer] were measured and compared with the FBS and with each other, as well. There was a significant difference between FBS and pre-operative Blood Sugar glucometry and the laboratory \[P< 0.001 and P=0.001, respectively\], and also between the mean preoperative BS by the glucometry and the laboratory procedures \[P<0.001\]. It is not possible to use FBS on the morning of operation day instead of the pre-operative BS level in diabetic patients.

Bone Neoplasms

secondary

Can clinical factors be determinants of bone metastases in non-small cell lung cancer?
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Keywords: Neoplasm Metastasis; Carcinoma, Non-Small-Cell Lung-complications; Lung Neoplasms; Bone and Bones-radionuclide imaging; Retrospective Studies
Abstract: The aim of this study was to investigate the correlations among symptoms, laboratory findings of bone metastasis and whole body bone scanning [WBBS] and the frequency of occurrence of bone metastases. Hundred and six patients who were diagnosed with non-small cell lung cancer [NSCLC] between June 2001 and September 2005 were investigated retrospectively. Bone pain, detection of bone tenderness on physical examination, hypercalcemia and increased serum alkaline phosphatase were accepted clinical factors of bone metastases. Presence of multiple asymmetric lesions in WBBS was also accepted as bone metastases. Subjects whose clinical factors and WBBS indicated doubtful bone metastases were evaluated with magnetic resonance and/or biopsy. Occurrence of bone metastases was 31.1% among all patients. Bone metastases were determined in 21 [52.5%] of 40 patients who had at least one clinical factor. Asymptomatic bone metastases without any clinical factors were established in 11.3% of all NSCLC patients and 15.3% of 26 operable patients. Sensitivity, specificity, positive predictive value, negative predictive value and accuracy of the clinical factors of bone metastases were 63.6, 73.9, 52.5, 81.8 and 70.7% respectively. There was no significant relationship between histologic type and bone metastases. Sensitivity, specificity, positive predictive value, negative predictive value and accuracy of WBBS in detection of bone metastases were 96.9, 86.3, 76.2, 98.4, 89.6% respectively. Sensitivity and specificity of the clinical factors of bone metastases are quite low. Routine WBBS prevented futile thoracotomies. Therefore, routine WBBS should be performed in all NSCLC patients, even in the absence of bone-specific clinical factors.

Breast Neoplasms

blood

Evaluation of carcinoembrionic antigen CEA and CA 15.3 tumor markers in patients operated for breast cancer.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 115-118 (19 ref.)
Keywords: Tumor Markers, Biological; Carcinoembryonic Antigen; CA-15-3 Antigen; Neoplasm Metastasis; Recurrence
Abstract: Tumor markers are biochemical signs of tumor existence and consist of cell surface antibodies, cytoplasm proteins, enzymes and hormones. We evaluated the variability of tumor marker levels in following-up patients without the evidence of the disease after the resection of a primary breast cancer. Carcinoembrionic antigen [CEA] and CA 15.3 were measured by commercially available methods in serial blood samples collected from 94 patients referred to surgical and oncolgical center of Ahwaz. In 72 cases with normal CA 15. 3, metastasis and recurrence occurred for 12% and 4.17 respectively. In 12 cases with abnormal CA15.3 metastasis and recurrence occurred for 54.55% and 4.55% respectively. In 80 cases with normal CEA metastasis and recurrence occurred for 15% and 5% respectively, and in 14 cases with abnormal CEA metastasis and recurrence occurred for 64.24% and 14% respectively. The incidence of metastasis is high in patients with abnormal tumor markers, and CA15.3 is more sensitive in following-up and evaluating the patient’s response to the treatment.
Bronchiectasis

pathology

Noncystic fibrosis bronchiectasis: Is it an orphan disease?
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King Saud University - College of Medicine
Annals of Thoracic Medicine 2007; 2 (1): 2 (9 ref.)
Keywords: Bronchiectasis-diagnosis; Pediatrics

A review of 151 cases of pediatric noncystic fibrosis bronchiectasis in a tertiary care center.
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King Faisal Specialist Hospital and Research Centre - Department of Pediatrics
Keywords: Bronchiectasis-diagnosis; Pediatrics; Bronchiectasis-etiology; Developing Countries; Respiratory Function Tests; Retrospective Studies

Abstract: This study was conducted to review the etiological factors and diseases associated with pediatric noncystic fibrosis bronchiectasis in a tertiary care center in Saudi Arabia. A retrospective review of all patients with confirmed noncystic fibrosis [Non-CF] bronchiectasis by chest X-ray and/or CT chest in a pulmonary clinic during the period 1993-2005 at a tertiary care center in Riyadh. A total of 151 cases were diagnosed as Non-CF bronchiectasis. Seventy-five [49.7%] were male, 76 [50.3%] were female; 148 [98%] are alive and 3 [2%] died. The southwestern regions constituted 72 [50%] of the cases. There was a period of [5 +/- 3.2] years between the start of symptoms and diagnosis of bronchiectasis. More than two-thirds of the patients had cough, tachypnea, wheezing, sputum production and failure to thrive. Ninety-one [60%] had associated diseases: Pulmonary diseases in 48 [32%], immunodeficiency in 27 [18%], central nervous system anomalies in 10 [7%], cardiac in 10 [7%] and asthma in 103 [68%] of the patients. Left lower lobe was commonly involved in 114 [76%] patients. Sixty-eight [67%] were found to have sinusitis. More than two-thirds of patients had two or more associated diseases. Forty-nine [32%] developed gastroesophageal reflux. Hemophilus influenza was cultured in 56 [37%], strep pneumoniae in 25 [17%] and pseudomonas aeruginosa in 24 [16%] of the patients. Disease progression was related to development of symptoms before 5 years of age, persistent atelectasis and right lower lobe involvement [P < 0.05]. Non-CF bronchiectasis should be included in the differential diagnosis of recurrent chest infection in Saudi Arabia. Early diagnosis and identification of associated diseases is needed to prevent progression of the disease.

Bronchiolitis Obliterans Organizing Pneumonia

Bronchiolitis obliterans organizing pneumonia: experience at three hospitals in Riyadh.
Al Saghir, Abdullah H.; Al Mobeereek, Abdullah F.; Al Jahdali, Hamdan; Al Elthann, Abdul Salam; Al Otair, Hadil; Al Dayel, Fouad
King Faisal Specialist Hospital and Research Centre - Department of Medicine Riyadh
Keywords: Tomography, X-Ray Computed; Biopsy; Thyroid Neoplasms; Signs and Symptoms, Respiratory; Steroids-therapeutic use; Treatment Outcome; Prognosis; Comorbidity

Abstract: Because reports of bronchiolitis obliterans organizing pneumonia [BOOP] are lacking from the Middle East, we conducted a retrospective review of all histopathologically proven cases of BOOP over a 10-year period at three tertiary care hospitals in Riyadh and describe the clinical features and outcome. Charts at the three hospitals were searched using a specific code for BOOP or cryptogenic organizing pneumonia [COP]. Lung specimens had to show histological proof of BOOP with a compatible clinical picture. Chest radiographs and high-resolution CT scans were reviewed. Twenty cases of biopsy-proven BOOP had well-documented clinical and radiographic data. There were 11 males and 9 females [mean age, 58 years; range, 42-78]. The clinical presentation of BOOP was acute or subacute pneumonia-like illness with cough [85%], fever [70%] dyspnea, [85%] and crackles [80%]. The most frequent radiological pattern was a bilateral alveolar infiltrate. The most common abnormality on pulmonary function testing [n=14] was a restrictive pattern [11 patients]. Most patients [70%] had no underlying cause [idiopathic BOOP]. Other associations included thyroid cancer, rheumatoid arthritis, syphilis and Wegner's granulomatosis. Ten patients [50%] had a complete response to steroids, 6 [30%] had a partial response and 3 [15.8%] with secondary BOOP had rapid progressive respiratory failure and died. The clinical presentation of BOOP in our patients is similar to other reported series. A favorable outcome occurs in the majority of cases. However, BOOP may occasionally be associated with a poor prognosis, particularly when associated with an underlying disease.
Brucellosis

epidemiology

Using GIS in explaining spatial distribution of brucellosis in an endemic district in Iran.
Kerman University of Medical Sciences - Physiology Research Center

Keywords: Endemic Diseases; Demography; Quality Control; Information Systems; Animals, Domestic

Abstract: To check the feasibility of using geographical information system [GIS] methods, we linked the brucellosis data of human and animals. In a village-based ecological study in Bardsir- a district in Kerman Province located nearly to the central part of Iran- data of human brucellosis, socio-economic level, and livestock characteristics [2001-4] were linked by using GIS methods. Annual incidence of human brucellosis was 141.6 cases per 100,000 inhabitants. Most of the high risk villages were seen in the north and south of Bardsir [3.6% of villages]. A positive association was observed between the frequency of brucellosis and density of cattle [OR=1.81, P= 0.007]. In addition, the size of human population was an independent determinant factor [OR= 1.94, P< 0.001]. No association was found between frequency of the disease and socio-economic indicators and also the density of sheep. Our study showed that we could generate informative risk maps of brucellosis using health and veterinary data which might improve the quality of control programme in Iran.

Busulfan

adverse effects

Assessment of morphological and functional changes in the mouse testis and epididymal sperms following busulfan treatment.
Anjamrooz, Sayed Hadi; Movahedin, Mansoureh; Mowla, Sayed Javad; Baianvand, Shahram Pour
Modarres University - School of Medical Sciences - Department of Anatomical Sciences
IBJ - Iranian Biomedical Journal 2007; 11 (1): 15-22 (23 ref.)

Keywords: Busulfan-toxicity; Mice; Testis-drug effects; Spermatozoa-drug effects; Epididymis

Carcinoma, Adenoid Cystic

diagnosis

Adenoid cystic carcinoma of the subglottic.
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University Kebangsaan, Malaysia Hospital - Faculty of Medicine - Department of Otorhinolaryngology, Head and Neck Surgery
Pakistan Journal of Medical Sciences 2007; 23 (2): 270-274 (16 ref.)

Keywords: Head and Neck Neoplasms; Laryngoscopy; Hoarseness; Carcinoma, Adenoid Cystic-surgery

Abstract: Adenoid cystic carcinoma [ACC] is one of the most common malignancies of the minor salivary glands in the head and neck. We report a case of adenoid cystic carcinoma of the subglottic region presenting with hoarseness and decrease effort tolerance. Smooth, solid and lobulated mass arising from the anterior part of the subglottic region was seen on direct laryngoscopy. Computed tomography [CT] scan and histopathological examination were confirmatory. Laser excision followed by radiation resulted in apparently normal subglottic mucosa.

Carcinoma, Hepatocellular

etiology

An update on the pathogenesis and pathology of hepatocellular carcinoma.
Abdel Satir, Ali
Arabian Gulf University - College of Medicine and Medical Sciences
Bahrain Medical Bulletin 2007; 29 (2): 64-67 (13 ref.)

Keywords: Carcinoma, Hepatocellular-pathology; Liver Neoplasms; Hepacivirus; Hepatitis B virus; Aflatoxins
Cardiomyopathies

pathology

Cardiac and neuromuscular issues of cardiomyopathies in a highly consanguineous population.
Stollberger, Claudia; Finsterer, Josef
Medical Principles and Practice 2007; 16 (2): 164 (4 ref.)
Keywords: Consanguinity; Myocardium-pathology; Neuromuscular Diseases; Cardiomyopathy, Hypertrophic

Reply, cardiac and neuromuscular issues of cardiomyopathies in a highly consanguineous population.
El Menyar, A.A.; Bener, A.; Numan, M.T.; Morcos, S.; Taha, R.Y.; Al Suwaidi, J.
Hamad General Hospital - Department of Cardiology and Cardiovascular Surgery
Medical Principles and Practice 2007; 16 (2): 165 (7 ref.)
Keywords: Consanguinity; Myocardium-pathology; Neuromuscular Diseases; Cardiomyopathy, Hypertrophic

Cardiopulmonary Resuscitation

The effects of cardiopulmonary resuscitation training to mobile patrols' knowledge, attitude, and practice, Dammam Area, Kingdom of Saudi Arabia.
Aldossary, Adel; Al Kurashi, Nabil Yassin
king Faisal University - College of Medicine
Keywords: Health Knowledge, Attitudes, Practice; Defibrillators; Prospective Studies

Abstract: Cardiopulmonary Resuscitation [CPR], being the first treatment for a person who has collapsed, has no pulse, and has stopped breathing should be effective. To assess and evaluate the effects of training in cardiopulmonary resuscitation to knowledge, attitudes, and practice of CPR among mobile patrol individuals in Dammam and Dammam Metropolitan areas. The present study was a prospective one-day intervention workshop designed to evaluate the effects of such program in Knowledge, Attitude, and Practice [KAP] of CPR to 65 mobile patrolmen who were randomly selected from 1,921 mobile patrolmen of the Police Headquarters in Dammam, Al-Qatif, Al-Hassa, Al-Khobar, and Dhahran in the Kingdom of Saudi Arabia done once to each group of not more than fifteen participants in the duration of 11-15 Dhual Qadah, 1424. The post test was conducted three times in three days from 25-27th Dhul Hijah, 1424 to evaluate respondents using an expert validated CPR KAP instrument designed for this purpose. Frequencies, percentages, means, standard deviations, paired t-tests, $x^2$, and ANOVA were appropriately computed. Ethical considerations were observed. Before the present program, 36.9% of participants attended CPR training; of whom, 54.2% attended within the last year, and 70.8% attended CPR training with the duration of less than two hours. The police provided CPR instruction to 32.5% of the participants. 70.8% attempted to conduct CPR in their work. After the present training, the participants' KAP, as well as total scores, significantly increased ($p <0.001$). The results of the study showed concurrence to results of similar earlier studies conducted in other countries on CPR KAP. The one-day intervention program significantly improved the patrolmen's CPR KAP. Policemen should be sent for adequate CPR and Automatic External Defibrillation [AED] training regularly. Private healthcare institutes may be used in remote areas or places where regular government training is unavailable to train them for first aid and CPR.

education

Cardiopulmonary resuscitation: Knowledge and personal experience in Iranian dentists.
Kavari, S.H.; Chohedri, A.H.
Shiraz University of Medical Sciences - School of Management and Medical Information Science
Pakistan Journal of Medical Sciences 2007; 23 (2): 296-297 (14 ref.)
Keywords: Knowledge; Health Knowledge, Attitudes, Practice; Dentistry; Heart Arrest; Dentists
Abstract: This work describes the knowledge and experience of dentists about cardiopulmonary resuscitation [CPR]. A total of 273 dentists working at Shiraz, Iran were interviewed: 55% felt that they are able to define CPR, although only 37% had a correct concept; 51% believed they were able to perform CPR, however, none of them had received practical training in CPR; 4% of the interviewed professionals mentioned the occurrence of cardiopulmonary arrest in their dental office. The authors feel that dental surgeons in Shiraz, Iran should be better trained to manage medical emergencies which they may face in dental practice.
Cefotaxime

chemistry

Influence of mechanical milling time on physicochemical properties and stability of cefotaxime sodium.
Rouholamini Najafabadi A.; Asgharian, R.; Tajerzadeh, H.; Gilani, K.; Vatanara, A.; Darabi, M.
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Tehran University of Medical Sciences - Faculty of Pharmacy - Department of Pharmaceutics
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 27-33 (27 ref.)
Keywords: Cefotaxime-pharmacokinetics; Drug Stability; Particle Size

Cerebral Palsy

surgery

Flexor carpi ulnaris transfer to improve function and cosmesis of hand in patients with cerebral palsy.
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Isra University/Hospital
Pakistan Journal of Medical Sciences 2007; 23 (2): 242-244 (8 ref.)
Keywords: Hand-surgery; Tendon Transfer-methods; Surgery, Plastic; Cosmetic Techniques; Hemiplegia; Retrospective Studies
Abstract: Function and appearance of the involved hand in patients with cerebral palsy can be improved by orthopedic surgery especially in spastic hemiplegia. Flexor carpi ulnaris transfer to extensor carpi radialis longus or bravis is a procedure commonly used for correction of flexion pronation deformity of hand in patients with cerebral palsy. Twenty patients with the mean age 7.5 years were selected for the procedure. Eight patients were in Zancolli class I, and 12 were in Zancolli class II. Green and Banks technique was used. Seventeen out of twenty patients had good functional improvement and cosmetic appearance. There parents were satisfied with the results. In three patients functional improvement and cosmetic appearance was fair but parents were not satisfied with the results. Green and Banks procedure is good for cerebral palsy patients with moderate flexion pronation deformity at wrist. Functional and cosmetic appearance of hand improves considerably with this procedure.

Cerebrovascular Accident

etiology

Risk factors for stroke: A hospital based study.
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Ziauddin Medical University Hospital - Department of Medicine
Pakistan Journal of Medical Sciences 2007; 23 (1): 17-22 (25 ref.)
Keywords: Cerebrovascular Accident-epidemiology; Risk Factors; Cerebral Hemorrhage; Cerebral Infarction; Prospective Studies
Abstract: Stroke is the commonest neurological cause of morbidity and mortality all over the world being the third leading cause of death. The goal of this study was to ascertain the frequency of risk factors for first ever stroke in our patients. This prospective study included all patients of either sex, 20 to 70 years and above admitted in Dr. Ziauddin Medical University Hospital, North Nazimabad Campus, Karachi, with first ever stroke verified by CT scan brain during a period of one year. Data analysis showed that 70.1% had cerebral infarction and 29.9% cerebral hemorrhage. The mean age at presentation was 62 years and male to female ratio 1.05:1. The most frequent risk factors included hypertension 65.8%, smoking 43%, diabetes mellitus 41.3%, underlying cardiac diseases 29.1%, family history of stroke/transient ischemic attack in the first-degree relatives 26.7%, high cholesterol 25.5%, history of past transient ischemic attack 24.9% and significant extracranial carotid atherosclerosis in 18.18%. In-hospital mortality was 11.7%. At 30-day follow up 22.27% of all stroke survivors were functionally independent. This study suggested that diabetes mellitus was more and underlying cardiac diseases less frequent in our patients than in the western reported series. Cerebral hemorrhage was relatively more common and the mean age at presentation was lesser compared to those in the developed countries. Stroke patients consume a large part of health resources all over the world so accurate information about the incidence, risk factors, management and outcome is needed for planning medico-social services besides primary and secondary stroke prevention in the community.
Cervical Vertebrae injuries

Faraj, Jafar H.; Al Arief, Mohammed; Jassim, Waleed H.; Kumar, Suresh; Khamis, Iman
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Hamad Medical Corporation - Department of Anaesthesia/ICUP, Pain and Palliative Care
Keywords: Spinal Injuries-epidemiology; Retrospective Studies; Epidemiologic Studies; Wounds, Nonpenetrating

Chemistry

history

Jabir ibn Hayyan.
Amr, Samir S.; Tbakhi, Abdel Ghani
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Saudi Aramco Medical Services Organization - Dhahran Health Center
Keywords: Pharmacy-history; Medicine; Philosophy-history

Chemistry, Pharmaceutical

Spectrophotometric methods for the simultaneous analysis of meclizine hydrochloride and pyridoxine hydrochloride in bulk drug and pharmaceutical formulations.
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University of Karachi - Department of Chemistry
Keywords: Spectrophotometry-methods; Ferric Compounds; Meclizine-analysis; Pyridoxine-analysis; Spectrophotometry, Ultraviolet
Abstract: Three new spectrophotometric procedures for the simultaneous determination of pyridoxine hydrochloride and meclezine hydrochloride are described. The first method depends on the application of simultaneous equation to resolve the interference due to spectral overlapping. The analytical signals were measured at 231 and 220 nm. Calibration graphs were established for 1 to 20 micro GmL-1 for pyridoxine hydrochloride and 0.5 to 10 micro GmL-1 for meclezine hydrochloride in binary mixture. In the second method, the determination of pyridoxine hydrochloride and meclezine hydrochloride was performed by measuring the absorbances at 290 and 235 nm in the simple absorbance spectra of their mixture. In third method a yellowish orange complex of pyridoxine hydrochloride was formed with ferric chloride, which absorbs in the visible region with <= max at 445 nm. Calibration curve of complex formation range was conducted in between 20 to 250 micro GmL-1. These methods were validated with respect to accuracy, precision, linearity, limit of detection and quantification. Regression analysis of Beer's plot showed good correlation in a general concentration range of 1 to 20 micro Gml-1 with correlation coefficient [r= 0.9999 and 0.9999; CV < 0.858] for pyridoxine hydrochloride, whereas meclezine hydrochloride concentration range 0.5 to 10 micro GmL-1 with correlation coefficient [r= 0.9998 and 0.9998; CV < 0.826]. These methods can be readily applied, without any interference from the excipients. The suggested procedures were successfully applied to the determination of these compounds in synthetic mixtures and in pharmaceutical preparations, with high percentage of recovery, good accuracy and precision.

Chromosome Aberrations radiation effects

Persistent unstable chromosomal aberrations in lymphocytes of radiotherapy workers after 1[st] mitotic division in Tehran, Iran.
Movafagh, Abolfazl; Maleki, F.; Fadaie, S.; AzarGashb, E.
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Shahid Beheshti Medical University
Pakistan Journal of Medical Sciences 2007; 23 (2): 254-258 (25 ref.)
Keywords: Lymphocytes-radiation effects; Occupational Exposure; Abnormalities, Radiation-Induced; Neoplasms, Radiation-Induced; Radiation Effects; Health Personnel
Abstract: Studies indicate that ionizing radiation can induce persistent genetic instability in a high proportion of exposed cells. It has also been reported that exposure of radiotherapy workers to ionizing radiation causes chromosomal damages. Some of the damaged cells show a large number of aberrations such as dicentrics,
polycentrics, rings, and numerous acentric fragments. To determine, whether chromosomal damages can be used as a biomarker of possible radiation in occupational exposure in a hospital setting. In this study, chromosome abnormalities were evaluated in peripheral blood lymphocytes from fifty medical radiotherapy workers who handled ionizing radiation for an average of twelve years, and forty three control individuals who did not knowingly come in contact with any radiation source. Chromosome aberrations were evaluated by the conventional solid stain technique. Dicentrics, fragments, followed by ring chromosomes, as well as total chromosome aberrations were elevated in the experimental group. We did not observe any aneuploidy chromosome in the present study. Although the level of exposure was below the annual permissible limit of twenty mSv/y recommended by the International Commission for Radiation Protection for whole body exposure, the mean frequencies of different chromosomal aberrations were higher in radiotherapy workers compared with controls [P=0.041]. Although the mean frequencies of chromosomal aberrations in the female workers [3.5 +/- 1.42] was slightly higher than in males [3.28 +/- 0.95], there was no significant differences [P=0.74] in the frequency of chromosome aberration between males and females of ionizing radiotherapy workers. The results of this study underscore the need of adopting measures to avoid or minimize overexposure to radiation in hospital settings.

Ciprofloxacin

pharmacology

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Pakistan Journal of Medical Sciences 2007; 23 (1): 39-42 (14 ref.)
Keywords: Drug Resistance, Bacterial; Hospitals, Teaching; Intensive Care Units; Microbial Sensitivity Tests; Escherichia coli; Klebsiella pneumoniae; Enterobacter cloacae; Pseudomonas aeruginosa; Acinetobacter; Staphylococcus aureus; Streptococcus pneumoniae
Abstract: To present trends of resistance to ciprofloxacin among common organisms isolated at King Khalid University Hospital [KKUH] between 2001-2005. Ciprofloxacin susceptibility of all isolates of Gram negative and Gram positive organisms were retrospectively obtained during the period from 2001-2005 in KKUH. Data from intensive care unit [ICU] and non-ICU patients were separately analyzed. Escherichia coli [E.coli] resistance increased from 10% in 2001 to 22% in 2005. Enterobacter cloacae [Ent.cloacae] resistance decreased from 11-14% in 2003-2004 to 7% as in 2001 and 2005. Klebsiella pneumoniae [K.pneumoniae] resistance fluctuated from 6% in 2002 and 2003, 13% in 2004 to 6% in 2005. Pseudomonas aeruginosa [P.aeruginosa] resistance ranged from 7% - 8% during this study period while that of Acinetetobacter spp. ranged between 45% to 62% and Staphylococcus aureus [S.aureus] resistance doubled from 18% in 2001 to 39% in 2005. None of Streptococcus pneumoniae [S.pneumoniae] isolates showed resistance to ciprofloxacin. Isolates of E.coli, Acinetobacter spp. and S.aureus from non-ICU patients showed higher resistance to ciprofloxacin than isolates from ICU patients while K.pneumoniae and P.aeruginosa showed higher resistance from ICU patients than isolates from non-ICU patients. Ciprofloxacin resistance among many Gram negative species and S.aureus is an increasing threat among many Gram negative species and S.aureus in our hospital in both ICU and non-ICU patients.

City Planning

methods

Evaluation of navab regeneration project in central Tehran, Iran.
Bahrainy, H.; Aminzadeh, B.
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University of Tehran - Faculty of Urban Planning
Keywords: Urbanization; Urban Renewal; City Planning-organization and administration
Abstract: Urban design has been used in the cities throughout the world to achieve certain goals and purposes. It has been common in developing countries, including Iran, to use urban regeneration plans in the older sections of large cities to eliminate urban blight and decay, and eventually achieve modernization and in some cases to also overcome socio-economic and cultural problems. Approaches have been used are modernist, technocratic, and elitist type of design/ decision-making, which, as, the present case study show, results in complete failure. This study intends to, following a discussion on theoretical basis of the issue, through a post-construction/ post-occupancy evaluation of the Navab Regeneration Project in central Tehran, explore the reasons behind this failure and see how the problems involved in the product may be construed to the kind of design/decision-making process applied.
Coagulants

Pretreatment of municipal wastewater by enhanced chemical coagulation.
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Iran University of Science and Technology [IUST] - College of Civil Engineering - Department of Hydraulics and Environment
International Journal of Environmental Research 2007; 1 (2): 104-113 (22 ref.)
Keywords: Waste Disposal, Fluid-methods; Phosphorus; Water; Alum Compounds; Ferric Compounds
Abstract: The efficiency of existing municipal wastewater treatment plants has been affected by the increase of incoming organic load caused by the expansions in developing countries. In the present investigation, the effect of Chemically Enhanced Primary Treatment [CEPT] process was studied on the enhancement efficiency of a municipal wastewater treatment plant in Tehran, Iran. Jar test results showed an increase in COD, phosphorus, turbidity and TSS removal by the increase in dosage of aluminum sulfate and ferric chloride as coagulants. Results revealed COD, phosphorus, turbidity and TSS removals of 38, 66, 68 and 69 %, for alum at 80 mg/L and 60, 73, 49 and 48 % for ferric chloride at 70 mg/L as the optimum doses, respectively. Ferric chloride revealed more efficient results compared with alum. The result of tests to find the optimum pH of two coagulants revealed that pH of 8.2 for both chemicals is the optimum performance condition. Therefore, CEPT can be used as an efficient method in conventional municipal wastewater treatment plants to reduce the organic load of biological treatment and enhance the removal of nutrients.

Conferences

Joint meetings: Exchange of ideas and Knowledge advancement.
Al Jahdali, Hamdan
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King Abdulaziz Medical - Department of Medicine
Annals of Thoracic Medicine 2007; 2 (1): 1 (3 ref.)
Keywords: Thoracic Diseases; Tuberculosis; Knowledge

Consanguinity

Consanguinity associated with child and adult mortality in 24 Asian and African countries an ecological study.
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Shiraz University - College of Sciences - Department of Biology
Keywords: Child Mortality; Adult; Mortality; Ecology
Abstract: Although numerous studies have found deleterious effects of inbreeding on childhood and pre-reproductive mortality, one question remains inadequately addressed: Does inbreeding lead to increased childhood mortality rates in countries with high level of consanguinity? To evaluate the public health impact of inbreeding on offspring mortality, the association between mean of inbreeding coefficient [alpha] and sex specific child and adult mortality rates in 24 countries from Asia and Africa was analyzed. Statistical analysis showed that countries with relatively higher rates of consanguineous marriages have higher mortality rates than the countries with lower consanguinity rates. Also, countries with relatively higher GDP per capita have lower mortality rates. After controlling the GDP per capita, significant positive correlations between alpha and child [Female: r=0.4355, df=21, P=0.038; Male: r=0.3991, df=21, P=0.059] mortality rates were observed. There was no significant correlation between alpha and adult [Female: r=0.2977, df=21, P=0.168; Male: r=0.2207, df=21, P=0.312] mortality rates, after controlling for GDP per capita. It is concluded that consanguinity influences child deaths rate independent of the GDP per capita and that a large proportion of deaths could be attributed to inbreeding in several countries due to high frequencies of consanguinity.

Consciousness Disorders

etiology

Magnitude of non-traumatic altered state of consciousness in department of emergency medicine hospital university Sains Malaysia [HUSM].
E-mail:shidee_ahmad@yahoo.com
USM Health Campus - School of Medical Sciences - Department of Emergency Medicine
Keywords: Consciousness Disorders-epidemiology; Hospitals, University, Emergency Medicine; Emergency Service, Hospital; Retrospective Studies
Abstract: Non-traumatic Altered State of Consciousness [ASC] is a non-specific consequence of various etiologies. The aim of this study is to collect the demographic data and to review the various etiologies responsible for non-traumatic ASC in Emergency Department. This retrospective study was carried out in teaching Hospital, Kota Bharu for
a period of 6 months. Patients’ demographic characteristics and the etiologies were analyzed. The total number of patients was 221. Fifty-four percent [54.3%] of the patients were males. The mean age of the patients was 56 years old with underlying medical illnesses. Most of them were non-smokers. The most common characteristics of non-traumatic ASC were ischemic stroke [cerebral infarction] [22.6%], intracerebral bleeding [17.2%] and cardiovascular related diseases [9.5%]. Majority of them were very ill and required intensive care. Four of them died in Emergency Department. Definitely, non-traumatic ASC required intensive management at ED and critical ward. Even though the adult non-traumatic ASC was not uncommon, it was associated with high morbidity. Mean age was 56 years old and equal distribution between males and females. Most of them had hypertension, diabetes mellitus or other cardiovascular disease related. The most common non-traumatic ASC were intracranial pathology and cardiovascular related disease was the second.

**Coronary Disease**

**therapy**

*Under-use of aspirin in acute coronary syndrome.*

Akhter, Mehmood Ahmed

*Pakistan Journal of Medical Sciences* 2007; 23 (1): 152-153 (1 ref.)

**Keywords:** Coronary Disease-prevention and control; Aspirin-therapeutic use; Acute Disease; Syndrome

**Cryptosporidium**

**isolation and purification**

*Enumeration of cryptosporidium sp. and giardia sp. [oo] cysts in a tropical eutrophic lake.*

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University of Yaounde1 - Faculty of Science - General Biology Laboratory


**Keywords:** Giardia-isolation and purification; Tropical Climate; Cysts-parasitology

**Abstract:** The biodynamic of Cryptosporidium spp. oocysts and Giadia spp. cysts have been assessed in the municipal lake of Yaounde, which is an artificial eutrophic lake that has been constructed on the Mingoa stream of the Mfoundi River Basin of Cameroon. The oocysts were identified by the Ziehl-Neelsen method while the cysts were identified by the Lugol iodine coloration. The values obtained suggest an increase in [oo] cysts density from the surface to the bottom of the lentic ecosystem. The oocysts varied from 56 oo cysts/L in the upper layer to 2640 oocysts/L of water in the lowest layer, while the cysts population dynamics ranged from 24 cysts/L at the surface layer of the lake to 1713 cysts/L at the lowest layers of the lake. There was a considerable reduction in the resistant forms of these emerging pathogenic protozoa between the surface water of the Mingoa stream entering the Lake and that coming out from the Lake. The highest value of Cryptosporidium oocysts determined at the entrance of the lake is 1480 oocysts/L while at the outlet the highest value of oocysts identified is 620 oocysts/L. The highest value of Giardia cysts determined at the entrance of the lake is 352 cysts/L while at the outlet the highest value recorded is 294 cysts/L.

**Cryptosporidium parvum**

**isolation and purification**

*Evaluation of QIAamp DNA mini kit for removing of inhibitors in detection of Cryptosporidium parvum oocysts in water samples by a nested-PCR assay.*

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**Keywords:** Cryptosporidium parvum-parasitology; Oocysts-parasitology; Water Purification; Water Pollution; Polymerase Chain Reaction; DNA

**Abstract:** In recent years, there has been a dramatic increase in the occurrence of waterborne disease outbreaks caused by the Cryptosporidium parvum, and presence of this protozoan parasite in drinking water is a significant health problem faced by the water industry. A new strategy for detection of Cryptosporidium oocysts in water samples is PCR-based techniques. In this study a nested PCR assay was designed for the specific amplification of a 189 bp DNA fragment of the gene encoding the heat shock protein [hsp70] of Cryptosporidium parvum oocysts. In order to prevent the inhibition of PCR amplification by substances contained in water samples, three DNA purification methods including QIAamp DNA mini kit, InstaGene Matrix, MagExtractor ® Genome were compared in concentrates of tap water samples spiked with the oocysts. After it was found that the QIAamp is only efficient purification technique, the efficiency of QIAamp and immunomagnetic separation for nested-PCR assay of various water samples was compared. The results show that QIAamp provide a useful and rapid tool for removing of PCR inhibitors. It seems that QIAamp purification- nested PCR assay is a sensitive, rapid and cost effective method for detection of Cryptosporidium parvum oocysts in clean water samples with turbidity < 2 nephelometric turbidity unit [NTU].
Curriculum

standards

Curriculum reform and the future direction of the medical laboratory technology program.
Bashawri, Layla; Alhameed, Mansoor; Ahmed, Mirghani; AlQurashi, Abdul Rahman
King Faisal University - King Fahd Hospital of the University - Department of Medical Laboratory Technology
Bahrain Medical Bulletin 2007; 29 (2): 61-63 (37 ref.)
Keywords: Health Care Reform; Clinical Laboratory Techniques; Technology, Medical
Abstract: A periodic review of the curriculum is a key element for the success of any educational program. The Medical Laboratory Technology [MLT] program at King Faisal University has undergone repeated reviews of its curriculum. Recently, we evaluated the curriculum through an academic staff members committee which thoroughly reviewed it, proposed certain changes and finally implemented those changes into the program structure. We also investigated the student's views about the changes in the curriculum through a structured questionnaire. This paper describes the different changes that have occurred in the MLT curriculum and the senior students' and recent graduates' view of the program. It also discusses the introduction of Problem Based Learning [PBL] as one of the future directions of curriculum change, the challenges and barriers of introducing PBL and how PBL could be best adopted in the curriculum.

Deafness

genetics

Familial and sporadic GJB2-related deafness in Iran: review of gene mutations.
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Shahrekord University of Medical Sciences - Cellular and Molecular Research Center
Keywords: Connexins; Mutation-genetics; Hearing Loss
Abstract: Mutations in the GJB2 gene encoding connexin 26 protein, are the main cause for autosomal recessive and sporadic non syndromic hearing loss in many populations. Here, we have taken together and reviewed results from our six previous publications, our unpublished data from ten Iranian provinces, as well as data from two previous mutation reports to provide a comprehensive collection of data for GJB2 mutations and deafness in Iran. In all, 1085 hearing impaired students and their deaf siblings from 890 families in 10 provinces of Iran were studied. The prevalence and type of the GJB2 gene mutations were investigated using nested PCR pre screening strategy and direct sequencing of the coding exon of the gene. Altogether 31 different genetic variants were detected from which 17 GJB2 mutations were identified. GJB2 mutations were found in 14.6% of deaf families [18.29% of familial and 12.7% of sporadic cases]. We found GJB2 mutations in both alleles in 78% of GJB2 mutations chromosomes. However, 35delG mutation was the most common GJB2 mutation accounting for 74.5% of the mutations in populations studied. Our data indicated that a specific combination of GJB2 mutations types and frequencies was presented in different populations of Iran. These results also highlight the importance of GJB2 mutations in development of hearing loss in familial and sporadic deaf families in different parts of the country and can be used as a basis of genetic counseling and clinical guideline in Iran.

Death Certificates

El Nour, Amel El Amin Mohammed; Ibrahim, Yousif Abdel Hammed; Ali, Mahgoub Makki
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Federal Ministry of Health - National Health Information Center - Community Medicine
Keywords: Hospitals, Pediatric; Cause of Death; Mortality
Abstract: As the death certificate was not recently revised or updated and doctors had no training on death certification, then accuracy and proper completion of the death certificate should be checked. The main objective of the study was to evaluate the death certificate. This study was conducted in the 4 pediatric hospitals in Khartoum state during the year 2004. Quantitative data were collected using pre-tested, pre-coded questionnaire for doctors and checklist for certificates and medical records; qualitative data were also collected from respondents of focus group discussions and by informants in in-depth interviews. The filling out of the death certificate was inappropriate and incomplete. Part II of the cause of death item was not filled out in [97%] of the certificates. The completion of most items of the death certificate was partial [98.2%]. In comparison between causes of death on the death certificate and the diagnoses in the deceased medical record only [36.7%] were corresponding. 63.3% of the filled out lines of the cause of death item were incorrect causes of death and [47%] of them were mode of dying. 78% of the doctors agreed that the death certificate should be filled out by them and not by house officers. The death certificate format was judged to be confusing and not clear. There was serious lack of training of doctors on death certification; training should be conducted for doctors at all levels. The death certificate format has to be modified, updated and simplified.
[Directory for registry and emission of death certificates in Sudan].
Aly, Margoub Makky; El Sheikh, El Sheikh El Tageny; Ahmed, Samir Mohamed; El Nour, Amel El Amin Mohammed; Zein El Abedin, Haterr; Mokey, El Din, Ekbal
Federal Ministry of Health
Keywords: Registries

Delirium

prevention and control

The multicomponent intervention to prevent postoperative delirium after open-heart surgery.
Astaneh, Ali Nazeri; Khajehmougahi, N.; Pakseresht, S.; Ramezani, A.
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Ahwaz Jondi Shapur University of Medical Sciences - Golestan Hospital - Cardiac surgery ward
Pakistan Journal of Medical Sciences 2007; 23 (2): 188-192 (14 ref.)
Keywords: Postoperative Complications; Thoracic Surgery; Cardiac Surgical Procedures-adverse effects; Preventive Medicine; Case-Control Studies
Abstract: To assess a multi-component intervention to prevent post operative delirium after open-heart surgery. This is an experimental-analytic study which assessed 32 patients 45 to 70 years of age after open-heart surgery in to 16 member groups [case and control]. From second days after operation until three days later, by 6 risk factors: cognitive visual and auditory impairment immobility, dehydration and sleep deprivation were assessed and a standard protocol was used for case group. Incidence of delirium was determined by clinical interview; based on DSM-IV-TR; twice a day [morning and evening]. Result were analyzed by t-test and S- plus. The median of total number of risk factors and immobility in case group had a significant reduction in comparison to control group. There were trends towards reduction in other risk factors and incidence of delirium. Primary prevention of delirium is probably the most effective treatment strategy.

Delivery of Health Care

economics

Financing health care in Sudan: Is it a time for the abolishing of user charges?
Mohamed, Gamal Khalafalla
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Federal Ministry of Health
Keywords: Health Care Costs; Cost Sharing; Insurance, Health
Abstract: During the past fifteen years, the government of Sudan introduced a number of initiatives to finance health care in general, and essential medicines in particular, as part of health reform. The lack of evidence-based policymaking means that the government subjectively changes health care financing policies frequently. It is clear that the intent of the government has been to increase equity of access to health services of acceptable quality. The evaluation study conducted by Mohamed [1] represents the first empirical evidence of the impact of Cost-Sharing Policy [CSP], in general, and Revolving Drug Fund [RDF], in particular, on the accessibility to essential medicines and thereby the utilization of public health facilities. In this article, the health financing mechanisms adopted and the future of the CSP will be discussed.

Depression

epidemiology

The prevalence of comorbid depression among adults with diabetes in southern Iraq.
Mansour, Abbas Ali; Jabir, Mansour Atta
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Basrah College of Medicine - Department of Medicine
Pakistan Journal of Medical Sciences 2007; 23 (2): 185-187 (19 ref.)
Keywords: Diabetes Mellitus; Prevalence; Comorbidity; Cross-Sectional Studies; Case-Control Studies; Adult
Abstract: symptoms of depression severe enough to warrant treatment are encountered in one of every four patients with diabetes. The goal of this study was to determine the prevalence of comorbid depression among sample of patients with type 2 diabetes mellitus [DM] using Center for Epidemiologic Studies Depression Scale [CES-D] in Basrah [Southern Iraq]. This was a cross sectional case control study. It's conducted on patients with type 2 DM being monitored at the endocrinology unit of the Al-Faiha Hospital in Basrah. Diabetics patients depression score 44.5+/-11 while that of the control was 34.4+/-6. Both the diabetics and control score more than 16, which is the lower threshold for diagnosis of depression according to the CES-D. If these figures applied, than almost all of our population will have depression according to CES-D. Diabetic were having higher score for depression than the control, but both group scored >16, which mean that all of our population were depressed.
Dermatitis, Atopic

drug therapy

Leukotriene antagonists and calcineurin inhibitors in the management of atopic dermatitis.
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Aga Khan University - Department of Family Medicine

Medicine Today 2007; 5 (1): 31-33 (20 ref.)

Keywords: Leukotriene Antagonists-therapeutic use; Calcineurin-therapeutic use; Immunologic Factors; Tacrolimus; Disease Management

Abstract: A mother brings her seven month old son who is otherwise well, with complaints of an itchy rash on the neck for the past one and a half months. The child had a similar rash on his legs behind the knees, which responded well to local steroid application. The mother has been applying 0.5% hydrocortisone on the baby's neck twice daily along with emollients for the past one month. She is now inquiring about other options for treatment.

Developmental Disabilities

Ambulatory outcome in children with developmental delay.
Al Marzooq, Rehab
Salmaniya Medical Complex

Bahrain Medical Bulletin 2007; 29 (2): 41-44 (18 ref.)

Keywords: Child; Walking; Retrospective Studies

Abstract: To identify early predictors of walking in children with motor developmental delay. Child development unit, pediatric department, Salmaniya Medical Complex. Retrospective study. Patients seen from January 2006 to June 2006 were included in the study and their characteristics were reviewed. We used 10-criteria practical motor assessment scheme to chart the acquisition, from the prone position to walking, according to a standardized procedure. Data were collected using case notes and through direct assessment. Seventy-two patients fitting our inclusion criteria presented over the study period, 37 were boys and 35 were girls. We found that ambulatory status was related to the rate of acquisition of the motor skills. Thirty-seven [51%] of the 72 children managed to walk, 17 [23%] independently and 20 [28%] with assistance; 35 [49%] did not manage to walk. All of the independent walkers were able to roll over by 18 months and sit by 24 months of age. Ambulatory status was related to early acquisition of specific motor and to developmental quotient. None of the patients who walked independently had cognitive developmental delay. The findings of this study showed that the ability to achieve walking can be predicted before the age of two years from two motor variables only: rolling over and sitting. It also showed that there is positive correlation between the ability to achieve walking and the cognitive development.

Diabetes Mellitus

prevention and control

Evaluation of diabetes care in a primary care setting.
Nasser, Jameel
Ministry of Health

Bahrain Medical Bulletin 2007; 29 (2): 45-49 (32 ref.)

Keywords: Primary Health Care; Diabetes Complications-prevention and control; Hemoglobin A, Glycosylated

Abstract: To assess the level of control of diabetes among people seen in the diabetes clinic and in a general clinic. A retrospective clinical study. Isa Town Health Center. The records of 996 patients with diabetes were randomly selected and reviewed for screening of macrovascular and microvascular complications. The following parameters were screened: lipids, blood pressure [BP], glycated haemoglobin [HbA1C], neurovascular foot assessment, smoking, referral for retinal examination, and urine screening for albuminuria and/or proteinuria in the period from 1.3.2006 till 15.6.2006. One hundred thirty-four patients [13.5%] had HbA1C less than 7; one hundred thirty-seven patients [13.7%] had BP less than130/80; three hundred and fifteen patients [31.6%] were on statins; forty-two [13.5%] of the patients who were on statins achieved the Low Density Lipoprotein [LDL] target level; one hundred sixty-four [16.5%] patients who were above 40 years received aspirin; three hundred eighteen patients [31.9%] were referred for retinal examination; urine screening was done for three hundred thirty-three patients [33.4%]. A highly significant statistical difference between the general and diabetes clinic was found in screening for all macrovascular and microvascular complications; with the exception of HbA1C, there was also a highly significant difference in metabolic and BP control among patients seen in the diabetes versus general clinic. Neurovascular assessment of the feet was missing in the records reviewed in the general clinic. Referral for retinal screening is very low especially in patients seen in the general clinic. The level of metabolic and BP control is low in both the general and diabetes clinic.
Diabetes Mellitus, Experimental

The effect of Ca2-EDTA on metabolism of zinc and carbohydrate as well as some biochemical factors in experimental diabetes.
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University of Annaba - Faculty of Sciences - Department of Biochemistry
Keywords: Edetic Acid; Chelating Agents; Zinc-metabolism; Carbohydrate Metabolism; Alkaline Phosphatase; Transaminases; Rats, Wistar; Aspartate Aminotransferases; Alanine Transaminase
Abstract: To investigate the effect of CaNa2-EDTA and experimental diabetes [IDDM] on zinc and carbohydrate metabolism and the activities of GOT, GPT and alkaline phosphatase. Forty male normal albino [Wistar] rats of 8 weeks of age were fed with a basal diet. Twenty rats were then intraperitoneally injected with alloxan to induce diabetes. Then after one week ten rats from each group [n= 20] were administrated intraperitoneally with CaNa2-EDTA for further three weeks. Body weight gain and food intake were recorded regularly. On day 21 animals were killed and blood glucose, serum and tissues zinc concentrations, liver glycogen contents, serum transaminase enzymes [GOT, GPT], and serum alkaline phosphatase activities were determined. The administration of CaNa2-EDTA significantly altered body weight gain, food intake and serum zinc concentration of either diabetic or non-diabetic animals. Both diabetic and non-diabetic rats given CaNa2-EDTA had higher blood glucose than their controls. Liver glycogen was also found to be higher in CaNa2-EDTA non-diabetic rats than their controls. CaNa2-EDTA also led to increasing of GOT and GPT, and decreasing serum alkaline phosphatase. To conclude, the present study demonstrates that CaNa2-EDTA had an effect on the previous parameters. Therefore it was appeared that CaNa2-EDTA resulted in the development of severe diabetes.

Diabetes Mellitus, Type 2

urine

Prevalence of microalbuminuria in type 2 diabetes mellitus at a diabetic clinic in King Abdulaziz University Hospital.
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King Abdulaziz University Hospital - Medical Department
Pakistan Journal of Medical Sciences 2007; 23 (2): 223-226 (28 ref.)
Keywords: Albuminuria-epidemiology; Prevalence; Hospitals, University; Diabetes Complications-prevention and control; Proteinuria
Abstract: To determine the prevalence of microalbuminuria and associated risk factors among type 2 diabetic patients with no proteinuria by urine dipstick test, attending a diabetic clinic in King Abdulaziz University Hospital. Three hundred and thirty one type 2 diabetes patients were recruited for the study. Urinary albumin concentration was measured by immunoturbidimetric assay. Microalbuminuria was diagnosed if the urinary albumin excretion more than 30mg/g of creatinine. Microalbuminuria was diagnosed in 151 patients out of the total numbers of the patients included in the study [45.6%]. The overall prevalence of the microalbuminuria in our patients with type 2 diabetes visiting our clinic in king Abdulaziz University Hospital were high and similar to that reported in other studies.

Diabetic Neuropathies

epidemiology

Diabetic neuropathy, foot ulceration, peripheral vascular disease and potential risk factors among patients with diabetes in Bahrain: a nationwide primary care diabetes clinic-based study.
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Arabian Gulf University - Family and Community Medicine Department
Keywords: Foot Ulcer-epidemiology; Peripheral Vascular Diseases-epidemiology; Diabetes Complications; Cross-Sectional Studies; Diabetes Mellitus, Type 2; Risk Factors; Early Detection; Primary Health Care
Abstract: Although epidemiological studies have persistently shown a high prevalence of diabetes in Arabs, the control of diabetes is still poor and complications of diabetes are common. We examined the prevalence of diabetic peripheral neuropathy [DN], neuropathic foot ulceration [FU] and peripheral vascular disease [PVD], and potential risk factors for these complications among patients attending primary care diabetes clinics in Bahrain. We studied 1477 diabetic patients [Type 2 diabetes 93%]; to, including 635 men and 842 women, with ages ranging from 18-75 years in a cross-sectional study. The main predictor variables were demographic and clinical data, including assessment of foot and blood parameters. Mean age of the patients and duration of diabetes were 57.3+/-.632 and 9.5+/-.8.4 years, respectively. DN was present in 36.6% of the population, FU in 5.9%, and PVD in 11.8%. Diabetic patients with neuropathy were older than patients without neuropathy [P=0.001] and had had diabetes longer [P=0.002]. Diabetic
patients with foot ulcers had more severe neuropathy and higher vibration perception thresholds values than patients without foot ulcers \( P < 0.05 \). Older age, poor glycemic control, longer duration of diabetes, elevated cholesterol levels, current smoking, obesity defined by body mass index, large waist circumference, elevated triglycerides levels and hypertension but not gender, were significant risk factors for DN in both the univariate and the multivariate analyses \( P < 0.05 \). DN and PVD also remained significant risk factors for foot ulceration in the multiple logistic regression analysis. Rates of DN and PVD are high among diabetic patients in Bahrain. Implementation of strategies for prevention, early detection, and appropriate treatment at the primary health care level are urgently needed.

**Diet**

*The association between skipping breakfast and obesity.*

Mehrabani, H.; Mirmiran, P.; Azizi, F.

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*Journal of Qazvin University of Medical Sciences and Health Services [The]* 2007; 10 (4): 51-57 (21 ref.)

**Keywords:** Obesity; Body Weight Changes; Exertion; Cross-Sectional Studies; Body Mass Index

**Abstract:** Diets of obese persons are less adequate than those with normal weight; obese persons skip breakfast more frequently. The aim of this investigation was to study the association between the regular breakfast intake and the obesity. This cross-sectional study was performed within the framework of the Tehran Lipid and Glucose Study [TLGS] on 562 subjects [279 men and 283 women]. Following the measurement of anthropometric indices, 24-hour dietary recalls for 2 days were collected. There were 2 groups for analysis: group one with breakfast intake [404 subjects] and group two [158 subjects] with no breakfast intake. ANCOVA and logistic regression tests were used for analysis. Sex, age, smoking and total energy intake were adjusted. 72% and 28% of subjects were in the "with breakfast intake" and "no breakfast intake" groups, respectively. 61% and 39% women and men in the "no breakfast intake group", respectively. BMI, WC, WHR showed significant differences between two groups. Those with no breakfast intake found to have higher chances for obesity [OR=2.58, 95%CI=1.37-4.85]. Based on our data, breakfast intake has an effect on the risk of obesity. Longitudinal studies with respect to physical activities are recommended.

**Dihydropyridines**

**adverse effects**

Benidipine hydrochloride increases calcified nodule formation in the bovine aortic smooth muscle cell cultures.

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*DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences* 2007; 15 (1): 7-11 (33 ref.)

**Keywords:** Atherosclerosis; Calcinosis; Cattle; Muscle, Smooth, Vascular; Calcium Channel Blockers

**Diskectomy**

**methods**

*Efficacy of Adcon-L gel or Healon-GV in epidural fibrosis after lumbar microdiscectomy.*

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*Selcuk University - Faculty of Meram Medicine - Neurosurgery Department*

*Neurosciences* 2007; 12 (2): 109-113 (45 ref.)

**Keywords:** Diskectomy-adverse effects; Epidural Space-pathology; Fibrosis; Organic Chemicals; Hyaluronic Acid; Adhesions; Lumbar Vertebrae; Gels; Retrospective Studies

**Abstract:** To evaluate the efficacy of anti-adhesion barrier agents following lumbar microdiscectomy. Healon GV or Adcon-L was applied to a laminectomy defect overlying the duramater in 60 patients assigned to 3 randomized groups: Group I - Adcon-L \( n=21 \), Group II - Healon GV \( n=21 \), and Group III - control group, no adhesion barrier used \( n=18 \). We conducted this study between 2004 and 2006 at Selcuk University, Konya, Turkey. No significant difference was found between the 3 groups over the outcome measurements according to visual analogue score and the Oswestry Disability Index or in the radiological evaluation of epidural fibrosis by application of those anti-adhesion barrier agents. When comparing group III with groups I and II, we could not find a statistically significant difference in the clinical results and in the outcome measures \( p > 0.01 \). The epidural application of popular anti-adhesion barriers, after lumbar microdiscectomy was not found to be effective regarding outcome measures in human spinal surgery.
Drinking

Surveillance of quality of drinking water.
Goel, Naveen K.; Bhatnagar, Tarun; Sharma, M.K.; Verma, Anita; Agarwal, Neeraj; Chander, Jagdish; Gupta, Varsha; Swami, H.M.
Government Medical College - Department of community Medicine, Microbiology
Bahrain Medical Bulletin 2007; 29 (2): 53-56 (27 ref.)

Keywords: Water-analysis; Water-standards; Water Microbiology; Water Pollution; Quality Control

Abstract: To study the status of bacteriological contamination of drinking water being supplied by the municipal corporation. Community based longitudinal study. Department of Community Medicine and Microbiology of Government Medical College. 133 Hand pumps and 107 taps from which people were using water for drinking purposes were included in the study. Bacteriological quality of drinking water was checked by Mackie and McCartney's method; calculating most probable number [MPN] by presumptive coliform count. Water samples with MPN > 3 were considered unfit for drinking purposes. The bacteriological analysis of water samples was carried out for two years from July 2002 to June 2004. It showed that 47.4% hand pumps and 15.9% taps were supplying contaminated water; the range was from 40-70% and 27.8-57.9% during pre-monsoon to post-monsoon, seasons of respective years. The contamination of drinking water unfortunately appears to be a universal phenomenon in most of the developing countries. The authors conclude that there are two spheres, which needs to be strengthened. Firstly, the bacteriological quality of drinking water needs to be improved in general and special care is to be taken during pre-monsoon and monsoon periods. Secondly, regular campaigns may be carried out to inform the public about the importance of safe and potable water including methods for household disinfection of drinking water, during the pre-monsoon and monsoon periods when the incidence of contaminated water samples is highest in the region.

Drug Information Services

Drug information resources at private community pharmacies in Kuwait.
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Kuwait University - Faculty of Pharmacy - Department of Pharmacy Practice
Medical Principles and Practice 2007; 16 (2): 107-109 (5 ref.)

Keywords: Pharmacies; Pharmaceutical Services

Abstract: To investigate the drug information resources available in private community pharmacies in Kuwait. Pharmacists at a sample of 20 private community [retail] pharmacies completed a self-administered questionnaire of available information resources and perceived appropriate information resources to answer five drug information questions. All pharmacies had at least one reference book but they were outdated. The Middle East Medical Index was most commonly found and three pharmacies had internet access. Half of the respondents reported getting medicines information directly from the pharmaceutical companies, usually through pharmaceutical representatives. Most pharmacists could identify appropriate information resources for drug dosing and drug interactions but did not fare well for medicine identification and primary research evidence. The poor quality and outdated drug information resources in private community pharmacies will affect the quality of information provided to clients and prescribers and have an adverse effect on the role pharmacists can play in the health system in Kuwait.

Drug Interactions

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

Keywords: Captopril-pharmacokinetics; Histamine H[2] Antagonists; Cimetidine; Ranitidine; Famotidine; Angiotensin-Converting Enzyme Inhibitors

Abstract: Captopril is effective in the treatment of hypertension of all grades of severity. H2-receptors antagonists block gastric acid secretion and some cardiovascular effects of histamine. In view of the fact that, simultaneous administration of both drugs may alter the antihypertensive effect of captopril, present paper deals with the in vitro availability studies of captopril in presence of commonly used H2-receptor antagonists like cimetidine, ranitidine and famotidine. In order to simulate various pH levels in GI tract and to find out the kinetics and energetics of captopril-H2-receptor antagonist interactions, these studies were carried out in buffers of pH 4, 7.4 and 9 at 37°C and at elevated temperatures. These studies clearly indicate that most of the H2-receptor antagonists bind to captopril, forming charge-transfer complexes. As a result, the availability of captopril was affected by the concurrent administration of H2-receptor antagonists. Accordingly coadministration of both the drugs should be avoided.

Duane Retraction Syndrome

Capsule contraction syndrome despite capsular tension ring.
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King Saud University - College of Medicine - Department of Ophthalmology
Keywords: Lenses, Intraocular; Yttrium; Phacoemulsification

Abstract: A 60-year-old man had phacoemulsification complicated by zonular dehiscence and implantation of capsular tension ring [CTR] and a three-piece foldable SENSAARAE intraocular lens [IOL] in his right eye. Nine weeks postoperatively, sever anterior capsule fibrosis and contracture of capsulorhexis opening was noted. A neodymium: YAG [Nd:YAG] laser radial anterior capsulotomy was performed to prevent further zonular stress. This case shows that the use of CTR might not prevent the occurrence of capsule contraction syndrome.

**Ductus Arteriosus, Patent complications**

A complication of the amplatzer PDA occluder requiring surgical correction.

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Queen Alia Heart Institute - Prince Hamzeh Suburb - Depatment of Cardiac Surgery  
**Pakistan Journal of Medical Sciences** 2007; 23 (1): 130-131 (6 ref.)

Keywords: Ductus Arteriosus, Patent-surgery; Equipment and Supplies-adverse effects

Abstract: Trans-cathereter occlusion of patent ductus arteriosus is the standard of care. We present a case of aortic coarctation secondary to Amplatzer PDA occluder [PDO] deployment treated surgically by device explantation. An eighteen month old boy had an Amplatzer PDA occluder implanted at the age of one year; presented with aortic coarctation; where the aortic disc of the PDA occluder was protruding into the aorta. He then underwent successful surgical retrieval of the PDA occluder and correction of aortic coarctation with ligation of patent ductus arteriosus.

**Echinococcosis**

Gigantic cerebral hydatid cysts in childhood.

Per, Huseyin; Gumus, Hakan; Kumandas, Sefer; Tucer, Bulent; Yikilmaz, Ali; Menku, Ahmet; Coskun, Abdulhakim; Kurtsoy, Ali  
E-mail:hper@erciyes.edu.tr  
University Kayseri - Department of Pediatric Neurology  
**Annals of Saudi Medicine** 2007; 27 (1): 60-61 (16 ref.)

Keywords: Magnetic Resonance Imaging; Brain-pathology; Child

Unusually located thoracic hydatid cysts.

Gozubuyuk, Alper; Savasoz, Bilgehan; Gurkok, Sedat; Yucel, Orhan; Caylak, Hasan; Kavakli, Kuthan; Dakak, Mehmet; Genc, Onur  
Gulhane Military Medical Academy - Department of Thoracic Surgery  

Keywords: Thorax; Surgical Procedures, Operative; Tomography, X-Ray Computed; Magnetic Resonance Imaging

**diagnosis**

Hydatid disease of the vermiform appendix.

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Baghdad University - College of Medicine - General and Transplant Surgery  
**Middle East Journal of Emergency Medicine [The]** 2007; 7 (1): 35-36 (7 ref.)

Keywords: Appendix-parasitology; Cecal Diseases; Albendazole-therapeutic use; Echinococcus granulosus; Abdomen-pathology; Tomography, X-Ray Computed

Abstract: A 50-year old woman came with a six-month history of a right iliac fossa painful palpable mass. Abdominal ultrasonography and computerized tomography revealed a calcified cystic mass. At laparotomy, the cystic mass was an enlarged appendix, containing a hydatid cyst without any other organ involvement. This is a rare manifestation of this disease.

**surgery**

An analysis of hydatid cyst surgeries in Tehran Milad Hospital, Iran, during 2001-2004.

Pezeshki, A.; Kia, E.B.; Gholizadeh, A.; Koohzare, A.  
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Tehran University of Medical Sciences - School of Public Health and Institute of Health Research - Department of Medical Parasitology and Mycology  
**Pakistan Journal of Medical Sciences** 2007; 23 (1): 138-140 (23 ref.)

Keywords: Surgery; liver-parasitology

Abstract: Hydatidosis is a zoonotic disease which is due to infectivity with larval stage of dog tapeworm,"Echinococcus granulosus". The disease is chronic and cysts can be lodged in different organs of the intermediate hosts. It has cosmopolitan distribution and impact health and economical challenges for the many
countries throughout the world. In Iran, human cases are constantly reported from different medical centers. Therefore, accurate information on the distribution of the disease is first step for the control and prevention. In this descriptive study, demographic information [sex, age, occupation] about patients who underwent hydatid cyst surgeries during 2001-2004 in Tehran Milad Hospital were collected and analyzed. Among 78 patients who had hydatid cyst operations in Milad hospital, 56.5% were female and 43.5% male. Liver was the most commonly involved organ. According to the result of this study, females were found more infected with hydatid cysts than males.

**Echinococcus granulosus**

**genetics**

*A new primer pair in ITS1 region for molecular studies on echinococcus granulosus.*


Tehran University of Medical Science - School of Public Health and Institute of Public Health Research - Department of Medical Parasitology and Mycology


**Keywords:** Echinococcosis; DNA Primers; Polymerase Chain Reaction; DNA; Genotype

**Abstract:** Echinococcus granulosus, the causative agent of cystic echinococcosis has long been recognized as having a high degree of genetic divergence. The strains characterization seems to be essential for the establishment of a preventive and control strategy in every endemic area. Using DNA based methods for strain /genotype characterizations of E. granulosus have some difficulties, especially access to an efficient and pure concentration of DNA and proper primers. Using grinder method, a pure and high concentration DNA was extracted from 10 human hydatid cysts collected from Isfahan [central Iran] hospitals, and processed for PCR reaction. Using DNASIS, the primers were designed in internal transcribed spacer 1 [ITS1] region, following analysis of 30 E. granulosus nucleotide sequences, extracted from gene bank. This new and specific E. granulosus primer which amplified DNA thoroughly can be applied for molecular studies on echinococcosis.

**immunology**

*Characterization of specific IgE antibody related to antigen 5 of echinococcus granulosus.*

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Pasteur Institute of Iran - Department of Parasitology


**Keywords:** Immunoglobulin E; Hypersensitivity; Echinococcosis; Antigens

**Abstract:** Anaphylactic reactions, such as urticaria, edema, respiratory symptoms, and anaphylactic shock often complicate the course of Cystic Echinococcosis [CE]. To investigate the role of the IgE immunoreactive antigen 5 [Ag 5] in the sero-positive patients with CE, we determined N-terminal of 57 kDa subunit of Ag5 responsible for IgE and C-terminal of this active antigen related to induction of IgG specifically. Immunoblotting analysis showed that specific IgE to 57-kDa subunit related to inter-chain disulphide band of two 22 kDa and 38-kDa component of Ag5 and conformational epitope on this subunits. In addition, since the 57 kDa component arise from the removal of the C-terminal portion of 22 kDa subunit of Ag5, thus IgE specifically recognized N-terminal of 22 kDa subunit which remain bounds to the other component, whereas IgG reacted with C-terminal of 38 kDa component of Ag5. Recognition of the specific binding site on the 57 kDa subunit of Ag5 could leads to understanding the mechanism regulating IgE/IgG production in some immune circumstances that IgE tends to some dominate, whereas in other IgG predominates.

**Economics, Hospital**

*[Unit-cost of financial cost centers in Shohada-ye-Haft-e Tir hospital].*

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*Journal of Qazvin University of Medical Sciences and Health Services [The]* 2007; 10 (4): 76-81 (8 ref.)

**Keywords:** Financial Management, Hospital; Cross-Sectional Studies; Costs and Cost Analysis

**Abstract:** Hospitals as economic firms must use costing and cost analysis methods for optimization. To determine the unit-cost of financial cost centers and calculating non-optimal price-variance rate in Shohada-ye-Haft-e-Tir hospital in 1381. This was a cross-sectional study conducted in 1382. Information sheets were used to collect data. Unit-cost of centers was determined by activity-based cost method. Unit-cost of centers for ICU, CCU, neurocerebral ward, general surgery, orthopedic ward and internal therapeutic department were calculated as 549000, 354000, 180000, 150000, 200000 and 120000 Rials, respectively. Comparing the findings with predicted tariffs, non-optimal variances were observed. Based on data obtained from current study, administrations are suggested to attempt in identifying the elements effective on unit-cost increase. Simultaneously, application of correct economic methods in calculating of tariffs is necessary.
**Education, Medical, Continuing**

Reforming and repositioning continuing medical education.
Spivey, Bruce E.
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International Council of Ophthalmology


**Keywords:** Accreditation; Certification; Licensure, Medical

**Abstract:** Discuss problems with Continuing Medical Education [CME] and suggest reforms. Assimilation of literature, personal communications, and experience. Discussions with organizations and individuals literature review and extant perceptions in the CME community. Recommendations for improvement of the CME process. Multiple stakeholders in CME must work together in implementation of change. That Continuing Medical Education [CME] needs reform is not news to those who read the educational literature. Classic CME [lectures in large dark halls] fails to produce change in physician behavior. However, most physicians are comfortable with present approaches. During a five-year dialogue and planning effort, 14 major stakeholders of CME in the US came together to form a Conjoint Committee [led by the author] and agreed both on the need for change and the initial plan to achieve it. Fundamental system wide changes must occur in CME affecting educational methodology and physician capability, particularly in self-assessment, as well as in: accreditation; certification; credentialing; licensure; and credit reporting, recording and funding. The multiple involved parties who [control] various aspects of CME agreed to focus on the physician end-user and create a revised CME system. This [new CME] would include simplified, standard reporting of CME experiences for physicians, as well as a more rational system of credit. A series of recommendations, next steps and action plans to accomplish the objectives were agreed upon and have been assigned to organizations according to historical interest and commitment. The paper includes arguments for change and outcomes if change is made.

**Educational Measurement**

[Assessment of two evaluation methods in cognitive domain for dental students in orthodontic department: CBT versus PBT].
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**Journal of Qazvin University of Medical Sciences and Health Services** [The] 2007; 10 (4): 82-85 (18 ref.)

**Keywords:** Students, Dental; Orthodontics; Software; Cognition

**Abstract:** The computer-based testing [CBT] is now an accepted tool for assessment in fields of higher education but there is a lack of empirical research in the usefulness of computer in evaluation of medical sciences. The purpose of this study was to compare the dental students' performance test scores with computerized and paper-based testing [PBT]. This analytical study was carried out on 46 dental students at orthodontic department of Yazd University of medical sciences in 2004. The new software with selected questions and commercial paper-based testing were used for CBT and PBT, respectively. Analysis of data was carried out using t-test and correlation test of Spearman. There was a significant correlation between CBT and PBT for students' scores [r=0.6, p=0.000], however, no statically significant correlation was found between mean scores obtained for CBT and PBT. Our results indicated that the CBT could be reliably used for the purpose of student ranking but care should be taken in using it for grading.

**Elaeocarpaceae**

The antinociceptive action of aqueous extract from muntingia calabura leaves: The role of opioid receptors.
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**Medical Principles and Practice** 2007; 16 (2): 130-136 (22 ref.)

**Keywords:** Plant Leaves; Plant Extracts; Receptors, Opioid; Analgesics; Mice; Temperature

**Abstract:** The present study was carried out to investigate the antinociceptive activity of the aqueous extract of Muntingia calabura [MCAE] leaves and to determine the effect of temperature and the involvement of the opioid receptor on the said activity using the abdominal constriction test [ACT] and hot-plate test [HPT] in mice. The extract was prepared by soaking the dried powdered leaves of M. calabura in distilled water [dH[2]O] overnight, and the supernatant obtained was considered as a stock solution with 100% concentration. The stock solution was diluted to 1, 5, 10, 50 and 100% and used to determine the antinociceptive activity of MCAE. A further experiment was done with 50% concentration to determine the effect of temperature and naloxone involvement of the opioid receptor system in MCAE antinociceptive activity. At the various concentrations MCAE showed significant antinociceptive activity in both tests. However, the concentration-dependent activity was observed only in the ACT but not in the HPT. The 50% concentration of MCAEs were also stable against the effect of various temperatures as indicated by the presence of activity in both tests. The temperatures [40, 60 and 100°C] also showed an enhanced extract activity only in the HPT. Pre-treatment with naloxone [2 and 10 mg/kg] blocked the extract activity in both tests, indicating the involvement of the opioid receptor system in MCAE antinociceptive activity. Our data indicate that M. calabura leaves possess antinociceptive activity against chemically and thermally induced noxious stimuli. The bioactive compound[s] responsible for its antinociceptive activity is/are heat-stable and work partly via the opioid receptor system.
**Electrocardiography**

Early changes in ventricular repolarization after thrombolytic therapy in patients with acute myocardial infarction as indicators for prediction of epicardial coronary artery reperfusion.

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**Medical Principles and Practice** 2007; 16 (2): 124-129 (15 ref.)

**Keywords:** Myocardial Infarction; Thrombolytic Therapy; Myocardial Reperfusion; Coronary Angiography

**Abstract:** To investigate the relationship between early T-wave inversion after thrombolytic therapy and the likelihood of successful epicardial coronary reperfusion. Thrombolytic therapy was given to 195 patients with ST segment elevation due to acute anterior myocardial infarction [AMI]. Coronary angiography was performed. Receiver operating characteristic [ROC] curve [grade of sensitivity versus false positive] was calculated using likelihood ratio method to identify the ideal cut-off values of the ventricular repolarization variables. Predictive indices showed 80% sensitivity, 83% specificity, 81% accuracy, 88% positive predictive value and 71% negative predictive value for early T-wave inversion after thrombolytic therapy. A good concordant agreement was noted between the data of coronary angiography and early T-wave inversion in the infarct-related ECG leads after thrombolysis [kappa coefficient x = 0.876]. Stepwise multivariate analysis revealed that early T-wave inversion after thrombolytic therapy of AMI was significantly associated with a history of preinfarction angina, residual infarct-related coronary artery stenosis >50%, short time to thrombolytic therapy <90 min, and evening time for occurrence of thrombolysis [p < 0.05]. The ROC curve data analysis showed that early T-wave inversion amplitude after AMI had 87% sensitivity and 84% specificity for predicting successful reperfusion, with an ideal cut-off value of 7.2 mm, while time of T-wave inversion had 80% sensitivity and 79% specificity, with an ideal cut-off value of 120 min. The data indicate that early inversion of T wave after AMI is a statistically significant independent variable in predicting successful epicardial coronary thrombolysis status.

**Electroencephalography**

Diagnostic role of EEG in children having unprovoked seizures, experience at the neurophysiology department, The children's hospital, Lahore.

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**Pakistan Pediatric Journal** 2007; 31 (1): 3-7 (23 ref.)

**Keywords:** Seizures-diagnosis; Child; Neurophysiology; Child, Hospitalized; Epilepsy-diagnosis; Epilepsy-epidemiology; Cross-Sectional Studies

**Abstract:** Although advances in imaging technology offer ever-increasing diagnostic accuracy, the electroencephalogram [EEG] retains its importance and is the cornerstone for the diagnosis and treatment of epilepsy. A cross-sectional descriptive study was conducted at Neurophysiology Department of The Children's Hospital, Lahore. Our aims were to find out the different types of epilepsies diagnosed on EEG in children referred for interictal EEG with recent clinical diagnosis of epilepsy. Out of 645 children referred for EEG after seizures, 415 [64%] were males and 230 [36%] were females, 21% had their first seizure before one year of age, 54 % of them were between the ages of 1-5 years and 46% of them were more than 5 years of age. We found normal interictal EEGs in 54% whereas 46% children had abnormal EEGs. So in addition to supporting the diagnosis of epilepsy, EEG has significant potential to classify epileptic seizures.

**Utilization**

EEG: Are we underutilizing this modality.

Haneef, S.M.

**Pakistan Pediatric Journal** 2007; 31 (1): 1-2 (5 ref.)

**Keywords:** Neurophysiology; Diagnostic Techniques and Procedures

**Electromagnetic Fields**

**adverse effects**

[Effects of electromagnetic fields on seminal vesicle in rat].

Zahedi, A.; Khaki, A.A.; Sohrabi, I.; Zarrintan, S.; Tanoumand, A.

**Journal of Qazvin University of Medical Sciences and Health Services [The]** 2007; 10 (4): 7-14 (21 ref.)

**Keywords:** Seminal Vesicles; Rats; Infertility

**Abstract:** In industrial world, almost everyone is unavoidably exposed to ambient electromagnetic fields [EMF] generated from various technical and household appliances. One of the critical issues is the possibility of adverse effect of EMF on male reproductive system including the testes and accessory glands. To examine weather the EMF can adversely affect the seminal vesicle tissue. This was an experimental study in which two groups [case and control] of 15 members were investigated. The members of case group were exposed to 50 Hz non-ionizing radiation during
the postnatal life for 2 months. The control group was kept in a similar situation but without exposure to EMF. Microscopic observations demonstrated that the smooth muscle fibers in capsule of tubulosecular glands were spread out in different layers and directions. Their nuclei showed signs of heterochromatinism. The number of heterochromatized epithelial cells per microscopic field was 1.127 +/- 0.46 for the case group while it was 0.60 +/- 0.74 for the control group [p<0.01]. Epithelial secretary cells also showed cell damages. Our findings suggest that EMF exposure may cause profound changes on seminal vesicle. Therefore, exposure to EMF may result in pathological changes leading to subfertility and infertility.

Empyema

epidemiology

Empyema thoracis: A clinical study.
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Annals of Thoracic Medicine 2007; 2 (1): 14-17 (13 ref.)

Keywords: Thoracostomy; Treatment Outcome; Empyema-microbiology; Empyema-therapy; Empyema, Pleural; Empyema, Tuberculous; Cross-Sectional Studies

Abstract: Empyema thoracis is a disease that, despite centuries of study, still causes significant morbidity and mortality. The present study was undertaken to study the age-sex profile, symptomatology, microbiologic findings, etiology and the management and treatment outcome in a tertiary care hospital. A prospective study of empyema thoracis was conducted on 40 consecutive patients with empyema thoracis admitted to the tuberculosis and chest diseases ward of a teaching hospital. The demographic data, clinical presentation, microbiological findings, etiology, the clinical course and management were recorded as per a planned pro forma and analyzed. The peak age was in the range of 21-40 years, the male-to-female ratio was 3.4:1.0 and the left pleura was more commonly affected than the right pleura. Risk factors include pulmonary tuberculosis, chronic obstructive pulmonary diseases, smoking, diabetes mellitus and pneumonia. Etiology of empyema was tubercular in 65% cases and nontubercular in 35% cases. Gram-negative organisms were cultured in 11 cases [27.5%]. Two patients received antibiotics with repeated thoracentesis only, intercostal chest tube drainage was required in 38 cases [95%] and more aggressive surgery was performed on 2 patients. The average duration for which the chest tube was kept in the complete expansion cases was 22.3 days. It was concluded that all cases of simple empyema with thin pus and only those cases of simple empyema with thick pus where size of empyema is small should be managed by aspiration/s. Cases failed by the above method, all cases of simple empyema with thick pus and with moderate to large size of empyema and all cases of empyema with bronchopleural fistula should be managed by intercostal drainage tube connected to water seal. It was also observed that all cases of empyema complicated by bronchopleural fistula were difficult to manage and needed major surgery.

Environmental Pollution

adverse effects

Environmental pollution: Its growing impact on health.
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Keywords: Air Pollution; Health; Developing Countries; Environmental Health

Eosinophilic Granuloma

diagnosis

Solitary eosinophilic granuloma of parietal bone in an adult patient.
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Neurosciences 2007; 12 (2): 160-162 (12 ref.)

Keywords: Histiocytosis, Langerhans-Cell; Parietal Bone-pathology; Tomography, X-Ray Computed; Eosinophilic Granuloma-surgery

Abstract: Eosinophilic granuloma [EG] is a well-recognized benign form of Langerhans-cell histiocytosis. The estimated incidence of EG is 3-4 per million of the population. More patients are children and adolescents between the ages of 1-15 years. In this report, we present an adult patient. A 37-year-old male was admitted with headache and right parietal swelling that was present for 2 months together with epileptic attacks. Cranial CT scan revealed a right parietal osteolytic lesion with large epidural and subcutaneous mass, causing brain compression. Total removal of the mass was carried out with cranioplasty. Histopathological examination disclosed Langerhans* cell histiocytosis and immunohistochemical detection of S-100 antigen. At follow-up, he had no neurological deficits, and control CT was normal. For symptomatic solitary calvarial EG, surgical excision is the main treatment option. Surgical treatment is simple, quick, and allows histological diagnosis of the osteolytic lesions.
Epilepsy

diagnosis

**Early predictors of intractable epilepsy in children: A case control study.**
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Pakistan Pediatric Journal 2007; 31 (1): 17-24 (21 ref.)

**Keywords:** Epilepsies, Myoclonic-diagnosis; Epilepsy-complications; Child; Case-Control Studies; Status Epilepticus

**Abstract:** Case control, Hospital based. Site: Epilepsy Centre, The Children's Hospital, Lahore-Pakistan. From 1st Sept 05 to 30th Nov 06 Knowing the prognosis of epilepsy in children would undoubtedly influence the treatment strategy. All the children, age 1 year to 16 years receiving anti-epileptic drugs for their idiopathic or cryptogenic epilepsy were the study population. After six months of commencement of treatment various factors associated with well control the ["controls"] and intractability the ["cases"] were analyzed and a univariate comparison was done between various factors for these two groups. Over a period of 14 months, 520 children, 33% the "control" and 67% the "cases" among these patients were enrolled for this study. Statistically, male gender history of birth asphyxia, initial seizure type, past head trauma, previous CNS infection and family history of epilepsy are not the risk factors, whereas seizures starting in infancy, seizures episodes >10 before commencing treatment, neonatal seizures and neurological deficit present at presentation were the risk factors for intractable epilepsy. Myoclonic seizures, status epilepticus before starting treatment and infantile spasm were seen in the "case" group only. We conclude children having risk factors for intractable epilepsy have poor prognosis and recommend that such children should be referred to epilepsy centre as soon as possible.

epidemiology

**The epidemiology of clinical neonatal seizures in Ramadi city.**
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Neurosciences 2007; 12 (2): 170-172 (7 ref.)

**Keywords:** Infant, Newborn, Diseases; Epilepsy, Benign Neonatal; Epidemiology; Seizures-epidemiology

pathology

**Pediatric epilepsy and psychopathology.**
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Neurosciences 2007; 12 (2): 101-104 (31 ref.)

**Keywords:** Pediatrics; Epilepsy-psychology; Psychopathology; Comorbidity; Seizures; Autistic Disorder

**Abstract:** The association of psychiatric disorders and pediatric epilepsy is under appreciated by clinicians. Behavioral disorders, especially depression, are often perceived as "reactory" processes. In fact, these comorbid disorders can be more disabling than the epilepsy itself. This review discusses the common behavioral comorbidities associated with epilepsy including autistic spectrum disorders, psychosis, attention deficit hyperactivity disorders, and mood disorders.

Ergotamine

adverse effects

**Brief report in vascular medicine Ergotamine-induced acute vascular insufficiency of the lower limbs.**
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Pakistan Journal of Medical Sciences 2007; 23 (1): 137 (3 ref.)

**Keywords:** Extremities-blood supply; Extremities-pathology; Vascular Diseases-chemically induced; Heparin
Esophageal Neoplasms

epidemiology

Oesophageal carcinoma in Jordanian field hospital in Afghanistan.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 82-85 (18 ref.)
Keywords: Esophageal Neoplasms-diagnosis; Endoscopy; Endoscopy, Digestive System
Abstract: Mazzar-I-Shariff in Afghanistan, is a poor wartorn city with only one gastrointestinal endoscopist in the region. It was noticed by previous gastroenterologists working in Jordanian Field Hospital in Afghanistan that oesophageal carcinoma is seen more frequent than that in Jordan. The objectives of the study were to determine the spectrum of upper gastrointestinal diseases in patients who undergone upper endoscopy in the Jordanian Field Hospital in Afghanistan and to estimat the incidence,age of diagnosis, clinical presentations and the endoscopic appearance of the oesophageal carcinoma. Between 20 December 2003 and March 3, 2004, 289 gastroscopies were performed in Jordanian field Hospital/Afghanistan on patients aged 16 years or more. Biopsies were taken from any suspected lesion. Data for each patient were kept to correlate with the histopathological results. Thirty three [11.4%] endoscopies gave normal results. The most common major single findings in the other 256 were oesophageal carcinoma [22.5%] duodenal ulcers [13.5%], and oesophagitis [13%]. About one third of the patients had more than one endoscopic finding. Oesophageal carcinoma was found in 22.5% of patients and it was more common in men than women. The most common presenting symptom for oesophageal carcinoma were dysphagia and weight loss. It was more frequent in age group of 60-72 years. The most common endoscopic findings were mass or ulcerative lesion. Oesophageal carcinoma is a common finding in patients who had upper endoscopy in the Jordanian Field Hospital in the north of Afghanistan.Mazzar-I-Sharif needs well equiped gastrointestinal unit and a multi disciplinary team [Gastroenterologist, Histopathologist, Surgeon and Dietitian] to deal with patients with oesophageal carcinoma and more research is needed to establish the possible etiology.

Ethylamines

metabolism

Fate of intermediate biodegradation products of triethyl amine in a compost-based biofiltration system.
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Keywords: Air Pollution
Abstract: Biofiltration of Triethylamine [TEA] vapor used as a catalyst in casting operations was evaluated in this study. The unit consisted of a 6-L three-stage biofilter containing a mixture of compost and wood chips [40:60 v/v] as the filter medium. Seed microbial population from municipal activated sludge was acclimated for a period of three weeks prior to the actual experimental runs. In the startup period, high pH values up to 10 was observed due to alkaline nature of TEA and inadequate formation of biofilm and low overall biodegradation. Steady increase of organic-N concentration along with gradual upward trend of pressure drop indicated sound establishment of microbial population. Operational parameters studied included loading rate [6-116 g/m3/h], hydraulic detention times [40-60 s], temperature [ 30+/-1°C], and humidity [50-55%]. Results indicated effluent ammonia concentrations meeting standards of 25 ppm can be obtained after 2.5 months of operation. Optimal organic loading rates [OLRs] of 90+/-14 g/m3/h for Hydraulic Retention Time [HRT] value of 48 s were suggested. Under these conditions, elimination capacity of 71+/-3 g/m3h and removal efficiency 81+/-14 % were achieved. Mass balance was performed on different forms of nitrogen products for a constant inle t concentration of 180 ppm TEA with a relatively stable removal efficiency of about 90% maintained for over a month. Both liquid [leachate] and gas [different sections, inlet, and outlet] phase measurements were made for the purpose of performing calculations. Ammonium-N and Nitrate-N were dominant in the first and third sections of the reactor, respectively. Cumulative TEA-N mass balance over a 2-month period indicated an equal proportion breakdown into ammonia-N, nitrate-N, and ammonium and organic-N. The fact that up to 30% of TEA-N could not be accounted for in the leachate and gas measurements can be attributed to incorporation into the cellular constituents.

Evoked Potentials, Auditory, Brain Stem

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Pakistan Pediatric Journal 2007; 31 (1): 25-29 (20 ref.)
Keywords: Hearing Loss, Conductive-diagnosis; Hearing Loss; Auditory Threshold; Child; Prospective Studies
Abstract: To investigate the efficacy of auditory brainstem response [ABR] for hearing evaluation in children with conductive hearing loss. A prospective study from January 2006 to December 2006. Department of Paediatric Audiology The Children Hospital and The Institute of Child Health Lahore. Auditory brainstem response was carried out in 113 children with conductive hearing loss, in the age range of 25 days to 13 years, using A "EMG 14 multi- sensory evoked potential system while sedating them with chloral hydrate and latency " intensity relationship was recorded for analysis. The patients with sensorineural and mixed hearing losses were excluded. Then, tympanometry with GSI * 38 Auto Tymp was done to evaluate middle ear functions. A total of 5777 children visited the hospital, out of which ABR was done in 911 [15.78%]. Among these, 113 [12.40%] children were with conductive hearing loss. 65 [57.52%] were males and 48 [42.48%] were females. 49 [43.36%] patients had moderate bilateral conductive hearing loss and 10 [8.85%] had mild unilateral conductive hearing loss whereas 47 [41.59%] had moderate bilateral conductive hearing loss and 7 [6.20%] had moderate unilateral conductive hearing loss. 85 [75.22%] patients had D type, 20 [17.70%] had A type and 8 [7.08%] had E type tympanograms. Among these 113 patients, 77 [68.14%] were with OME, 28 [24.78%] with Down’s Syndrome and 8 [7.08%] with perforation [either bilateral or unilateral]. It is concluded that auditory brainstem response can be reliably used in the detection of conductive hearing impairment and is an efficient method for threshold estimation in children.

Fasciitis, Necrotizing

etiology

Necrotizing fasciitis caused by aeromonas sobria: A case report.
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Keywords: Fasciitis, Necrotizing-diagnosis; Aeromonas; Gram-Negative Bacterial Infections; Fasciitis, Necrotizing-therapy

Abstract: Aeromonas sobria is facultative, oxidase-positive, anaerobic, flagellated gram-negative bacilli. Found commonly in sewage, soil, and blackish or fresh water. Commonly causing various diseases in immunocompromised patient, but in healthy patients causing diarrhea and soft tissue infections. We are reporting a case of incomplete septic abortion and necrotizing fasciitis caused by Aeromonas sobria, which was successfully diagnosed early and managed by aggressive surgical and medical managements.

Fever

Depletion of serotonin synthesis with p-CPA pretreatment alters EEG in urethane anesthetized rats under whole body hyperthermia.
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Keywords: Serotonin-chemical synthesis; Rats; Urethane; Anesthetics, Intravenous; Fenclonine; Serotonin Antagonists; Electroencephalography; Brain Edema

Fluorescein Angiography

Indocyanine green angiography in inflammatory eye disease: Perpective.
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Inflammatory Eye Diseases Center for Ophthalmic Specialized Care
Keywords: Eye Diseases; Uveitis; Sensitivity and Specificity

Foreign Bodies

Delayed diagnosis of foreign body aspiration in children.
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Ribat Hospital - Department of Pediatrics
Keywords: Respiratory Aspiration; Child; Diagnosis

Abstract: Foreign body aspiration in children is common and usually presents with an initial episode of choking with subsequent respiratory symptoms. There may be cough, wheeze, or strider, with decreased or abnormal breath sounds on examination. However, it can mimic other illnesses and cause difficulty in diagnosis. Radiological investigations may help to confirm aspiration but should not be used to exclude it. This case is a presentation of foreign body aspiration with a delay in diagnosis and misdiagnosed as bronchial asthma. It is believed that delay could have been avoided with a more careful approach to the history and more appropriate use of investigations. This case also demonstrates the use of CT scan with reconstruction in diagnosis of foreign body.
Fruit physiology

A study of the digestive effect of dates on sucrose and starch.
Said, Subhi A.; Khan, Saeed A.; Mohajir, M. Siddiq
Dubai Pharmacy College
Keywords: Fruit-metabolism; Sucrose; Starch; Digestion; Chromatography, High Pressure Liquid
Abstract: A study of the digestive effect of dates on sucrose and starch has been carried out. Digestion of sucrose and dates and starch and dates at pH 7.4 results in the breakdown of both sucrose and starch to glucose and fructose. On the contrary, digestion of sucrose and starch alone at pH 7.4 does not cause any breakdown suggesting that dates do affect the breakdown of sucrose and starch in the intestine. The variations in the analytical results are of the order of 1-2% in terms of RSD.

Gallbladder Neoplasms
diagnosis

Patients with gall bladder cancer: a clinical experience.
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Patel Hospital
Pakistan Journal of Medical Sciences 2007; 23 (2): 298-300 (21 ref.)
Keywords: Gallbladder Neoplasms-epidemiology; Cholelithiasis; Gallstones; Gallbladder Neoplasms-surgery
Abstract: To see the clinical profile of patients with gallbladder cancer. In this multicentre retrospective study records of all patients with gallbladder cancer, who presented at Patel Hospital, Karachi Adventist Hospital and Bilquis Naz Hospital Karachi, during January 2002 to December 2005, were reviewed. Out of sixty-six, forty-nine were females [74.2%] and seventeen were males [25.8%], showing female preponderance. Forty-two [63%] patients were in age group of 51-70 years. Fifty two patients [78%] presented with advanced disease. Main symptom noted was pain associated with anorexia, nausea and vomiting. Major signs were palpable mass, hepatomegaly and jaundice. Adenocarcinoma was reported in sixty-four [97%] cases. Prevalence of gall bladder cancer is higher in females in our series. Most of them were in fifth and sixth decade of life. Gallbladder cancer showed association with gallstones and fifty-two patients [78%] presented with unresectable advanced malignancy.

Gambling

Obstinate gambling addiction.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 293-295 (8 ref.)
Keywords: Obsessive-Compulsive Disorder; Sertraline-therapeutic use; Behavior, Addictive
Abstract: Some authors regard gambling as an addiction. Detailed psychiatric examination revealed obsessive-compulsive syndrome in this patient. He was treated systematically with individual psychotherapy and sertraline from low doses up to the maximal dose [i.e. about 200 mg daily]. A complete remission of the obsessive-compulsive syndrome was achieved. A number of indirect proofs demonstrate a significant role of sertraline in the aetiology of obsessive-compulsive syndrome. The most important evidence is the effectiveness of the drug from the group of selective inhibitors of serotonin central reuptake [SI-5HT] in the treatment of obsessive compulsive syndrome. Sertraline is safe and effective in the treatment of obsessive-compulsive syndrome. Drug doses ranged from 50 to 200 mg daily.

Gangrene

Lung gangrene in a mechanically ventilated woman due to streptococcus pneumoniae.
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Keywords: Lung-pathology; Respiration, Artificial; Streptococcus pneumoniae; Pneumococcal Infections
Abstract: A 51-year-old woman with long-standing type II diabetes, presented to the accident and emergency department with 5 day history of fever, cough, with minor greenish sputum and right pleuritic pain. Pulmonary auscultation revealed right rales. Arterial blood gas analysis [ABG] showed, pH 7.41; PaCO2 30 mmHg; PaO2 55 mmHg [while patient breathing oxygen at 3 L/minute]. Chest radiograph showed a consolidated area in the right middle lobe. The patient was admitted in the intensive care unit for further management. Because of persistent hypoxia the patient was intubated and placed on mechanical ventilator. Multiple sputum smears revealed Gram-positive cocci while
sputum cultures revealed Streptococcus pneumoniae. Two blood cultures obtained on admission yielded Streptococcus pneumoniae. A CT scan of the chest revealed a crescent-shaped lucency [air crescent sign] within the area of consolidation in the right middle lobe. Based on these radiographic findings the patient was diagnosed with lung gangrene and she was treated with antibiotic. There was no time to intervene surgically because she died six days after admission.

**Genes, p53**

The effect of wild type P53 gene transfer on growth properties and tumorigenicity of PANC-1 tumor cell line.

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Tarbiat Modares University - Faculty of Basic Sciences - Department of Biochemistry

*IBJ - Iranian Biomedical Journal* 2007; 11 (1): 1-6 (24 ref.)

**Keywords:** Cell Line, Tumor; Pancreatic Neoplasms-genetics; Tumor Suppressor Proteins p53; Gene Transfer Techniques; Gene Therapy

**Abstract:** The p53 protein function is essential for the maintenance of the non-tumorigenic cell phenotype. Pancreatic tumor cells show a very high frequency of p53 mutation. To determine if restoration of wild type p53 function can be used to eliminate the tumorigenic phenotype in these cells, pancreatic tumor cell lines, PANC-1 and HTB80, differing in p53 status were stably transfected with exogenous wild type p53 gene. The transfection was performed using Polybrene/DMSO-Assisted Gene Transfer method. The wild type p53 gene integration into genomic DNA was detected by Southern blot and PCR. Furthermore, the expression of wild type p53 protein was detected in selected clones by immunohistochemistry and Western blot. While HTB80 cell line failed to produce a stable p53 expressing clone, the PANC-1 cells produced stable lines. Following characterization of clones, the growth rate and tumorigenicity of PANC-1 wild type p53 clones were compared to the control cells. Our data showed that the expression of wild type p53 decreased the growth rate of PANC-1 cells. It was also observed that the expression of wild type p53 in PANC-1 cells suppressed its potential for tumor formation in nude mice, completely, while the parental line leads to the formation of a relatively large tumor. Our results suggest that gene therapy based on restoration of wild type p53 protein function in pancreatic tumor cells with high amount of mutant p53 is a feasible option in pancreatic cancer treatment.

**Giardiasis**

**complications**

Effect of giardia lamblia infection on the cognitive function of school children.

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**Keywords:** Giardia lamblia-pathogenicity; Schools; Child; Cognition

**Abstract:** The association between helminthic parasitic infection and cognitive function has long been recognized, however there are few reports about Giardia lamblia infection. This paper describes a study about the effect of G. lamblia infection on the cognitive function. One hundred thirty two children infected with G. lamblia from Robat Karim south of western Tehran, Iran were compared with 150 children without any parasitic infection. These two groups were identical in socioeconomic and nutritional status. Cognitive function was assessed using, three tests from Wechsler Intelligence Scale for children and one subset of the Clinical Evolution of Language Function. Comparison of two groups revealed that uninfected children improved significantly more than children who had G. lamblia infection in the tests of Fluency [P< 0.02] and Digit-span Forwards/ Backwards [P< 0.004]. Regular stool examination is suggested in areas with low hygienic conditions, since G. lamblia infection might be present without any clinical manifestation.

**drug therapy**

Comparison between efficacy of single dose of tinidazole with a 7 day standard dose course of metronidazole in giardiasis.

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Hamadan University of Medical Sciences - School of Medicine - Department of Parasitology

*Pakistan Journal of Medical Sciences* 2007; 23 (1): 43-46 (19 ref.)

**Keywords:** Tinidazole-therapeutic use; Tinidazole-administration and dosage; Metronidazole-therapeutic use; Metronidazole-administration and dosage; Randomized Controlled Trials

**Abstract:** Giardia intestinalis is the most common intestinal protozoan in the under developed countries. Treatment of infection has some difficulties by metronidazole because of long course of therapy and various side effects. The objective of this study was to determine efficacy and side effects of tinidazole compared with metronidazole in the treatment of giardiasis in children. A randomized controlled clinical trial, 106 subjects [69 males, 37 females] with Giardia intestinals infection admitted to out patients or private clinics in Hamdan, West of Iran, was treated with tinidazole or metronidazole. The study period was May 2002 to January 2003. Tinidazole 50 mg/kg single dose and metronidazole 15 mg/kg three times a day for seven days were given orally to children. Parasitological cure was documented when there was 3 times negative stool examination for giardiasis at 1-2 weeks after therapy. Thirty-seven
of 42 individuals [88.1%] treated with tinidazole and 43 of 64 children [67.2%] treated with metronidazole had parasitological cure. Cure rates between two groups were significant statistically [P<0.01]. No major side effect were observed except two cases in metronidazole group who had mild headache and abdominal pain for two days and some had metallic taste. Three cases in tinidazole group had nausea, dizziness and headache. Tinidazole was more effective than metronidazole, produced fewer and mild side effects and is recommended as drug of choice in single dose therapy for giardiasis. Because of single dose administration, short course of therapy and good compliance of patients, this preparation is preferred to metronidazole in the treatment of giardiasis.

**Glaucoma**

**surgery**

**Outcome of capsule excision for bleb encapsulation after Ahmed glaucoma valve implantation.**

Al Shahwan, Sami; Oaida, Ohud; Morales, Jose; Al Torbak, Abdullah; Dawood, Ahmed; Abouamou, Marwan; Saeed, Abdul Aziz bin

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King Khaled Eye Specialist Hospital

**Saudi Journal of Ophthalmology** 2007; 21 (1): 3-7 (31 ref.)

**Keywords:** Surgical Procedures, Operative; Prosthesis Implantation; Intraocular Pressure; Treatment Outcome

**Abstract:** To assess the outcome of surgical intervention for bleb encapsulation after Ahmed implant. We reviewed the records of 9 patients who developed bleb encapsulation after Ahmed implant and who underwent bleb revision because of uncontrolled glaucoma despite medical treatment. After a mean follow-up of 36 months [range 2 to 84], the mean intraocular pressure [IOP] after bleb revision [16.6±/4.3] was significantly lower than the mean preoperative IOP [28.7±/5.3] [P value <0.05]. Successful outcome was defined as a final IOP between 6 and 22 mmHg with the same or less medication than pre-operatively; this was achieved in seven eyes [77.80%]. Capsular excision after failure of an Ahmed Glaucoma Valve caused by fibrous encapsulation is a useful approach for re-establishing function and lowering the IOP.

**Glyburide**

**pharmacology**

**Safety and efficacy of repaglanide and glibenclamide.**

Akhter, Mahmud Ahmed

**Pakistan Journal of Medical Sciences** 2007; 23 (1): 154 (1 ref.)

**Keywords:** Hypoglycemic Agents; Diabetes Mellitus, Type 2-drug therapy; Carbamates-therapeutic uses; Carbamates-pharmacology; Treatment Outcome

**Gonorrhea**

**diagnosis**

**Two Cases of endocervical gonorrhoea and Bartolin gland diseases.**

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Kermanshah University of Medical Sciences

**Pakistan Journal of Medical Sciences** 2007; 23 (1): 135-136 (13 ref.)

**Keywords:** Cervix Uteri-microbiology; Bartholin’s Glands-microbiology; Neisseria gonorrhoeae-pathogenicity; Infertility, Female; Gonorrhea-therapy

**Abstract:** Gonorrhoea a sexually transmitted disease if left untreated can cause infertility apart from other disorders. We report two cases and feel that all pregnant women should be screened for gonorrhoea.

**Gram-Negative Bacteria**

**drug effects**

**Resistant gram-negative bacilli and antibiotic consumption in Zarqa, Jordan.**

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Prince Hashem Hospital

**Pakistan Journal of Medical Sciences** 2007; 23 (1): 59-63 (21 ref.)

**Keywords:** Drug Resistance, Bacterial; Microbial Sensitivity Tests; Anti-Bacterial Agents
**Abstract:** To investigate the prevalence of antibiotic resistance among gram-negative bacteria in relation to antibiotic use in Prince Hashem Hospital [PHH], Jordan. One hundred consecutive gram-negative bacterial isolates from different sites were collected from patients admitted to the ICU at PHH. The susceptibilities of the strains to 12 antibiotics were performed and interpreted. The quantities and the numbers of the patients discharged on antibiotics and the quantities consumed were obtained from the hospital pharmacy records. The most common isolate was P. aeruginosa [n=21] The most common site of isolation was the respiratory tract [65%], The highest susceptibility was to piperacillin/ tazobactam[78%], and the lowest was to cefuroxime[34%]. The aminoglycosides gentamicin and amikacin were active against 71% and 73% of the isolates respectively, Ciprofloxacin was active against 75% of the isolates. The most frequently used antibiotics were the third-generation cephalosporins ceftriaxone and cefazidime, followed by imipenem and amikacin. Antibiotic resistance surveillance programs associated with registration of antibiotic consumption are necessary to promote optimal use of antibiotics. Rational prescribing of antibiotics should be encouraged through educational programs, surveillance and audit. Proper infection control measures should be practiced to prevent horizontal transfer of drug-resistant organisms.

**isolation and purification**

**Differentiation of common gram negative pathogens by PCR- ribotyping.**

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National Institute for Biotechnology and Genetic Engineering [NIBGE] - Health Biotechnology Division

**Pakistan Journal of Medical Sciences** 2007; 23 (2): 233-237 (18 ref.)

**Keywords:** Gram-Negative Bacteria-genetics; Ribotyping; Polymerase Chain Reaction; Laboratory Techniques and Procedures; Escherichia coli; Salmonella typhi; Proteus vulgaris; Enterobacter aerogenes; Pseudomonas aeruginosa; Citrobacter freundii

**Abstract:** Gram negative bacteria especially members of family Enterobacteriaceae are among the most frequently isolated organisms from the clinical specimens. Rapid diagnosis of the pathogen in a clinical sample is always very important. Conventional methods are time-consuming. Among molecular techniques, PCR is very useful but unless very specific primers are used, non-specific amplifications are a problem. PCR-ribotyping is a technique that gives very specific multiple bands by use of a single primer set. This study was designed to establish patterns for five common pathogens of Enterobacteriaceae, namely Escherichia coli, Salmonella enterica serovar Typhi [Salmonella Typhi], Proteus vulgaris, Klebsiella aerogenes, and Citrobacter freundii along with another very common and problematic gram negative pathogen Pseudomonas aeruginosa. Each species gave a specific ribotyping pattern. Escherichia coli gave four amplification products of 1200, 850, 800, and 700 bps. Four amplification products of different sizes were also observed in Citrobacter freundii [3000, 1200, 900, 850, 700, and 580 bps], Proteus vulgaris [900, 800, 750 and 700 bps], and Klebsiella aerogenes [3000, 870, 700, and 520 bps]. More discrimination with five amplification products was seen in Salmonella Typhi [3000, 1200, 900, 850, and 700 bps]. On the other side of spectrum was Pseudomonas aeruginosa only a single amplification product of 750 bps was observed. PCR-ribotyping can very efficiently and specifically differentiate between opportunistic gram negative human pathogens.

**Habits**

[Deleterious Oral habits].

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**Journal of Qazvin University of Medical Sciences and Health Services [The]** 2007; 10 (4): 86-94 (33 ref.)

**Keywords:** Fingersucking; Nail Biting; Bruxism; Oral Hygiene

**Abstract:** Oral habits are learned patterns of muscle contraction and have a very complex nature. They are associated with anger, hunger, sleep, tooth eruption, and fear. Some children even display oral habits for release of mental tension. These habits might be nonnutritive sucking [thumb, finger, pacifier and or tongue], lip biting, nail biting and bruxing events. As these habits can result in damage to dentoalveolar system, hence, dentists play a crucial role in giving necessary information to parents. This information includes relevant changes in the dentoalveolar system and the methods to stop oral habits. Also, a dentist is required to treat the ensuing malocclusion.

**Halitosis**

**etiology**

**Eradication therapy in helicobacter pylori-positive patients with halitosis: Long-term outcome.**

Katsinelos, Panagiotis; Tziomalos, Kostas; Chatzimavroudis, Grigoris; Vasiliadis, Themistoklis; Katsinelos, Taxiarhich; Pilpilidis, Ioannis; Triantafillidis, Ioannis; Paroutoglou, George; Papaziogas, Basilis

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**Medical Principles and Practice** 2007; 16 (2): 119-123 (28 ref.)

**Keywords:** Helicobacter pylori; Helicobacter Infections-drug therapy; Treatment Outcome
Abstract: The aim of this study was to investigate the incidence and long-term outcome of halitosis before and after eradication therapy in patients with functional dyspepsia and Helicobacter pylori infection. Halitosis and dyspepsia-related symptoms were investigated by way of a questionnaire. Only patients with functional dyspepsia, H. pylori infection and no histological evidence of atrophy were included in the study. A total of 18 patients fulfilled these criteria and completed the study. Four to six weeks after the end of eradication treatment, endoscopy or [13C] breath test was performed to check for H. pylori in the gastric mucosa. Halitosis and dyspeptic symptoms were re-evaluated during and at the end of follow-up. H. pylori infection was eradicated in all patients, in the 14/18 patients [77.8%] with triple drug therapy, and the 4/18 patients [22.2%] with quadruple drug therapy. During the follow-up period [mean 55.8 +/- 21.3 months [range 6-108 months]] resolution of halitosis was observed in 16/18 patients [88.9%], while 2 patients [11.1%] [p < 0.001] continued to present with halitosis. Also, eradication therapy resulted in statistically significant relief of all dyspeptic symptoms, except bloating. Eradication of H. pylori in patients with functional dyspepsia and halitosis results in sustained resolution of halitosis during long-term follow-up in the majority of cases. This finding supports the existence of a link between H. pylori infection and halitosis and suggests that H. pylori eradication might be considered in patients with halitosis.

Headache

epidemiology

Clinical and epidemiological aspects of headache in a neurology clinic in Babol, Northern Iran.
Ahangar, Alijan A.; Hosseini, Seyed R.; Beykaie, Seyed M.
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Babol Medical Sciences University - Yahyanejad Hospital - Department of Neurology
Neurosciences 2007; 12 (2): 168-169 (5 ref.)
Keywords: Headache-diagnosis; Neurology; Ambulatory Care Facilities; Cross-Sectional Studies; Epidemiology

Health Manpower

organization and administration

[Foundation of National Observatory for human health resources in Sudan].
Badr, El Cheikh El Seddiq
E-mail:elsheikh941@gmail.com
Community Medicine Department
Keywords: Health Personnel

Health Promotion

Medical journals in Sudan: A new hope.
Badr, El Sheikh

methods

Health promotion prospects in Sudan.
El Subai, Ibrahim
E-mail:elsubai77@hotmail.com
Federal Ministry of Health
Keywords: Health Promotion-organization and administration; Risk Factors; Health Behavior

Heart Failure, Congestive

physiopathology

Role of subcellular remodeling in cardiac dysfunction due to congestive Heart Failure.
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University of Manitoba - Faculty of Medicine - Department of Physiology, Insitute of Cardiovascular Sciences, St. Boniface General Hospital Research Center
Medical Principles and Practice 2007; 16 (2): 81-89 (105 ref.)
Keywords: Ventricular Remodeling; Myocardial Infarction; Gene Expression; Cardiomegaly
Abstract: Although alterations in the size and shape of the heart [cardiac remodeling] are considered in explaining cardiac dysfunction during the development of congestive heart failure [CHF], there are several conditions including initial stages of cardiac hypertrophy, where cardiac remodeling has also been found to be associated with either an
increased or no change in heart function. Extensive studies have indicated that cardiac dysfunction is related to defects in one or more subcellular organelles such as myofibrils, sarcoplasmic reticulum and sarcolemma, depending upon the stage of CHF. Such subcellular abnormalities in the failing hearts have been shown to occur at both genetic and protein levels. Blockade of the renin-angiotensin system has been reported to partially attenuate changes in subcellular protein, gene expression, functional activities and cardiac performance in CHF. These observations provide support for the role of subcellular remodeling [alterations in molecular and biochemical composition of subcellular organelles] in cardiac dysfunction in the failing heart. On the basis of existing knowledge, it appears that subcellular remodeling during the process of cardiac remodeling plays a major role in the development of cardiac dysfunction in CHF.

**Helicobacter pylori**

**isolation and Purification**

Assessment of helicobacter pylori viability by flow cytometry.


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Tehran University of Medical Science - School of Public Health and Institute of Public Health Research - Department of Pathobiology


Keywords: Helicobacter pylori-metabolism; Microbial Viability; Helicobacter pylori-growth and development; Flow Cytometry; Helicobacter Infections

Abstract: Flow cytometry is a rapid, sensitive, and reliable method for determination of bacterial viability. Here we assayed the capability of flow cytometry to detect Helicobacter pylori viable cells in both forms of spiral and coccoid. Viable bacteria stained with Rhodamin 123 and fluoresced with laser beam of 488nm. The rate of Rh123 absorption was determined in both forms of bacteria. In positive control that consisted of live bacteria, the rate of Rh123 absorption was at highest, but negative control that consisted of dead bacteria, the rate of Rh 123 absorption was at lowest absorption. This method showed that non-culturable coccoid forms of H. pylori, which could resist environmental stresses, were alive and might be responsible for bacterial transmission and failure in disease treatment. Due to simplicity, reliability, and sensitivity of flow cytometry, this method is preferred to other expensive and no reliable methods such as autoradiography, PCR and Electron microscopy used for assessment viability.

**Hepacivirus**

**isolation and purification**

Prevalence of hepatitis C virus among out patients of a private laboratory in Tehran.

Hajia, M.; Shahrokhi, N.; Amirzargar, A.A.; Farzanehkhah, M.; Biglari, S.; Ghorishy, M.; Saraf Nejad, A.

Research Center of Reference Laboratories of Iran


Keywords: Hepatitis C-epidemiology; Prevalence; Outpatients; Polymerase Chain Reaction

Abstract: With an estimated 170 million infected individuals, hepatitis C virus [HCV] has a major impact on public health. Frequency of HCV infection was studied in 785 referred patients to a private Laboratory, Tehran, Iran from April 2003 until March 2006 by PCR method. Analyzed results revealed infection rate was 40.27%, 35.51% and 33.09% in the first, second and third year, respectively. Frequency rate of the infection shows a fluctuated shape during months of three years. Maximum rate of the HCV infection was in May of the first and in June of the second and third year, respectively. It shows decrease and increase within rest months in each year. HCV infection rate was higher in 31 to 40 years old group of patients. Analysis of the data revealed higher HCV infection in men than women had. It was concluded that HCV frequency pattern underlines specific attention to suspected patients during high rate time.

**Hepatitis B**

**epidemiology**

Seroprevalence of Hepatitis B and C among the healthy blood donors at Fauji Foundation Hospital, Rawalpindi.

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Pakistan Journal of Medical Sciences 2007; 23 (1): 64-67 (20 ref.)

Keywords: Hepatitis C-epidemiology; Seroepidemiologic Studies; Blood Donors; Disease Transmission; Prospective Studies

Abstract: To find out the seroprevalence of Hepatitis B and C virus among the healthy blood donors at Fauji Foundation Hospital, Rawalpindi. A prospective observational study. From April 2005 to September 2005 at Fauji Foundation Hospital, Rawalpindi. All healthy blood donors reporting to blood bank were screened for Hepatitis B and C. Total number of 1428 donors were screened, among them 97.05% were males. Prevalence of Hepatitis B was 2.45% with a male predominance of 2.38%. Seroprevalence of Hepatitis C was 2.52% with male predominance of
Prevalence of Hepatitis B and C is not uncommon in our country. Transfusion of contaminated blood is one of the important cause of its spread. To control its further spread public awareness and health education programs and selection of healthy blood donors should be done.

**Hepatitis B Surface Antigens**

**immunology**

**Seropositive HBsAg frequency in Karachi and interior Sindh, Pakistan.**

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Dr. Essa's Laboratory and Diagnostic Center  
Pakistan Journal of Medical Sciences 2007; 23 (2): 157-160 (24 ref.)  
Keywords: Hepatitis B-epidemiology; Incidence; Homosexuality; Hepatitis B virus  
Abstract: Viral hepatitis continues to be a major health problem in Pakistan which encourages appraisal of the current frequency of HBV surface antigenemia. A total of 35,257 individuals of both sexes presenting at a private diagnostic lab and its branches in key areas of Karachi City were screened for HBsAg during an 8-year period ending June 30, 2006. Also evaluated were 1,776 blood samples collected from residents of Hyderabad, Khairpur, Larkana, Nawabshah, and Sukkur in Sindh province. Detection of HBsAg in all serum samples as a marker of HBV was done using the Roche COBAS CORE HBsAg-II EIA system. A total of 1,735 HBsAg positive cases [4.92%] were detected in those assessed in Karachi, and 39 [2.19%] in the individuals tested in parts of interior Sindh. The youngest seropositive subject was a male 3-month old infant, the eldest a 70-year old man; the majority of carriers [78.9%] were aged 16-49 years, and 70.8% of those testing positive in Karachi were male, as were 69.2% in other Sindh cities. HBsAg positivity in Karachi has steadily increased in frequency in our hands from 2.84% in 1998 to currently 4.92%. A significant majority of those positive in all age groups were male in gender warrants deliberation on the credible modes of infection, including homosexuality.

**Hepatitis B Vaccines**

**immunology**

**Response of booster dose of cuban recombinant Hepatitis-B vaccine in nonresponder and hyporesponder children.**

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Shaheed Beheshti University of Medical Sciences and Health Services - Shohada Medical Center - Pediatric Department  
Pakistan Journal of Medical Sciences 2007; 23 (1): 23-26 (18 ref.)  
Keywords: Hepatitis B virus; Hepatitis B-prevention and control; Vaccination; Child  
Abstract: Acute hepatitis B infection can debilitate a patient for weeks and occasionally has a fatal outcome, while chronic infection is a major threat to the individual. To assess response of nonresponder and hyporesponder children to booster dose of Cuban recombinant hepatitis B vaccine. An interventional, descriptive study has been conducted on children who had been immunized with Cuban recombinant Hepatitis B vaccine and their antibody titers were <10mIU/ml [nonresponder] and 10-100mIU/ml [hyporesponder] administered booster dose of the same vaccine in their Deltoid muscles. The response of 141 children with the mean age of 1.9 years to booster dose of vaccine were 94.3% and 100% vaccinees with the first and second booster dose of vaccination respectively. The anti-HBs titer in nonresponders and hyporesponders were 468+/464 and 783+/346mIU/ml respectively with significant differences between two groups [P=0.001]. This study demonstrate moderately increase antibody production in the majority of vaccinees with single supplementary vaccine.

**Hepatitis B virus**

**genetics**

**Distribution of Hepatitis B virus [HBV] genotypes among HBV carriers in Isparta.**

Kaya, Selcuk; Cetin, Emel Sesli; Aridogan, Cicigolu; Onal, Suleyman; Demirci, Mustafa  
E-mail: selcuk@med.sdu.edu.tr  
Suleyman Demirel University - Medical Faculty - Microbiology and Clinical Department  
IBJ - Iranian Biomedical Journal 2007; 11 (1): 59-63 (20 ref.)  
Keywords: Hepatitis B virus-classification; Genotype; Carrier State; Disease Transmission
Hernia, Diaphragmatic

congenital

Medical Quiz - congenital diaphragmatic hernia.
Al Hindi, Saeed
Bahrain Medical Bulletin 2007; 29 (2): 68 and 80 (11 ref.)
Keywords: Hernia, Diaphragmatic-diagnosis; Hernia, Diaphragmatic-surgery

Hirsutism

etiology

An aetiological study of moderate to severe hirsutism.
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Mayo Hospital - Department of Dermatology
Pakistan Journal of Medical Sciences 2007; 23 (2): 167-171 (10 ref.)
Keywords: Polycystic Ovary Syndrome; Hirsutism-diagnosis
Abstract: Hirsutism is a common disorder of females. Most cases are idiopathic, however some studies claim polycystic ovarian syndrome to be the commonest cause. The objective of the present study was to evaluate the etiology of moderate to severe hirsutism and to devise a rational diagnostic approach in these patients depending upon age, severity of the problem and other clinical findings. Seventy four consecutive patients with moderate to severe hirsutism [i.e. Ferriman and Gallwey score of 7 and above] were enrolled and recorded on a standard Proforma. All patients were assessed clinically with particular emphasis on signs and symptoms of virilisation. Hormonal investigation as well as abdominal and pelvic ultrasonography for adrenals and ovaries was done in all patients. Of the 74 patients 35 [47.3 %] were labeled as idiopathic hirsutism, while 33 [44.6%] were diagnosed as polycystic ovary syndrome. Other causes identified were hypothyroidism [4%], Cushing's syndrome [2.7%] and congenital adrenal hyperplasia [1.3%]. Majority of patients belonged to the age group 21-25 years. The commonest cause of hirsutism in our study was idiopathic [47.3%]. This was followed by PCOS which accounted for 44.6% of patients.

Histiocytosis

diagnosis

Histiocytosis in children: Five years experience at a tertiary care hospital.
Ali, Agha Shabbir; Qureshi, Abid; Masood, Yasser; Nadeem, Amir; Ahmad, Farhana; Abbas, Azhar; Tarar, Abid Mahmood
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The Children's Hospital and Institute of Child Health - Department of Pediatric Medicine
Pakistan Pediatric Journal 2007; 31 (1): 38-41 (9 ref.)
Keywords: Histiocytosis-therapy; Treatment Outcome; Langerhans Cells; Retrospective Studies; Histiocytosis, Langerhans-Cell
Abstract: Histiocytosis is a diverse group of illness of monocyte- macrophage cell lineage. Diagnostic criteria and management protocols are not precisely defined due to cases. Study was conducted to review the clinical features at admission and outcome of histiocytosis following chemotherapy [DALHAX 83 protocol was used]. It was a retrospective study, carried out from March 2000 to February 2005, at department of hematology- oncology, The Children's Hospital and the Institute of Child Health, Lahore. From 01-03-2000 to 28-02-2005, total 36 cases with histiocytosis disorders were admitted. It comprises 2% of total admissions, class I langerhan cell disease was the most common [24/36], followed by class II [8/36] and class III [4/36] cases among this group of illness. Fever and hepatosplenomegaly was present in all classes. Soft tissue swelling, jaundice and lymphadneopathy were also seen in class I, II and III histiocytosis respectively. Nineteen patients died/ left treatment and absconded with incomplete treatment. Seventeen patients responded to chemotherapy again. Histiocytosis class I is a chemosensitive disease. If the functional deterioration of the involved organ has not set in, class I disease has good prognosis.

Human papillomavirus 18

Human papilloma virus-16/18 cervical infection among women attending a family medical clinic in Riyadh.
Al Muammar, Tarfah; Al Ahdal, Mohammed N.; Hassan, Ahmed; Kessie, George; Cruz, Damian M. Dela; Mohamed, Gamal E.
King Faisal Specialist Hospital and Research Center - Department of Family Medicine
Keywords: Human papillomavirus 16; Uterine Cervical Dysplasia; DNA Probes, HPV; Cervix Uteri-microbiology; Prevalence; Cytology; Vaginal Smears; Cervical Intraepithelial Neoplasia; Polymerase Chain Reaction
Abstract: Prevalence information is lacking on human papillomavirus types 16 and 18 [HPV-16/18] infection in cervical tissues of women residing in Riyadh, Saudi Arabia. In addition, there are no observations on progression to cervical intraepithelial neoplasia [CIN]. Pap smear and HPV-16/18 DNA detection by PCR followed by Southern blotting was performed on 120 subjects [Saudi and other Arab nationals] during routine gynecological examination. Some HPV-positive subjects were followed for 4 years, by Pap smear every 6 months and by HPV DNA detection at the end of 4 years. Overall HPV-16/18 prevalence was 31.6%. HPV-16 prevalence alone was 13.3%, HPV-16 as a mixed infection with HPV-18 was 15%, and all HPV-16 was 28.3%. HPV-18 alone was 3.3%, HPV-18 as a mixed infection with HPV-16 was 15%, and all HPV-18 was 18.3%. Ten subjects had cervical abnormalities with the Pap smear test; six of whom were HPV-16/18 positive, 1 with HPV-16, 1 with HPV-18, and 4 with a mixed infection of HPV-16/18. Of all 23 HPV-16/18-positive subjects, either as individual or mixed infection, followed for 4 years, 7 showed abnormal cytology 6 at initial examination and 1 during follow-up. Of these 7, 6 reverted to normal without treatment and 1 was treated and became normal after 3 years. None of the subjects progressed to CIN-III. A high prevalence of HPV-16/18 was found, but with a low rate of progression to CIN. A significant association with abnormal cytology was found only in patients with HPV-16/18 mixed infection.

Hypotension, Orthostatic

epidemiology

Orthostatic hypotension in Iranian patients with Parkinson's disease.
Chitsaz, Ahmad; Saadatnia, Mohammad; Etemadifar, Masoud; Tajmirriahi, Marzieh
Isfahan University of Medical Sciences - Al Zahra Hospital - Department of Neurology
Neurosciences 2007; 12 (2): 133-135 (25 ref.)
Keywords: Parkinson Disease; Prevalence; Levodopa
Abstract: To prospectively investigate the prevalence and clinical relevance of orthostatic hypotension [OH] in Parkinson’s disease [PD] in Isfahan, Iran. We investigated 150 consecutive patients with PD [42 women, 108 men] in Al-Zahra Hospital, Isfahan, Iran from January 2002 to January 2004. Blood pressure was measured first in a supine position following a rest of at least 10 minutes, and then after 3 minutes of active standing. Data concerning the age, gender, duration of disease, and drug consumption were recorded in a questionnaire. Orthostatic hypotension in PD is more frequent in women, patients taking a higher dose of levodopa, in higher age groups, and patients with longer duration of the disease, however, a statistically significant difference was seen in the female group and patients taking a higher dose of levodopa. Orthostatic hypotension is mainly related to PD pathology and the clinical relevance of OH to gender, age, and disease duration may be due to the natural course for progression of human autonomic dysfunction during life. Higher doses of levodopa may increase the risk of OH.

Iloprost

therapeutic use

Effect of iloprost on adrenal medullary grafts in central nervous system transplantation and apoptosis.
Caglar, Sukru; Torun, Fuat; Erdemli, Esra; Torun, Ayse N.
Selcuk University - Faculty of Medicine - Department of Neurosurgery
Keywords: Transplantation; Apoptosis; Central Nervous System-surgery; Adrenal Medulla-surgery; Rabbits
Abstract: To investigate whether iloprost, a stable analog of prostacyclin, is useful for the preservation of neural grafts in transplantation surgery. This study was conducted at the Microsurgery Laboratory of the Department of Neurosurgery, Faculty of Medicine, Ankara University, Ankara, Turkey in 2003. The animals [rabbits] were divided into 3 groups. In group I, autografts taken from the adrenal medulla were stored in 0.9% sodium chloride [NaCl] solution for 45 minutes before transplantation. In group II, autografts taken from the adrenal medulla were stored in iloprost solution [50 ng/ml] for 45 minutes before transplantation. Graft transplantation was not performed in the third group. In group I, the grafts partially preserved their viability. In group II, the large adrenal medullary cells had evident euchromatin nuclei fused with neurons, and there was an increase in vascularization. Three weeks after transplantation surgery, it was determined that iloprost maintained the viability of the graft tissue and probably prevented apoptosis, and facilitated the integration of the graft tissue into the host brain.

Infant, Premature

Economic valuation of premature mortality and morbidity.
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E-mail: hakKarimzadegan@yahoo.com
Lahijan Campus,IAU
Keywords: Mortality; Morbidity; Economics; Cost of Illness; Socioeconomic Factors; Infant Mortality
**Abstract:** The air in Tehran is one of the most polluted airs in the entire world. Because of the air pollution in the Great Tehran area, morbidity, mortality and symptoms emerge. This study has been conducted for the first time in Iran. According to this study the total annual direct medical costs of morbidity estimated at US$ 3258255.48. Our work also led to the estimation of an income elasticity of WTP for reduction in the probability of premature mortality that is, an income elasticity of the value of a statistical life. The total annual mortality damage cost estimated at US Dollar 232538684.38. Contingent valuation (CV) was utilized in order to place monetary values on symptoms. By using CV, the economic value of each symptom was estimated per person per day. The use of CV in this study required that a questionnaire be prepared and the Willingness to Pay of Tehran citizens be estimated by a random sampling. Finally the total health damage costs of air pollution in Tehran or benefits of reducing air pollution estimated at US Dollar 663776276 annually.

**Infertility, Male**

**blood**

Relationship of zinc concentrations in blood and seminal plasma with various semen parameters in infertile subjects.

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Pakistan Journal of Medical Sciences 2007; 23 (1): 111-114 (27 ref.)

**Keywords:** Zinc-blood; Semen; Azoospermia; Spermatozoa; Sperm Count

**Abstract:** To find out relationship of zinc concentrations in blood and seminal plasma with various semen parameters between fertile and infertile men. Prospective study. This study was carried out in the Infertility Clinic of Jinnah Postgraduate Medical Center [JPMC], Karachi and Department of Biochemistry, Basic Medical Sciences Institute, JPMC, Karachi. Fifty eight primary infertile male subjects, without any treatment, who had regular unprotected intercourse for at least 12 months without conception with their partners, aged 20-40 years, were selected from Infertility Clinic Jinnah Postgraduate Medical Center, Karachi. After semen analyses they were grouped as, oligospermic [30], and azoospermic [28]. Twenty five known fertile male selected from general population and after semen analysis were taken as normospermic control group. Semen analyzed according to WHO criteria. Serum and seminal plasma zinc were estimated by 5Br. PAPS Colorimetric method. This study showed significant difference in serum and seminal zinc levels in normospermic, oligospermic [p<0.05] and azoospermic [p<0.005] subjects. Seminal plasma zinc showed a positive correlation with sperm count and negative with sperm motility in normospermic and oligospermic and negative correlation with volume, pH, WBC concentration in all three groups. There was no correlation found with sperm morphology. On the basis of the findings of this study and those of other reports, zinc may contribute to fertility through its significant effects on various semen parameters. It seems that the estimation of seminal plasma zinc may help in investigation and treatment of infertile males.

**Insulin**

**metabolism**

**Insulin therapy induced adiposity evaluated by computed tomography is not visceral.**

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Pakistan Journal of Medical Sciences 2007; 23 (2): 161-166 (27 ref.)

**Keywords:** Tomography, X-Ray Computed; Adiposity; Intra-Abdominal Fat; Diabetes Mellitus, Type 2; Body fat Distribution

**Abstract:** In individuals with type 2 diabetes, weight gain during treatment with insulin and other agents prevents the attainment of glycemic targets and probably limits the success of treatment. Studies have attempted to elucidate the mechanisms behind the apparent paradox of insulin improving glycemic control and cardiovascular risks, while causing weight gain. The aim of this study is to clarify the influence of insulin therapy on body weight and differential fat distribution [visceral or peripheral] in newly insulin treated type 2 diabetic male patients. The study was conducted on 26 type 2 diabetic male patients evaluated at baseline and 12 months after instituting insulin therapy. Body mass index [BMI], absolute waist circumference [AWC], systolic and diastolic blood pressure, HbA1c% were estimated. Abdominal Computed tomography was applied to evaluate areas of subcutaneous fat [SF] and visceral fat [VF] before and after insulin therapy. There is significant reduction in HbA1c [9.03+/-0.72 vs. 7.50+/-0.58, p<0.001] and significant increase body mass index [BMI] =28.92+/-1.39 vs. 29.81+/-1.27, p=0.02). However there was non significant changes in the AWC 103.27+/-3.87 Vs 105.14+/-3.25, P=0.065, VF 121.01+/-5.84 Vs 123.01+/-5.55, p=0.213, SF 206.54+/-9.93 Vs 212.12+/-11.62, P = 0.069and V/S ratio 0.59+/-0.03 vs. 0.58+/-0.03, P=0.365. Weight gain in the newly insulin treated type 2 diabetic patients during 12 months duration is equally distributed in both peripheral and visceral fat. So, insulin therapy does not appear to increase the visceral fat in type 2 diabetic patients which is strongly liked to atherosclerosis. Longer-term follow up and bigger sample size are necessary to address the issue of the kinetics of weight gain and to establish the possible correlation with other cardiovascular risk markers.
Insulin Resistance

Insulin resistance in women with recurrent spontaneous miscarriage of unknown aetiology.
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Medical Principles and Practice 2007; 16 (2): 114-118 (28 ref.)

Keywords: Abortion, Habitual-etiolog; Abortion, Spontaneous-etiolog; Pregnancy Complications; Insulin; Cross-Sectional Studies

Abstract: The objective of this study was to explore the role of insulin resistance in women with recurrent spontaneous miscarriage [RSM]. Patients with 3 consecutive spontaneous miscarriages were classified as having RSM. Thirty-five non-pregnant women presenting with RSM in our specialized RSM clinic constituted the study population, while 30 non-pregnant, parous, fertile women without RSM served as controls. The study and control patients were matched for age, ethnicity and body mass index [BMI]. Blood was extracted from these patients for fasting blood glucose and fasting insulin simultaneously, and a battery of investigations including ultrasonography was performed on all the patients with RSM. There was no significant difference in the mean fasting glucose for the study and control patients [5.5 +/- 0.7 vs. 5.3 +/- 0.6 mmol/dl] and in the mean fasting insulin [15.0 +/- 5.1 and 12.9 +/- 2.9 mU/l]. There was a significant difference between the mean parity of the study and control patients [0.7 +/- 0.7 vs. 1.7 +/- 0.5, p < 0.0001] and also the mean number of miscarriages [4.2 +/- 1.2 vs. 0.1 +/- 0.4, p < 0.001]. There was, however, no significant difference in the insulin resistance of both groups as calculated using the Homeostasis Model Assessment and the fasting glucose insulin ratio of <4.5. Insulin resistance was not significantly associated with RSM in our study. Further studies may be needed.

Insulin sensitivity obtained from the oral glucose tolerance test and its relationship with birth weight.
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Ankara Training and Research Hospital - Department of Pediatrics
Annals of Saudi Medicine 2007; 27 (1): 13-17 (20 ref.)

Keywords: Birth Weight; Glucose Tolerance Test; Diabetes Mellitus, Type 2; Risk Factors; Body Mass Index; Receptor, Insulin; Infant, Small for Gestational Age

Abstract: Glucose intolerance and insulin sensitivity in preadolescent children might predict the risk of developing type 2 diabetes mellitus in adult life in small for gestational age [SGA] children. We aimed to investigate whether reduced birthweight is related to low insulin sensitivity in preadolescence. Twenty-five SGA children and 29 appropriate for gestational age children [AGA] children born between 1993 and 1994 were evaluated for insulin sensitivity in preadolescence. At the beginning of the study, body mass index [BMI] was calculated and an oral glucose tolerance test [OGTT] was performed. Blood samples to measure glucose and insulin were taken every 30 minutes during OGTT. Homeostasis of model assessment-insulin resistance [HOMA-IR] and composite index [CI] values were measured to assess insulin sensitivity. On the OGTT, 120-minute glucose and insulin levels were higher in SGA than AGA children [P=0.02 and P=0.001, respectively]. Although there was no difference between HOMA-IR values, the mean CI value was lower in SGA than AGA children [P=0.001]. There was an inverse correlation between birthweight and 120-minute glucose concentrations [r=0.30, P=0.02]. This correlation was stronger between birthweight and 120-minute insulin concentrations [r=0.50, P=0.001] BMI was positively correlated with 120-minute insulin [r=0.50, P=0.001] There was no relationship between HOMA-IR values and birth size, but the CI index was positively correlated with birthweight [r=0.40, P=0.002]. Birthweight may be a predictive factor for insulin sensitivity and CI is more reliable than HOMA-IR to assess this sensitivity in preadolescence.

Intensive Care Units, Neonatal

Pattern and outcome of admissions to neonatal unit of Khyber teaching hospital, Peshawar.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 249-253 (23 ref.)

Keywords: Infant, Newborn; Neonatology; Patient Admission; Hospitals, Teaching; Jaundice, Neonatal; Infant, Low Birth Weight; Fetal Growth Retardation; Infant, Premature; Asphyxia Neonatorum

Abstract: To determine the number, disease pattern and outcome of admitted patients to neonatal unit. Khyber Teaching Hospital, Peshawar N.W.F.P from 1st Jan, 2005 to 31st Dec, 2005. Data of all the neonatal admissions was recorded and analyzed for age, weight at the time of admission, sex, reason for admission, duration of hospital stay and final outcome of these cases. Their referral source was also determined. A total of 1694 neonates were admitted during the year 2005. Among them male were 1219(71.96%) and females were 475 (28.04%). Maximum number of patients was admitted during 1st 24 hours of life. Majority 1056 (62.33%) were referred from hospitals and maternity homes along with 458 (27.03%) home deliveries. Low birth weight accounted for 41.20% of total admissions. Neonatal infections were the next commonest cause of neonatal admissions which includes sepsis [26.03%], pneumonia [1.71%] and Meningitis [1.18%], premature babies [26.50%], N.N.J [19.95%], and birth asphyxia [16.52%]. Other causes of neonatal admission were congenital heart disease [1.41%], meconium aspiration syndrome [1.18%]. I.U.G.R [0.82%] and R.D.S [0.59%]. Among total admissions 1212 [71.54%] were sent home after their complete recovery, 252 [14.87%] expired, left against medical advise [L.A.M.A] 120 [7.08%] and discharged on their attendants request 107
[6.31%]. Pre-maturity, neonatal infection, neonatal jaundice and birth asphyxia were the main causes of neonatal admissions. Increased awareness for in time referral to tertiary level hospitals is mandatory by those health workers who conduct deliveries at private hospital /maternity homes as well as those who conduct deliveries at homes.

**Interferon-alpha**

**adverse effects**

Interferon alpha - induced psychotic disorder in patient with chronic hepatitis B.
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Keywords: Hepatitis B, Chronic-drug therapy; Psychoses, Substance-Induced
Abstract: Interferon has remained the mainstay for treating patients suffering from chronic viral hepatitis. However, its efficiency has been limited by the neuropsychiatric side effect profile that it carries; neurotransmitter alterations in the central nervous system [CNS] have been correlated to psychiatric complications of Interferon alpha. Although mood disorders such as depression occasionally develop during Interferon alpha therapy, psychotic disorders have been rarely reported. We present a case of Interferon alpha 2b induced psychotic symptoms in a young male with hepatitis B and review the relevant literature.

**Intermittent Positive-Pressure Ventilation**

Use of noninvasive positive pressure ventilation during pregnancy: case series.
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Keywords: Respiratory Insufficiency-therapy; Pregnancy; Pregnancy Complications; Pregnancy Outcome; Respiration, Artificial-methods
Abstract: Mechanical ventilation is commonly required in critically ill pregnant patients, requiring ICU admission, with higher morbidity and mortality related to airway management. Alternatively, noninvasive positive pressure ventilation [NIPPV] is increasingly used to treat nonpregnant patients. Pregnancy has been a contraindication to its use. We would like to report a case series of successful use of NIPPV in pregnancy. NIPPV is increasingly used to treat hypoxemic respiratory failure. It has rarely been used during pregnancy. On the other hand, acute respiratory failure [ARF] remains a leading cause of ICU admission in obstetric patients. The use of NIPPV in managing ARF in pregnant patients was not investigated. We report the outcome of treatment with NIPPV of four sickle cell disease pregnant patients with ARF caused by acute chest syndrome. Median APACHE II score for the four cases was 27. Intubation was avoided in all cases. None had aspiration. Mean duration of NIPPV was 40 h with ICU discharge after a mean of 4 days.

**Intestinal Fistula**

**etiology**

Secondary aorto-duodenal fistulas.
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Ministry of Health - Salmaniya Medical Center
*Bahrain Medical Bulletin* 2007; 29 (2): 74-76 (7 ref.)
Keywords: Fistula; Aorta; Transplantation-adverse effects; Aortic Valve-surgery; Heart Valve Prosthesis; Endoscopy
Abstract: Aorto-enteric fistula is a serious and fatal complication of aortic graft surgery. The difficulty in both diagnosis and management amplify the impact and seriousness of this condition. Reports about the value of the use of endoscopy as a diagnostic tool are increasing in the medical field. Here we present our experience with a case of secondary aorto-duodenal fistula [ADF] followed by discussion of the current scientific opinion about this life threatening condition.

**Intubation, Intratracheal**

**methods**

A wake tracheal intubation via intubating laryngeal mask vs direct laryngoscopy and cervical spine excursion.
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*Pakistan Journal of Medical Sciences* 2007; 23 (2): 238-241 (14 ref.)
Keywords: Laryngeal Masks; Laryngoscopy; Spine; Cervical Vertebrae; Anesthesia; Prospective Studies
Abstract: To compare intubating laryngeal mask airway [ILMA] with direct laryngoscopy in patients with cervical spine injury. Prospective, hospital based study conducted during March 2004 to May 2005, in Imam Khomeini Hospital, Tabriz Medical Science University, Iran. We compared the excursion of the upper cervical spine during tracheal intubation using direct laryngoscopy with awake intubation via Laryngeal mask airway in 40 patients. Intubating laryngeal mask caused less extension [at C2-3 and C1-2] than intubation by direct laryngoscope. Patients, who were locally anesthetized and sedated tolerate intubation well. However laryngoscopy is still the fastest method to secure an airway. In traumatic patients who require intubation and have limitation with cervical spine movement, we can use intubating laryngeal mask in awake patients locally anesthetized as a safe, tolerable and relatively fast method to secure an airway.

Leadership

[Relation between [leadership styles] and [hospital performance indicators].
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 70-75 (14 ref.)
Keywords: Hospital Administration; Hospitals; Cross-Sectional Studies
Abstract: Hospitals are social foundations which appear to maintain and promote healthy life and today they are known as inevitable necessity for health sector development. Since manpower is recognized as the most important resource in organization, the leadership our direction of manpower is considered to be one of the most essential duties of hospital managers. To assess the leadership styles of hospital managers and chiefs and also their further effects on hospital operational indicators. This was a cross-sectional study carried out in Qom province [Iran] during 2004. A total of eight hospitals [3 charity hospitals and 5 public hospitals] were investigated. The target population included all hospital managers and leads [8 managers, 8 leads]. Data were collected using two types of questionnaires and analyzed by SPSS software. Consultative style was found among 75% of leads and the rest was benevolent-authoritative style. Among managers, 75% of leadership style was consultative followed by benevolent-authoritative style [12.5%] and exploitative-authoritative style [12.5%]. On the average, managers and leads leadership style was mainly consultative. Data were indicative of a better status of hospitals’ indicators in Qom province compared to other parts of the country. Findings reveal that Iranian hospital managers and leads are reluctant to practice participatory management methods and do not intend to involve staff actively in decision making processes about hospital affairs. They do, however believe that despotic way of dealing with hospitals and health care facilitis affairs, is more appropriate than the participatory method.

Learning

Learning how to learn- How to take lecture notes?
Badr, El Sheikh
Keywords: Education, Medical-methods; Students

Leishmania tropica

pathogenicity

Leishmania tropica: another etiological agent of canine visceral leishmaniasis in Iran.
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Tehran University of Medical Sciences - School of Public Health and Institute of Public Health Research - Department of Medical Parasitology and Mycology
Keywords: Leishmaniasis, Visceral-etiolog; Leishmaniasis, Visceral-veterinary; Dog Diseases; Dogs; Leishmaniasis, Visceral-epidemiology; Disease Reservoirs
Abstract: Dogs have been previously reported to be reservoirs of Leishmania infantum as the etiological agent of human visceral leishmaniasis in Iran. We report a case of canine visceral leishmaniasis [VL] caused by L. tropica from the north-west of Iran where human visceral leishmaniasis is endemic. The canine VL was initially screened by dipstick rK39 and direct agglutination test, then the dog was dissected and obtained samples were examined by parasitological [direct exam, cultivation] and molecular techniques [RAPD-PCR and RFLP-PCR]. Leishmania parasites were found in spleen and liver of the dog. The serological tests for the detection of specific anti-leishmania antibodies showed positive results. L. tropica as another agent of canine VL was determined.

Leishmaniasis, Cutaneous

drug therapy

Tc1 cells percentage in patients with cutaneous leishmaniasis before and after treatment with glucantime.
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Keywords: Meglumine-therapeutic uses; T-Lymphocytes, Cytotoxic; Flow Cytometry
Abstract: Various responses and different prognosis to specific treatment in different patients from one hand, and importance of IFN-gamma producer cells on the other hand impressed us to study Tc1. The study was conducted in Ghaem Medical Center and Bu-Ali Research Institute, Mashhad University of Medical Sciences, Iran from 2001 to 2002. Lymphocytes of 36 patients were counted and cultured. Percentage of different responsible immunity cells in 29 patients, were determined by Flow Cytometry System before and after medication with glucantime [IM]. Patients who showed improvement after the treatment were put into group 1 and those who did not recover were labeled group 2. In this self-control clinical trial, sampling method was consecutive non-probability and the results were analyzed by t-test consequently. The percentage of Tc1 cells showed a significant increase despite of being stimulated with Phorpol-Mristate-Acetate [PMA] among the whole studied patients and group 1 [P= 0.069 and P= 0.040, respectively]. While no significant change was observed among patients in group 2. This verifies the influence of Tc1 cells for the treatment of patients with CL and perhaps the role of glucantime in improving the cell immunity response through increasing such cells.

Prevention and Control

Deltamethrin-impregnated bed nets and curtains in an anthropotic cutaneous leishmaniasis control program in northeastern Iran.
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Annals of Saudi Medicine 2007; 27 (1): 6-12 (17 ref.)
Keywords: Pyrethrins; National Health Programs; Health Education; Textiles; Insecticides
Abstract: Anthropotic cutaneous leishmaniasis [ACL] has long been a significant public health problem in northeastern Iran. The objective of this study was to determine the efficacy of deltamethrin-impregnated vs. nonimpregnated bed nets [NIBs] and curtains [NICs] in ACL control. Deltamethrin-impregnated bed nets [IBs] and curtains [ICs] with 25 mg ai/m2 were distributed among 160 households in one district and NIBs and NICs were distributed among the same number of households in another district. A third district with a similar numbers of households served as a control. Health education messages were disseminated to ensure the population’s complicity with the proper use of bed nets and curtains. Sticky paper traps were used to assess the effect of insecticide-impregnated bed nets and curtains on the density of Phlebotomus sergenti. Deltamethrin susceptibility and also bioassay tests were carried out on the species by WHO standard method. Case findings were done by house-to-house visits once a season and all the inhabitants of the selected households in each district were examined. IBs and ICs provided good protection against sandfly bites and reduced the transmission of ACL in the intervention district, while NIBs and NICs provided no protection. There was no significant difference in monthly density of P. sergenti indoors and outdoors among the districts [P>0.05]. This species was susceptible to delta-methrin in the field population in the area. Bioassays confirmed that the nets treated with deltamethrin remained effective for more than 3 months. Personal protection is an effective and sustainable means of preventing and controlling ACL and can reduce dependence on insecticides. We encourage the use of IBs and ICs to control ACL in other high-risk areas of Iran and Afghanistan during the active season of sandflies.

Leptospirosis

Epidemiology

Distribution of human leptospirosis in guilan province, Northern Iran.
Guilan University of Medical Sciences - Faculty of Medicine - Cellular and Molecular Research Center
Keywords: Leptospira; Zoonoses; Enzyme-Linked Immunosorbent Assay
Abstract: Leptospirosis is the most widespread zoonosis in the world and is more prevalent in tropical and temperate regions. Guilan Province in north of Iran, is an endemic region of human leptospirosis. Since diagnosis of leptospirosis according to clinical symptoms is very difficult due to lack of characteristic pathogenic sign[s], laboratory support is necessary. In 2003, we obtained blood samples from patients hospitalized in main general hospitals of Guilan Province and were suspected as having leptospirosis according to their clinical presentations. We examined 995 sera by a commercial IgM and IgG ELISA kit to find positive cases, 62.7% of positive cases were male and about 86% of them were farmer. High distribution rate of leptospirosis was seen in middle-aged people [65% in 20-50 years old]. It seems that leptospirosis has a high occurrence in major cities and is mostly distributed in warm months of the year. Demographic analysis of the results indicates that leptospirosis is typically a rural and an occupational disease in the area.
Leukemia, Hairy Cell

epidemiology

Hairy cell leukaemia in a tertiary hospital in southern Nigeria: 10 year survey.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 259-263 (18 ref.)

Keywords: Leukemia, Hairy Cell-diagnosis; Leukemia, Hairy Cell-therapy; Hospitals

Abstract: The clinico-pathologic features, incidence and pattern of presentation of patients with the rare hairy cell leukaemia in University of Benin City Teaching Hospital, a major tertiary health centre in Niger Delta region of Nigeria have not been previously documented. All cases that presented from 1993 to 2003 were reviewed and this rare leukaemia constituted 1.5% of all haematological malignancies. Median age at presentation was 40 years. Typical clinical signs of pancytopenia and massive splenomegaly were found. Lymphadenopathy was rare. Normalization of pancytopenia was achieved by splenectomy followed by cytostatic agents but increased susceptibility to infection was not reduced. Four patients received interferon-alpha two patients, cladribine with prednisolone following splenectomy.

Leukemia, Myeloid, Chronic

mortality

Analysis of prognostic factors affecting response to treatment and survival in chronic myeloid leukaemia patients.
Adam, Soheir; Zaher, Galila; Chedid, Fares; Abdulaal, Mohammed
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Bahrain Medical Bulletin 2007; 29 (2): 57-60 (15 ref.)

Keywords: Prognosis; Survival Rate; Treatment Outcome; Leukemia, Myeloid, Chronic-diagnosis

Abstract: To evaluate the prognostic significance of the disease features at presentation in chronic myeloid leukemia [CML] patients. This is a retrospective study of sixty patients of CML and their follow up over 20 years. Ten clinical and laboratory features of the disease were evaluated for their prognostic significance. All patients received cytoreductive therapy. All patients were seen at King Abdul Aziz University Hospital and the National Guard Hospital in Jeddah, Saudi Arabia. The prognostic value of sex, age, white cell, basophils, promyelocytes and platelet counts, splenomegaly, bone marrow [BM] blast count, BM fibrosis and the presence of the Philadelphia chromosome, was assessed using log-rank tests. All variables significantly associated with survival univariately were included in a Cox regression. The time to either death or transformation from date of diagnosis was analyzed using a Kaplan-Meier survival curve. Spleenomegaly greater than or equal to 13 cm and a bone marrow blast count of greater than 10% at diagnosis, were both found to be significantly associated with a high-risk of transformation or death in this population. Other presenting features studied, did not have a statistically-significant prognostic impact. The median duration of the chronic phase in the studied group of patients was 120 months. Spleenomegaly and a high BM blast count were both associated with a risk of transformation or death in this population.

Lichen Planus

epidemiology

Epidemiological and clinical features of lichen planus in Jordanian patients.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 92-94 (19 ref.)

Keywords: Lichen Planus-diagnosis; Epidemiology; Retrospective Studies

Abstract: To study the epidemiological and clinical features of LP in Jordanian patients. A retrospective study was done. The files of 167 patients with LP, who attended the Dermatology Clinic, Queen Alia Military Hospital, Amman, Jordan, from January 2003 to December 2005, were analyzed. The 167 patients with LP formed 0.73% of the total number of new dermatology outpatients. The male: female ratio was 1: 1.1. The patient ages ranged from 6 to 73 years, most being in the age range from 34 to 59 years [mean, 39.7 years]. No familial cases were seen. No precipitating factors were detected. The majority of the patients [57.7%] showed classical lesions followed by hypertrophic type next in frequency. Most patients [83.6%] had pruritus. Limbs were the most common site to be involved at onset [61.3%]. Mucous membranes were involved along with skin in 48.5%. Nail changes were observed in 9% of patients and hair affection in 1.2%. The epidemiological and clinical features of the disease in Jordan are similar to those mentioned in literature, with higher prevalence of actinic type which is the case in most countries of Middle East.
**Liposarcoma**

**diagnosis**

Diagnostic laparoscopy and resection of a rare case of large mesenteric liposarcoma.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 267-269 (9 ref.)

**Keywords:** Liposarcoma-surgery; Laparoscopy; Mesentery-pathology; Peritoneal Neoplasms; Liposarcoma-pathology; Rare Diseases

**Abstract:** Liposarcoma arising from the mesentery of the bowel is a rare lesion. Some of the most common presenting symptoms of primary mesenteric liposarcoma is increasing abdominal girth, weight loss, abdominal pain, abdominal discomfort with meals and the presence of a freely movable abdominal mass or masses. Our patient presented with a large intra-abdominal mass. Diagnostic laparoscopy revealed tumor confined to the mesentery of the ileum. Laparoscopy was attempted, though conversion was necessary to achieve negative margins. Laparotomy was required to resect the tumour with clear margins. Myxoid and well-differentiated types of liposarcoma are by far the most common histological type. Tumor size greater than 20cm predict significantly poorer prognosis. The treatment of choice for primary mesenteric liposarcoma is surgical resection with clear margins. Radiotherapy or systemic chemotherapy has no benefit in increasing long-term survival. Laparoscopy is of limited value.

**Low Back Pain**

**radiography**

Radiological changes of the spine in patients with chronic low backache.
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**Keywords:** Spine-radiography; Lumbar Vertebrae; Chronic Disease; Intervertebral Disk Displacement; Sciatica; Spondylolisthesis; Case-Control Studies

**Abstract:** To determine the association between causes such as disc space narrowing, vertebral osteophytes and spondylolisthesis with chronic low backache among Sri Lankan adults. A case control study was done at the Teaching hospital Ragama and Rehabilitation hospital Ragama Sri Lanka. Postero-anterior and lateral radiographs of the lumbo-sacral spine of a hundred and thirty cases and a hundred and thirty three controls were studied. The cases and controls were matched for age and sex. All radiographs were read by two radiologists working independently for the presence of vertebral osteophytes, spondylolisthesis and disc space narrowing. The results were analysed by applying chi squared test for bivariate associations and logistic regression for multivariate associations. The age range of the study subjects was 18-82 years. Mean [SD] age for cases was 49.3 years [15 years]; Mean [SD] age for controls was 51.4 years [17 years]. There were 81 [62.3%] females with low backache and 82 [61.7%] females without low backache. Disc space narrowing was present in 15% of cases and 2% of controls. A person with disc space narrowing had a 7 times greater chance of developing low backache compared to a person without disc space narrowing [OR = 6.8, P= 0.008]. Vertebral osteophytes were present in 72% of cases and 64% of controls. Spondylolisthesis was present in 8% of cases and 7% of controls. Vertebral osteophytes and spondylolisthesis did not have a significant association with low backache. Among the radiological features of the lumbar spine, disc space narrowing was the only feature with a significant association with low backache.

**Macular Degeneration**

**Optical coherence tomography in acute solar maculopathy.**
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King Khaled Eye Specialist Hospital


**Keywords:** Sunlight-adverse effects; Tomography, Optical Coherence; Visual Acuity

**Vision function and quality of life outcomes after low vision rehabilitation in patients with age-related macular degeneration at a tertiary eye care center.**
Khan, Sarfaraz A.; Das, Taraprasad; Krishnaihah, Sannapaneni; Nutheti, Rishita; Nirmalan, Praveen; Kumar, Sharmila Mohan; Christy, Beula; Thomas, Ravi; Rao, Gullapalli N.

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Vision Rehabilitation Centres


**Keywords:** Vision, Low; Rehabilitation; Quality of Life; Questionnaires
Abstract: To report vision function [VF] and quality of life [QOL] outcomes after low vision rehabilitation in patients with age-related macular degeneration [AMD]. A questionnaire developed and validated to assess VF and QOL in cataract patients in south India was administered to 50 patients with AMD before and after providing low vision care between October 1, 1997, and May 31, 2003. The outcome measures included overall changes in VF and QOL after low vision rehabilitation. Rasch analysis was performed on pre and post rehabilitation responses to the QOL and VF instruments using Winsteps package. Visual function: The items that were most difficult were reading, writing, needlework, sorting stones from food grains, recognizing faces and light adaptation. Difficulties with these functions reduced significantly after rehabilitation. Quality of Life: The items that were most difficult were banking, using public transport, and psychological well-being. Following rehabilitation the visual functioning for banking, daily living skills, and ease of dialing the telephone increased significantly though the visual functioning/satisfaction for the item related to mobility and psychological well-being either remained the same or worsened. The average perceived visual functioning and QOL improved significantly after rehabilitation [p<0.001]. The improvement in visual function [reading, writing, and recognizing faces] and improvement in quality of life [banking, daily living skills, and dialing the telephone] following rehabilitation point to the advantage of low vision rehabilitation in patients with age-related macular degeneration.

Magnetics

adverse effects

Mini-magnets and their hazards in children.
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Altnagelvin Area Hospital - Department of General Surgery
Pakistan Journal of Medical Sciences 2007; 23 (2): 287-289 (9 ref.)
Keywords: Play and Playthings; Child; Accidents
Abstract: With the advancement in technology every day more and more sophisticated toys are being developed for children. Most of them contain mini magnets. Safety of these magnets for use in children’s toys is controversial. There is growing number of cases reported in literature regarding hazards of mini magnets. We are reporting an unusual case where a seven year old boy has to be taken to theatre for removal of two tiny attached magnets onto his dorsal penile skin which were removed under general anaesthesia.

Malathion

toxicity

Late-onset polyneuropathy due to malathion intoxication.
Bilir, Ayten; Yelken, Birgul; Ozkan, Basak; Tannriverdi, Belkis; Ekemen, Serdar
E-mail: aytbilir@yahoo.com
Eskisehir Osmangazi University - Medical Faculty - Department of Anesthesiology and Reanimation
Neurosciences 2007; 12 (2): 166-167 (5 ref.)
Keywords: Phosphates; Polyneuropathies-etiology; Phosphoric Acid Esters-toxicity

Meckel Diverticulum

complications

Portal-mesenteric vein thrombosis as an unusual presentation of Meckel’s diverticulum complication.
Al Khayat, Hailahm; Hayati, Hussein; Al Khayat, Hisham; Sadeq, Adnan; Goof, Ala; Zarka, Zaki Anas
E-mail: halkhayat@yahoo.com
Saad Specialist Hospital - Department of Surgery
Keywords: Venous Thrombosis; Mesenteric Veins; Portal Vein; Abdomen, Acute; Tomography, X-Ray Computed; Heparin-therapeutic use; Warfarin; Thrombophilia

Medical Audit

Importance of self audit by a journal to measure quality improvement and planning for future.
Jawaid, Shaukat Ali
E-mail: shaukat@pulsepakistan.com
Pakistan Journal of Medical Sciences 2007; 23 (1): 4-8 (13 ref.)
Keywords: Periodicals-standards; Quality Control; Forecasting; Authorship; Abstracting and Indexing
MEDLINE

How relevant are impact factor and indexation in MEDLINE?
Jafary, Maqbool H.; Jawaid, Shaukat Ali
E-mail: drjafary@gmail.com
Pakistan Journal of Medical Sciences 2007; 23 (1): 1-3 (14 ref.)
Keywords: Periodicals; Publishing; Abstracting and Indexing

Medulloblastoma
diagnosis

Medulloblastoma: A life threatening cancer of infancy and childhood.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 275-277 (10 ref.)
Keywords: Child; Infant; Infratentorial Neoplasms; Cerebellar Neoplasms; Cranial Fossa, Posterior
Abstract: Medulloblastoma is a rare and aggressive tumor of the brain that usually occurs in children or young adults with a tendency to metastasize. The incidence in infant is rare. We came across one such child who presented with slight disorientation, vomiting, irritable personality and somewhat large size head. The clinical, radiological preoperative diagnosis was space occupying lesion in the posterior fossa. On histological examination it turned out to be Medulloblastoma of infratentorial region in posterior fossa.

Mental Disorders
epidemiology

An epidemiological survey of mental disorders among adults in the north, west area of Tabriz, Iran.
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Razi University Hospital, Mental Center - Tabriz Medical Science - Department of Psychiatry
Pakistan Journal of Medical Sciences 2007; 23 (1): 54-58 (20 ref.)
Keywords: Prevalence; Demography; Diagnostic and Statistical Manual of Mental Disorders; Cross-Sectional Studies
Abstract: To find out prevalence of mental disorders in the North West Area of Tabriz, Iran and their association with demographic factors such as gender, marital status, education and age. In this cross sectional study 1017 households were chosen using systematic randomized sampling and 2624 individuals above the age of seventeen years and above. We obtained information on psychiatric disorders by using Duke University Questionnaire. Four hundred fifty two people were interviewed by two psychiatrists based on the DSM-IV criteria. The SPSS-11 version was used for analysis. The probability of mental disorder was 19.4% in women and 8.59% in men. The overall prevalence of psychiatric disorders was 14.4%. Etiological studies provide usefull information for planning provision of mental health care. Further studies are needed to find out the prevalence of mental disorders in the community.

Metabolic Syndrome X
epidemiology

Metabolic syndrome in normal-weight Iranian adults.
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Shaheed Beheshti Medical University - Endocrine Research Center
Keywords: Prevalence; Cross-Sectional Studies; Body Mass Index; Blood Pressure; Triglycerides-blood; Sex Factors; Blood Glucose; Cholesterol, HDL; Cardiovascular Diseases; Adult
Abstract: This study provides the first reported estimates of the prevalence of the metabolic syndrome in a normal-weight Iranian population. In this population-based cross-sectional study, the study population consisted of a representative sample of 1 737 males and 1 707 females aged >/=20 years with normal body mass index [BMI] [18.5-24.9 kg/m] [2] for both genders. The metabolic syndrome was defined according to the Adult Treatment Panel III guidelines. We present means and proportions, and multivariate odds ratios that quantify the association between metabolic syndrome and normal BMI quartiles, controlling for age, physical activity, smoking and education. The overall prevalence of the metabolic syndrome in normal-weight men and women were 9.9% and 11.0% [P=0.2] respectively. Men had a lower BMI than women, while their waist circumference [WC] was higher. The prevalence of
high WC and low high-density lipoprotein cholesterol [HDL-C] was higher in women, while high blood pressure, high triglyceride levels and having at least one metabolic risk factor were more prevalent in men. Individuals in the highest category of normal BMI had significantly higher odds for being at risk for metabolic syndrome compared to those in the first category [OR: 5.21 for men and 2.15 for women]. There was an increasing trend in odds for having all the metabolic syndrome components except for high fasting blood sugar [FBS] and high WC in men. Women showed a similar increasing trend except for high FBS across normal BMI quartiles. The prevalence of the metabolic syndrome in normal-weight Iranian adults is relatively high. Therefore, interventions for prevention of cardiovascular disease could be considered in this population.

Metals, Heavy

Bioaccumulation of heavy metals in some fauna and flora.
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Abia State University PMB 2000 - Department of Industrial Chemistry
Keywords: Industry; Mollusca; Crustacea; Hibiscus; Vernonia; Water Pollution, Chemical
Abstract: Bioaccumulation of heavy metals in fauna and flora in the Ijaw area of the Niger Delta of Nigeria were investigated. The fauna-molluscs and crustacea, and flora Hibiscus esculentus and vernonia amygdalina were selected for this study. Results show that Molluscs and crustacea accumulate considerable amounts of heavy metals. Higher levels of all the metals determined Hg, Pb, Cr, Cu, Ni, and Zn were observed in the shells than in the fleshly tissues. Hibiscus esculentus and vernonia amygdalina also accumulated these heavy metals. The mercury levels in the roots of Hibiscus esculentus and vernonia amygdalina is 0.010 micro g/g +/- 0.00, while the stem 0.17 +/- 0.03 micro g/g and leaves 0.25 +/- 0.02 micro g/g was recorded for the v. amygdalina. The H. esculenta fruit has lead levels of 0.22 +/- 0.03 micro g/g. The levels of Cu, Ni, and Zn are generally higher than those of Hg, Pb and Cr in all the samples analyzed. There is a growing concern about the physiological and behavioral effects of environmental trace metals in human population. The toxicity of lead at high levels of exposure is well known but of a major concern is the possibility that continual exposure to relatively low levels of these heavy metals through the consumption of these fauna and flora may entail adverse health effects.

Metronidazole analogs and derivatives

Synthesis of metronidazole derivatives as antigiardiasis agents.
Khabnadideh, S.; Rezaei, Z.; Khalafi Nezhad, A.; Motazedian, M.H.; Eskandari, M.
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Shiraz University of Medical Sciences - Faculty of Pharmacy and Pharmaceutical Sciences Research Center - Department of Medicinal Chemistry
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 17-20 (11 ref.)
Keywords: Giardiasis-drug therapy; Antiprotozoal Agents; Imidazoles; Epoxy Compounds

Migraine Disorders

epidemiology

Migraine: Comorbidity with depression.
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Civil Hospital Karachi - Department of Neurology
Pakistan Journal of Medical Sciences 2007; 23 (1): 95-99 (22 ref.)
Keywords: Comorbidity; Depression-epidemiology; Migraine Disorders-diagnosis; Depression-diagnosis
Abstract: To identify and see impact of coexisting depression in diagnosed cases of migraine. Hospital-based case-control study. Department of Neurology, Jinnah Postgraduate Medical Centre Karachi. Patients of all ages and both sexes attending neurology OPD at JPMC between October 1998 to October 1999 were included. International Headache Society criteria for diagnosis of migraine and Urdu version of Hospital Anxiety and Depression Scale for diagnosis of depression was used. Migraine with Depression cases [MWD] were compared with Migraine without depression as controls [MC]. Duration and frequency of migraine, co-morbidity with depression. Out of 100 migraineurs, 40 were MWD and 40 MC were taken from the remaining 60 migraineurs. Among MWD and MC females were common: 72%[29] and 78%[31] respectively. Of the females MWD, most of the patients belonged to the age group 31-40years; 52%[15] patients, compared to MC where age group 21-30 years; 58%[18] was common. Among the males, maximum number of migraineurs belonged to the age groups of 22-30 years for both MWD and MC i.e. 46%[05] and 56%[05] respectively. Fifty percent of MWD reported having migraine attacks for 10 or more years whereas only 18% of MC had the similar duration. [P-value <=0.01]. Ninety percent [n=36] of MWD reported maximal disability during the headache as compared to the 62.5%[25] of MC. 62.5%[25] of MWD had an average frequency of 4 or more attacks per month compare to 55%[22] of MC having once per month or less. [P-value =0.001]. Migraineurs with long history and high frequency might benefit from psychiatric evaluation and addition of antidepressant drugs to their therapeutic regimen.
Multiple Myeloma

epidemiology

Plasma cell myeloma in a tertiary centre in Niger delta region of Nigeria: Clinicoimmunologic Analysis.

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Pakistan Journal of Medical Sciences 2007; 23 (1): 27-32 (25 ref.)

Keywords: Multiple Myeloma-diagnosis; Multiple Myeloma-pathology; Multiple Myeloma-therapy; Multiple Myeloma-immunology; Retrospective Studies

Abstract: To determine the incidence and pattern of presentation of patients with multiple myeloma [MM] in a tertiary health center in Edo state, Niger Delta region of Nigeria noted for its petrochemical industries and gas flare sites. A retrospective study of 30 cases of MM from 1992 to 2004. University of Benin Teaching Hospital, Nigeria. Clinicoimmunologic information in addition to autopsy findings was obtained from case-files. Diagnosis was established according to the standard definition and staged according to the Durie-Salmon clinical staging system. Advanced stages of the disease [II-III] and performance status scale of 2-4 with pathological fractures were the main form of presentation. Overall median survival was three months \[P<0.0001\] with 33.3% of the patients surviving at 12 months and 13.3% at 24 months. Bone pains and anaemia with pathological fractures were the commonest characteristic features with a short three months median survival rate.

Multiple Sclerosis

diagnosis

MR imaging of multiple sclerosis simulating brain tumor.

Armagan, Ercan; Kahilogullari, Gokmen; Ugur, Hasan C.; Heper, Aylin O.; Attar, Ayhan

University of Ankara - Faculty of Medicine - Department of Neurosurgery

Neurosciences 2007; 12 (2): 158-159 (10 ref.)

Keywords: Multiple Sclerosis-radionuclide imaging; Brain Neoplasms-diagnosis; Magnetic Resonance Imaging

Abstract: Multiple sclerosis [MS] may sometimes present as a mass lesion that is clinically and radiologically indistinguishable from brain tumor. The initial recognition of such cases is essential to avoid a surgical intervention and supplementary treatment. Sometimes areas adjacent to a tumor may present similar histopathological features with non-neoplastic demyelinating lesions. Thus, the proper preparation of the specimen is the key for correct pathological diagnosis. We report a case of MS with large cranial involvement showing a mass effect. The operative procedure associated with medical treatment was performed, and a good result was obtained. Our case presentation and others in the literature suggest strategies for detecting MS presenting as a mass lesion.

genetics

Human leukocyte antigen typing in Iraqi multiple sclerosis patients.

Saleem, Maysoon A.; Mukhelf, Hamid F.; Moussawi, Khalida M.; Al Khafaji, Jasim T.

Neurosciences 2007; 12 (2): 127-132 (20 ref.)

Keywords: HLA Antigens; Multiple Sclerosis-etiologic; Histocompatibility Testing

Abstract: To assess the relative frequency of human leukocyte antigen [HLA] class I and class II in Iraqi multiple sclerosis [MS] patients, and to ascertain whether they offer any etiologic or protective role. We conducted this study in the Baghdad MS Clinic and Teaching Laboratory Institute, Medical City, Baghdad Teaching Hospital, Baghdad, Iraq from March to July 2004. We enrolled 44 randomly selected MS patients and 69 healthy unrelated age- and sex-matched controls. We carried out HLA class I and class II typing on both groups using the microlymphocytotoxicity test. The HLA class I typing revealed no consistent association between MS and HLA-A and -Cw, while HLA-B5 and -B44 were found to possibly be risk factors for MS with odds ratio [OR] of 10.2 for -B5 and 4.4 for -B44. The HLA-B35 may form a protective factor with OR of 0.1. The HLA class II typing revealed an etiologic risk for HLA-DR4 [OR=10.3] and a protective effect for -DR7 [OR=0.2], and etiologic effect for -DQ1 [OR=3.3] and -DQ3 [OR=3]. The HLA DR4 carries the strongest association with MS in Iraqi patients. This study adds to the well-known diversity of HLA-allelic association of MS in different populations, and emphasizes the complexity of genetic susceptibility to MS.

physiopathology

Multiple sclerosis and neurochemical disturbances.

Markelov, Vladimir V.; Trushin, Maxim V.

Kazan Municipal Rehabilitation Medical Health Center

Pakistan Journal of Medical Sciences 2007; 23 (1): 145-149 (60 ref.)

Keywords: Neurotransmitter Agents; Tryptophan; Neuroimmunomodulation
Abstract: The data presented in this manuscript suggest a pivotal role of the central nervous system [CNS] in the regulation of immune status. We describe here that some neurochemical disturbances may provoke development of various diseases including multiple sclerosis. Some theoretic and practical backgrounds, how to improve the multiple sclerosis sufferers and patients with other autoimmune disorders, are also given.

**Muscle, Skeletal**

**pathology**

**What's your diagnosis?** A previously healthy 77-year-old man with a painful mass in the calf for two months. **Diagnosis: calcific myonecrosis of the calf.**

Ozbarlas, Serdar; Kalaci, Aydiner; Ozkan, Cenk; Togrul, Emre

Cukurova University - Faculty of Medicine - Department of Orthopaedics and Traumatology


**Keywords:** Muscle, Skeletal-radiography; Magnetic Resonance Imaging; Necrosis; Calciosis

**Mutism**

**diagnosis**

Seletive mutism and co-morbidity with dysmorphism.

Al Marzooq, Rehab; Ali, Reem M.

Salmaniya Medical Complex

Bahrain Medical Bulletin 2007; 29 (2): 71-73 (15 ref.)

**Keywords:** Fragile X Syndrome-diagnosis; Comorbidity

Abstract: The relationship between primary and secondary care is not dichotomous. It's an extended spectrum relation, with no start and accordingly it never ends. Both settings contribute uniquely to the integrated delivery of health care. The type of interface, therefore, should not be colliding and the conflict seen in some health care settings are really arbitrary and artificial. Nevertheless, different health systems around the world through history have experienced an everlasting conflicts and controversies. Ways to recover and repair the gap have been going ever since. The vital role of primary care cannot be ignored or overlooked; it has become an integral part of all medical disciplines. Thus it is crucial to develop an understanding between primary and secondary care. This paper outlines the causes of conflicts between the two disciplines and the probable ways for resolution.

**Mycobacterium tuberculosis**

**genetics**

Identification of mycobacterium tuberculosis CTL epitopes restricted by HLA-A 0201 in HHD mice.

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IBJ - Iranian Biomedical Journal 2007; 11 (1): 23-31 (37 ref.)

**Keywords:** Vaccines, DNA; Epitopes; HLA-A Antigens; Mice

**Myocardial Infarction**

**physiopathology**

[Predictive value of ST-T change of avR lead in detection of coronary artery involvement inferior MI patients].

Sadeghi, M.; Roohafza, H.R.; Poomoghadas, M.; Tavassoli, A.A.

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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 42-45 (9 ref.)

**Keywords:** Electrocardiography; Coronary Angiography; Coronary Vessels-pathology

Abstract: In inferior MI, both circumflex [CX] and Right coronary artery [RCA] can be involved. Application of noninvasive paramedical evaluations in predicting of such events is considered to be worthwhile. Detection of coronary artery [RCA or CX] involvement in inferior myocardial infarction based on avR change. In 100 patients with inferior MI, 12-lead standard ECG was recorded in first 6 hours and ST-T change of avR evaluated. T-P segment was considered as isoelectric line. Data were analyzed using SPSS-12 and the sensitivity, specificity, positive and negative predictive values evaluated. RCA disease was seen in 72 patients and CX in 28. Isoelectric ST, ST depression and ST elevation in avR were seen in 61, 22 and 17 patients, respectively. Positive predictive value [PPV] of isoelectric ST for RCA disease was 78.7% compared with 21.3% for CX. PPV of ST elevation for RCA and CX diseases were 70.6% and 29.4%, respectively. PPP of ST depression for RCA disease was 54.5% compared to 45.5% for CX. Regarding the higher PPV of isoelectric ST, clinicians are suggested to employ this criterion in addition to other findings for RCA involvement prior to invasive procedure.
Nails, Ingrown

pathology

Ingrowing toe Nail.
Asahraf, Muhammad Sajjad
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Civil Hospital
Pakistan Journal of Medical Sciences 2007; 23 (1): 150-151 (12 ref.)
Keywords: Nails-pathology; Nails-surgery; Laser Surgery; Nails, Ingrown-surgery

Nanoparticles

Design and optimization of nsaid loaded nanoparticles.
Sashmal, Swati; Mukherjee, Swarupananda; Ray, Subhabrata; Thakur, Ram Sharnagat; Ghosh, Lakshmi K.; Gupta, Bijan K.
Ranbaxy Research Lab
Keywords: Anti-Inflammatory Agents, Non-Steroidal-pharmacokinetics; Drug Delivery Systems; Poloxamer; Polyglycolic Acid; Drug Carriers; Drug Stability; Flurbiprofen
Abstract: The objective of the study was to design and evaluate NSAID loaded Nanoparticles drug delivery system, where Flurbiprofen [model drug] Nanoparticles with suitable size range are envisaged to concentrate at inflammation sites due to increase fragility of blood vessels at those sites and increased aggregation and prostaglandin synthesis. Materials used were surfactant [pluronic F 68] and polymer [poly lactic co glycolic acid; PLGA]. The flurbiprofen loaded nanoparticles were prepared by solvent diffusion nano-precipitation method. Experiment was carried out following 32 factorial designs, where drug-polymer ratio was varied to optimize the formulation. From I.R studies no drug-polymer interaction was found. Particles size analysis was done using Malvern Mastersizer. Two parameters, namely, drug-polymer ratio and solvent-nonsolvent ratio were chosen for optimization following the factorial design. Amount of drug loading and surfactant was kept constant, and only polymer load was varied. The in-vitro drug release profile from nanoparticles was found to follow Higuchi square root kinetics implying a diffusion dependent release as is expected of an insoluble, non-swellable nature of PLGA. It indicated that nanoparticles formed were matrix in nature, in which flurbiprofen dispersed uniformly. Suitable polynomial models were generated and statistically validated using ANOVA for the different responses, namely drug release [maximization] and particle size [minimization]. Those models were solved numerically and simultaneously to optimize the required formulation. Optimized formulation were found to have a polymer-drug ratio of 18.89:1 and manufactured at a nonsolvent-solvent ratio of 4:1 to maximized release after 8 hrs and minimized particle size. The methodology avoids the use of organic solvent and thus provides a safe, reproducible and fast method of production of nanoparticles. The study collaborates on the feasibility and suitability of aqueous polymeric drug delivery system, employing statistical design to develop a clinically useful Nanoparticle system with targeting potential.

Naphthoquinones

toxicity

Henna-induced severe hemolysis: In Glucose-6-Phosphate Dehydrogenase deficiency.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 119-121 (8 ref.)
Keywords: Hemolysis; Glucosephosphate Dehydrogenase; Glucosephosphate Dehydrogenase Deficiency
Abstract: Glucose- 6-phosphate dehydrogenase deficiency is one of the most common enzyme deficiencies worldwide. Lawson is a chemical present in henna, the crushed leaves of which are not only used as a cosmetic agent but also as a therapeutic agent for some types of skin lesion. In vitro observations indicated that lawson is an agent capable of causing oxidative hemolysis. We report a 42 - days old G6PD - deficient male infant with acute severe hemolysis after application of henna to treat his napkin dermatitis.

Neurilemmoma

diagnosis

Schawanoma disguising as a solitary thyroid nodule.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 128-129 (7 ref.)
Keywords:  Thyroid Nodule-diagnosis;  Neoplasms;  Neurilemmoma-surgery

Abstract:  Schawannoma is a benign tumor arising from schawann’s cells. Schawannoma is arising from nerve tissue in central and peripheral nervous system is not uncommon, but is rarely found in body organs like pancreas, parotid gland or clinically simulate some other organ pathology. A case of Schawannoma clinically presenting as a solitary thyroid nodule is presented in this case report.

**Neurofibromatosis 1 complications**

Vertebral scalloping in neurofibromatosis-1.
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Hammoud Hospital - Division of Neurosurgery
Neurosciences 2007; 12 (2): 155-157 (10 ref.)
Keywords:  Neurofibromatosis 1-pathology;  Lumbar Vertebrae-pathology;  Lumbar Vertebrae-radiouclide imaging

Abstract:  A 39-year-old male patient known to have neurofibromatosis-1, presented with sciatica and low back pain. At the age of 27, an MRI of the spine revealed widening of the lumbar canal due to posterior scalloping of the last 4 lumbar vertebrae. Repeat MRI and simple lateral lumbar-sacral plain film at the age of 39, revealed significant progression of the lumbosacral lesion. In view of the progression of the disease during the last 15 years, we opted for insertion of a lumbo-peritoneal [LP] shunt to decrease the CSF pressure, which is the most probable cause of scalloping. We shied away from lumbar fixation as we thought that this would not stop the vertebral erosion. The LP shunt affected good symptomatic and radiologic outcome over a 2-year follow up.

**Neuropeptides metabolism**

A study of the oxidation induced conformational and functional changes in neuroserpin.
Mohsenifar, Afshin; Lotfi, Abbas S.; Ranjbar, Bijan; Allameh, Abdolamir; Zaker, Farhad; Hasani, Leila; Kia, Batool Etemadi; Hasannia, Sadegh
Tarbiat Modares University - Department of Clinical Biochemistry
IBJ - Iranian Biomedical Journal 2007; 11 (1): 41-46 (31 ref.)
Keywords:  Serpins-metabolism;  Reactive Oxygen Species;  Oxidative Stress;  Hydrophobicity

**Obesity epidemiology**

Prevalence of obesity and abdominal obesity in a sample of urban adult population within south east of Iran.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 193-197 (25 ref.)
Keywords:  Prevalence;  Urban Population;  Cross-Sectional Studies;  Adult;  Abdomen

Abstract:  Obesity is now considered as a major health challenges in the both developed and developing countries. The prevalence of this phenomenon has been reported up to 36.7% in some of the urban regions of Iran. Since, there has been no previous study regarding prevalence of obesity in the adult population within South East of Iran, this study was carried out in the year 2002 to estimate the prevalence of obesity and abdominal obesity in adults 30 years and older in Rafsanjan. This survey was a cross sectional study in which a random sample of adults [n=756; age>30] were selected. For each individual a questionnaire was completed, in which height, weight, waist circumference and demographic characteristics were recorded. The overweight and obesity were defined by BMI=25-29.9 and BMI >30, respectively. The abdominal obesity was defined for women and men by waist circumference >88cm and >102cm,respectively. The prevalence of obesity [type 1 and 2] and overweight were 11.6% and 38.2%, respectively. In addition 164 [37.5%] of women and 118 [36.9%] of men were overweight. Seventy eight [18.2%] of women and 15 [4.7%] of men were obese, 248 [56.9%] of women and 52 [16.6%] of men suffered from abdominal obesity. The results of this study showed that the obesity and abdominal obesity are among the most important health problems within South East of Iran. Therefore, it can be suggested that an interventional approach is needed in order to change people's lifestyle, which by itself may also have an important effect in reducing morbidity and mortality from other chronic diseases.
surgery

Slippage after adjustable gastric banding according to the pars flaccida and the perigastric approach.
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Kuwait University - Faculty of Medicine - Department of Surgery
Medical Principles and Practice 2007; 16 (2): 110-113 (21 ref.)
Keywords: Laparoscopy; Stomach-surgery; Obesity, Morbid-surgery; Bariatric Surgery
Abstract: To evaluate laparoscopic adjustable gastric banding and the 'pars flaccida' techniques for treating morbidly obese patients. Between May 1999 and July 2002, 64 patients underwent laparoscopic adjustable gastric banding. The 'perigastric' technique was performed in the first 31 patients. From September 2000 the band was positioned according to the 'pars flaccida' technique in the remaining 33 patients. The patients were divided into three groups: group 1 - 'perigastric' technique using Lap-Band size 9.75 and 10 cm [31 patients]; group 2 - 'pars flaccida' technique using Lap-Band size 10 cm [12 patients], and group 3 - 'pars flaccida' technique using the Swedish band [21 patients]. There were 58 females and 6 males with a mean age of 36.6 years [range 17-56]. The preoperative mean body mass index was 46.2 kg/m2. Band slippage occurred in 10/31 patients [32.2%] of group 1, 3/12 patients [25%] of group 2 and none in group 3 patients [p < 0.01]. The 'pars flaccida' technique significantly reduces the incidence of postoperative slippage after gastric banding. This complication is further reduced in the Swedish band group. Furthermore, we do not recommend using the 10-cm Lap-Band in the 'pars flaccida' technique.

Obstetric Labor, Premature

blood

[Evaluation of alpha-fetoprotein and alkaline phosphatase levels in prediction of preterm labor].
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 32-35 (5 ref.)
Keywords: alpha-Fetoproteins-biosynthesis; Alkaline Phosphatase-blood; Case-Control Studies
Abstract: Preterm labor is one of the complications of pregnancy affecting 7% of cases. To determine variations of AFP and ALP as a predictive index of preterm labor. A case-control study was performed on 210 patients in Kosar hospital, Qazvin. The case group composed of 70 pregnant women between 28-37 weeks who had their deliveries in labor ward and diagnosed as preterm labor. The first control group included 70 pregnant women between 28-37 wks who were followed until 37th week of pregnancy and the mentioned parameters were measured in their serum. The second control group consisted of 70 women who had term delivery and evaluated for the effect of labor on the level of predicting markers. The data derived from questionnaires were used as primary information. The analysis of data was performed based on parametric test [t-test] using SPSS 4 [confidence interval of 95%]. The mean of AFP in preterm labor group was 167.61 IU/ml followed by 77.5 and 70.5 IU/mL in first and second control groups, respectively. There was a significant difference [up to 2-205 times of mean value] between preterm labor group and the first control group [p<0.05]. The mean of ALP in preterm labor group was 320 IU/mL followed by 284.1 and 280.1 IU/mL in first and second control groups, respectively. Regarding ALP levels, no significant difference was found between two control groups. The serum level of AFP was increased in preterm labor whereas no variation in the level of ALP was observed.

Occupational Health

[Assessment of factors associated with explosion of gas-fuel in fire-tube boilers].
Asilian, H.; Valadkhani, A.; Mortazavi, S.B.; Salem, M.; Khavanin, A.
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 58-63 (8 ref.)
Keywords: Safety Management; Explosions; Gases; Fuel Oils; Industry; Safety
Abstract: There are many factors with different degrees of importance in explosion of fire-tube boilers and hence, reorganization, assessment and ranking of such factors by an accurate analytical method could be used as a guideline for experts related to safety programs. This study was planned to determine all effectual factors associated with explosion of oil fuel, the probability of occurrence in a specific area of industry, and also ranking of basic events. Fault tree analysis method was used in studying four fire-tube boilers located in one of the factories of Alborz Industrial City [Qazvin, Iran] to determine the effective events for occurring expected explosion accident and also to show their association. All basic events were further ranked by qualitative method. Developed fault tree showed 76 events which were connected through 42 logical gates. There were 36 basic events ranked in 11 levels according to their qualitative importance. Ranking of basic events showed that the human error factor [in management planning level] has the highest order among the factors with potential to cause boiler explosion.
Ofloxacin

analysis

Optimization of levofloxacin analysis by RP-HPLC using multivariate calibration technique.
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University of Karachi - Department of Chemistry
Keywords: Chromatography, High Pressure Liquid; Multivariate Analysis; Chemistry, Pharmaceutical; Parabens
Abstract: A rapid and sensitive reverse phase high performance liquid chromatographic [RP-HPLC] method for the analysis of levofloxacin from bulk materials, dosage formulations and human serum is described. This isocratic method employs, a Nucleosil, C18 [10um, 25 cm x 0.46 cm] column with a mobile phase of water and acetonitrile [6:5], where in phosphoric acid was used to adjust the pH to 2.9 and propylparaben as an internal standard. Optimization of levofloxacin analysis was carried out using multivariate calibration technique and detector response was recorded at five different wave lengths. A linear response \([r > 0.9999]\) was observed in the range of 40 to 10000 ng ml\(^{-1}\). The method shows good recoveries, intra and inter-day relative standard deviations were less than 1.2%. Validation parameters as specificity, accuracy and robustness were also determined. The method can conveniently be used for analysis of levofloxacin pharmacokinetic levels in human serum and pharmaceutical formulations.

Oils, Volatile

chemistry

Chemical composition of the essential oil of Eremostachys laevigata bung.
Amiri, H.; Meshkat Al Sadat M.H.; Lari, Yazdi, H.
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University of Lorestan - Faculty of Sciences - Department of Biology
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 41-44 (31 ref.)
Keywords: Sesquiterpenes, Germacrane; Triterpenes; Sesquiterpenes

Omentum

pathology

Primary omental torsion: Two case reports.
Al Bader, Ibtisam; Ali, Ali Al Said; Al Sharraf, Khalid; Behbehani, Abdullah
E-mail: albader_ib@hotmail.com
Mubarak Al Kabeer Hospital - Department of Surgery
Medical Principles and Practice 2007; 16 (2): 158-160 (8 ref.)
Keywords: Torsion; Peritoneal Diseases-diagnosis; Abdominal Pain; Infarction; Abdomen, Acute
Abstract: To describe two cases of primary omental torsion as an uncommon cause of abdominal pain. Two female patients presented to our surgical service with right-sided abdominal pain. In view of their clinical presentation and workup, both patients required operative intervention. At laparotomy, the cause of the pain was recognized to be due to infarcted omentum secondary to torsion. Both patients underwent omentectomy and appendectomy and had an uneventful recovery. Primary torsion of the omentum is difficult to diagnose preoperatively; this condition is usually detected during surgical exploration for acute abdominal pain.

Onagraceae

Antitumor and antibacterial activity of ethylacetate extract of ludwigia hyssopifolia linn and its active principle piperine.
Das, Banibrata; Kundu, Juthika; Bachar, Sitesh Chandra; Aftab Uddin, Mohammad; Kundu, Joydeb Kumar
Dhaka University - Faculty of Pharmacy - Department of Pharmaceutical Technology
Keywords: Plant Preparations-therapeutic use; Plant Extracts; Phytotherapy; Piperidines; Antineoplastic Agents; Anti-Bacterial Agents
Abstract: An alkaloid constituent 1-[5-[1,3-benzodioxol-5-yl]-1-oxo-2,4-pentadienyl]piperidine, trivial name piperine was isolated from Ludwigia hyssopifolia Linn. [Family-Onagraceae]. The ethylacetate extract of the plant and the isolated compound piperine were studied for antitumor and in vitro antibacterial activity. Ethylacetate extract showed 73.05 and 84.14% inhibition of Agrobacterium tumefaciens-induced crown gall tumor formation in potato disc. Piperine exhibited antitumor activity with IC\(50\) value of 13.50 \(\mu\)g/disc. Both ethylacetate extract and piperine showed mild to moderate antibacterial activity against selected Gram-positive and Gram-negative bacteria.
Oocytes

cytology

Intracytoplasmic glutathione level in MII oocyte during in vitro maturation of germinal vesicle: Effect of cysteamine.
Mohammadi Roushandeh A.; Noori Mooghahi M.H.; Pasbakhsh, P.; Abdol Vahhab, M.; Akbari, M.; Shokrgozar, M.A.; Sobhani, A.; Amidi, F.; Abbasi, Habibi, M.; Roudkenar, M.
Tabriz University of Medical Sciences - Faculty of Medicine - Department of Anatomy
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 12-16 (13 ref.)
Keywords: Glutathione; Cysteamine; Cytoplasmic Vesicles; Oocytes-growth and development; Mice

Osteogenesis Imperfecta

diagnosis

A three month old infant with skeletal deformities.
Jindani, Hafiza; Ali, Amjad; Ali, Niloufer Sultan
Aga Khan University - Department of Family Medicine
Keywords: Bone Diseases, Developmental; Muscle, Skeletal; Genetic Counseling; Limb Deformities, Congenital; Osteogenesis Imperfecta-therapy; Infant
Abstract: Osteogenesis imperfecta [OI] is a heritable disease of bone the hallmark of which is bone fragility. It is an autosomal dominant disorder. Diagnosis is usually clinical, based mainly on typical features. There is no curative treatment for OI. Active physical rehabilitation in the early years allows children to attain a higher functional level than does orthopaedic management alone. Therefore family physicians need to play an active role in guiding their patients to optimal rehabilitation.

Pain

epidemiology

[Prevalence of chronic pain in adolescents of Qazvin and the associated impact on daily living].
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 64-69 (12 ref.)
Keywords: Adolescent; Prevalence; Activities of Daily Living
Abstract: Pain among adolescents and children has been identified as an important public health problem. Chronic pain in adolescents leads to disability in physical activity, anxiety, sleep disturbance, school absence, and social withdrawal. This study was to investigate the prevalence and impact of chronic pain on daily living and activities of adolescents. This was a descriptive analytical study designed to determine prevalence of pain in 200 adolescents aged 12 to 15 years through random cluster sampling among the population of Qazvin. Data were collected through questionnaires and analyzed using SPSS. The most common types of pain in adolescents were headache [36%], abdominal pain [21%], and eye pain [21.5%]. Prevalence of chronic pain increased with age and was significantly higher in girls [p<0/001]. The self-reported trigger for pain was: anger/disputes [58.1%], sadness [52.8%], and common cold or illness [44.4%]. Our results highlight the relevance of adolescent pain for public health policy. To enhance our knowledge about adolescent pain and encouraging parents, teachers, and health care professionals to assist young people and adolescents with pain management, additional studies are suggested.

therapy

Implementation and function of acute pain management service: Aga khan University Hospital experience.
Shafiq, Faraz; Hamid, Mohammad; Samad, Khalid
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Aga Khan University Hospital - Department of Anaesthesia
Pakistan Journal of Medical Sciences 2007; 23 (2): 301-303 (10 ref.)
Keywords: Pain Clinics; Hospitals, University; Quality Assurance, Health Care; Pain, Postoperative-prevention and control; Acute Disease; Disease Management
Paresthesia

etiology

A young man with paresthesia in left hand-Left ulnar neuropathy at the elbow.
Bahou, Yacoub; Hadidi, Azmi
Jordan University Hospital - Department of Neurosciences
Neurosciences 2007; 12 (2): 173-174 (2 ref.)
Keywords: Ulnar Neuropathies-diagnosis; Neural Conduction; Action Potentials; Elbow

Particulate matter

Particulate matter dispersion and haze occurrence potential studies at a local palm oil mill.
Abdullah, L.C.; Wong, L.I.; Saari, M.; Salmiaton, A.; Abdul Rashid, M.S.
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University Putra Malaysia - Faculty of Engineering - Department of Agricultural Engineering and Biology
Keywords: Plant Oils; Geographic Information Systems; Industry
Abstract: The emissions from palm oil industry through incineration and open burning are the major sources of air pollutants contribution in Malaysia. The consequence of increasing the particulate concentration, the particulate matter dissolves with vapour and grows into droplets when the humidity exceeds approximately 70% and causing opaque situation known as haze. This work focuses on the dispersion particulate matter from palm oil mill. Gaussian Plume Model from a point source, subject to various atmospheric conditions is used to calculate particulate matter concentration then display the distribution of plume dispersion using geographic information system. Atmospheric Stability, mixing height, wind direction, wind speed, natural and artificial features play an important role in dispersion process. Study on the dispersion of particulate matters and the haze potential are presented as a case study in this paper. The data obtained will be served as the purpose of modeling the transport of particulate matter for obtaining permits and prevention of significant deterioration to the environment.

Penicillin G

chemical synthesis

Penicillin G extraction from simulated media by emulsion liquid membrane.
Ramazani Kalhor, R.; Kaghazchi, T.; Fazeli, M.R.; Daeipoor, F.
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 21-26 (14 ref.)
Keywords: Penicillin G-Pharmacology; Emulsions; Chemistry, Pharmaceutical

Phenanthrenes

metabolism

Biodegradation of phenanthrene by mixed culture consortia in batch bioreactor using central composite face-entered design.
Nasrollahzadeh, H.S.; Najafpour, G.D.; Aghamohammadi, N.
University Sains Malaysia - School of Biological
International Journal of Environmental Research 2007; 1 (2): 80-87 (19 ref.)
Keywords: Bioreactors; Xenobiotics; Culture Techniques
Abstract: Biodegradation of Phenanthrene [PHE] was studied in aqueous culture to demonstrate the potential of the mixed culture in degrading high concentration of PHE. The experiments were conducted to monitor biodegradation of Phenanthrene for duration of 6 days. Biodegradation of PHE was successfully achieved in low and middle concentration by the isolated mixed culture. A full factorial Central Composite Design of experiments was used to construct response surfaces with the removal, the extent of PHE degradation and the specific growth rate as responses. The initial Phenanthrene concentration [X1] and the reaction time [X2] were used as design factors. The result was shown that experimental data fitted with the lynomial model. Analysis of variance showed a high coefficient of determination value in the range of 0.936'0.999. The maximum biodegradation of PHE in terms of the removal of PHE [Y1] was found to be 0.100 mg/mg [degraded PHE/initial PHE]. The maximum extent of biodegradation relative to initial PHE concentration and biomass [Y2] was 0.171 mg/mg [degraded PHE/initial PHE/biomass]. This maximum biodegradation correspond to the factors combination of middle level of PHE content [X1= 19.06 mg/L] and the highest level of reaction time [X2 = 132.00 hours]. The removal efficiency of PHE biodegradation was achieved 100%. Polynomial model was found useful to predict PHE degradation under the experimental studied. It was observed that optimum biodegradation of PHE can be successfully predicted by RSM.
Phenytoin pharmacokinetics

Evaluation of phenytoin pharmacokinetics in neurotrauma patients.
Shohrati, M.; Rouini, M.R.; Mojtahedzadeh, M.; Firouzabadi, M.; Ghaini, M.R.; Kanani, M.
Baqiatallah University of Medical Sciences - Research center of chemical injuries
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 34-40 (22 ref.)
Keywords: Trauma, Nervous System; Pharmacokinetics; Prospective Studies

Phosphodiesterase Inhibitors

therapeutic use

Effect of sildenafil in primary pulmonary hypertension.
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Sultan Qaboos University Hospital - Department of Medicine, Cardiology Section
Pakistan Journal of Medical Sciences 2007; 23 (2): 264-266 (16 ref.)
Keywords: Hypertension, Pulmonary-drug therapy; Treatment Outcome
Abstract: Primary pulmonary hypertension is a disorder with limited treatment options and poor outcome. We demonstrated a beneficial role of sildenafil, a phosphodiesterase 5 inhibitor, in a patient with primary pulmonary hypertension. After the initiation of sildenafil the pulmonary artery pressure decreased from 40/20mmHg to 16/6mmHg, while mean pulmonary arterial systolic pressure decreased from 25mmHg to 10mmHg. Sildenafil has a beneficial effect in patients with primary pulmonary hypertension in improving the functional class and decreasing the pulmonary artery pressures.

Placenta Accreta

therapy

Conservative management of placenta percreta.
Okoro, Obioha; Onwere, Stephen
Abia State Teaching Hospital - Department of Obstetrics and Gynaecology
Pakistan Journal of Medical Sciences 2007; 23 (2): 278-279 (7 ref.)
Keywords: Pregnancy Complications; Disease Management; Cesarean Section
Abstract: Placenta percreta is a very rare condition. The incidence varies from 1:540 deliveries to 1: 93,000. It is becoming more common in view of the increasing Caesarean Section rates all over the world. In this case report, clinical features, risk factors and management have been discussed. The Obstetrician therefore has to be very wary in cases of repeat Caesarean Section. Most cases of placenta percreta will end in a hysterectomy, but this case was managed conservatively.

Plant Leaves

Evaluation of tectona grandis leaves for wound healing activity.
Majumdar, Mrityunjoy; Nayeem, Naira; Kamath, Jagadish V.; Asad, Mohammed
Krupanidhi College of Pharmacy
Keywords: Phytotherapy; Aloe; Plant Preparations-therapeutic use; Wound Healing; Burns-therapy; Rats, Wistar
Abstract: The frontal leaves of Tectona grandis [Verabinaceae] are widely used in the folklore for the treatment of various kinds of wounds, especially burn wound. The present study was carried out to evaluate the effect of hydrochloric extract of Tectona grandis on experimentally induced wounds in rats and compare the effects observed with a known wound healing agent, Aloe vera. The models selected were excision wound, incision wound, burn wound and dead space wound. A suitable gel formulation was selected for the application using cellophane membrane penetration. In the excision wound and burn wound models, animals treated with Tectona grandis leaf extract showed significant reduction in period of epithelisation and wound contraction 50%. In the incision wound model, a significant increase in the breaking strength was observed. Tectona grandis leaf extract treatment orally produced a significant increase in the breaking strength, dry weight and hydroxyproline content of the granulation tissue in dead space wound. It was concluded that Tectona grandis leaf extract applied topically [5% and 10% gel formulation] or administered orally [250 mg and 500 mg/kg body weight] possesses wound healing activity.
Plant Oils

metabolism

Biodegradation of palmarosa oil [green oil] by Serratia marcescens.
Mohanan, S.; Maruthamuthu, S.; Muthukumar, N.; Rajesekar, A.; Palaniswamy, N.
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Central Electrochemical Research Institute - Biocorrosion Division
Keywords: Serratia marcescens; Chromatography, High Pressure Liquid
Abstract: Biodegradation of oil depends on the nature of the oil, the type of microbial community and a variety of environmental factors. Green oils are being used as consumer goods and as raw materials in industries such as food processing, pharmaceutical and cosmetic. Microbial contaminations of green oils have been the cause of degradation problems. Serratia Marcessens produced cytochrome oxidase, catalase, Dextrose, Lactose, Manose and sorbitol enzymes were the main reason for the degradation at palmarosa oil. Changes of colour and turbidity was also the evidence for green oil degradation by bacteria. More oxygen included protons [O-CH2] group was produced in the presence of bacterial species and the addition of oxygen took place during bacterial degradation of palmarosa oil. The biodegradation of palmarosa oil by Serratia marcescens have been carried out using High Performance Liquid Chromatography [HPLC], Fourier Transform Infrared Spectroscopy [FTIR] and Nuclear Magnetic spectroscopy [NMR] analysis. Carboxyl group present in the palmorasa oil is utilised as a sole carbon sources for the Serratia marcescens.

Plasmacytoma

diagnosis

Solitary plasmacytoma of the cranial vault.
Salehpour, Firooz; Meshkini, Ali; Mozaffar, Aria Sheikh; Karimi, Kourosh; Hadidchi, Shahram
Keywords: Skull Neoplasms; Hematoma, Epidural, Cranial
Abstract: Solitary skull vault plasmacytoma is a relatively rare disorder where the ample involvement of bone usually makes the diagnosis easy, but we report a case of a solitary skull vault plasmacytoma presenting acutely masquerading as an extradural hematoma.

Pleural Effusion

etiology

The etiology of pleural effusion in children: Hyderabad experience.
Memon, Saleh A.B.; Shaikh, Shajeel J.
Liaquat University of Medical and Health Sciences - Department of Paediatric Surgery
Pakistan Journal of Medical Sciences 2007; 23 (1): 86-87 (9 ref.)
Keywords: Child; Pleural Effusion-epidemiology
Abstract: To evaluate the common causes of pleural effusion in children. Retrospective study. Liaquat University Hospitals Jamshoro, Hyderabad. The data of all paediatric patients of major pleural effusion from January 2005 was collected and analyzed retrospectively to determine the cause of pleural effusion. This study was conducted on 50 patients. The boys were 30 [60%] and 20 [40%] were girls; male to female ration was 3:2. Age range was three years to 14 years. All patients belonged to poor socioeconomic class. The common symptoms were fever and cough. X-Ray chest showed large pleural effusion. Forty [80%] patients were anemic with less than 8gm Hb level. In 39 patients the ESR was less than 40mm in the first hour. The pleural fluid specimen was taken for culture and sensitivity. Sputum was sent for acid fast bacilli. In two patients, the puss was thick; these patients underwent thoracotomy and decortications. Tuberculous pleural effusion was the most commonly encountered. It was found in 35 [66%] cases. The second most common cause was paraneumonic pleural effusion.

Pneumonia, Pneumocystis

diagnosis

The dark bronchus sign: HRCT diagnosis of pneumocystis carinii pneumonia.
Yadav, Poonam; Seith, Ashu; Sood, Rita
India Institute of Medical Sciences - Department of Radiodiagnosis
Keywords: Pneumocystis carinii; Tomography, X-Ray Computed
Abstract: We report the importance of the ‘dark bronchus’ sign in the diagnosis of uniform, diffuse ground glass opacification on high resolution computerized tomography [HRCT]. This sign is useful to identify diffuse ground glass opacity on HRCT in cases of Pneumocystis carinii pneumonia who may present with a normal or equivocal chest radiograph in the early course of disease.

Polyneuropathies

virology

Four cases of polyneuropathy due to HTLV[1] infection in Imam Reza Hospital: North East of Iran.
Habiballah, Nemati Karimoy; Hassanabady, H.; Rafatpanah, H.
E-mail: h_nemati_k@yahoo.com
Mashhad University of Medical Sciences - Department of Internal Medicine
Pakistan Journal of Medical Sciences 2007; 23 (2): 283-286 (13 ref.)
Keywords: Polyneuropathies-etiology; HIV; HTLV-I Infections-complications
Abstract: HTLV[1] is the first retrovirus which is known to infect human. HTLV[1] infection has two important manifestations including neurologic and hematologic disorders. We report four cases of HTLV[1] polyneuropathy managed between 1999 and 2004 at Imam Reza Hospital Mashad, [north east of Iran]. In all the four patients the disease started with paresthesia followed by muscle weakness. All patients had areflexia and most of them suffered from distal hypoesthesia.

Polyps

surgery

A case of urinary bladder benign polyp treated successfully by resection in a child.
Mursidhi, Mujalli S.; Akl, Kamal
E-mail: mujalli_mhailan@hotmail.com
Jordan University Hospital - Department of Urology
Annals of Saudi Medicine 2007; 27 (1): 52 (12 ref.)
Keywords: Polyps-pathology; Urinary Bladder-pathology; Hematuria; Polyps-diagnosis; Urinary Retention; Cystoscopy-utilization

Polysorbates

Effect of tween 80 added to the soil on the degradation of endosulfan by pseudomonas aeruginosa.
Jayashree, R.; Vasudevan, N.
E-mail: p_tamil@yahoo.com
Anna University - Centre for Environmental Studies
Keywords: Soil; Soil Microbiology; Pseudomonas aeruginosa; Endosulfan-metabolism; Hydrogen-Ion Concentration
Abstract: Endosulfan, a chlorinated cyclodiene insecticide is of environmental concern because of its apparent persistence and toxicity to many non target organisms. Endosulfan is hydrophobic and persists in soil for more than a year. To overcome the problem of hydrophobic and limited availability, surfactants play a major role in soil remediation. In the present study, the effect of Tween 80 added to the soil on the degradation of endosulfan by Pseudomonas aeruginosa at different pH [7.0 and 8.5] was studied. The addition of synthetic surfactant Tween 80 enhanced the solubility and degradation of endosulfan. A significant degradation [94%] was observed in pH 8.5 and Tween 80 added soil; the bacterial population in the treatment unit T8 was 75 x 109 CFU/g of soil. The unit T4 inoculated at pH 8.5 showed 86 % alpha and 60 % beta endosulfan degradation, the bacterial population was 73 x 108 CFU / g of soil. The degradation of both the isomers were observed and accompanied with formation of endodiol and endosulfan sulfate.

Power Plants

Kho, W.L. Freddy; Sentian, J.; Radojevi, M.; Tan, C.L.; Law, P.L.; Halipah, S.
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University Malaysia Sarawak[UNIMAS] - Department of Civil Engineering
Keywords: Air Pollution; Environmental Pollution
Abstract: ISC-AERMOD dispersion model was used to predict air dispersion plumes from an diesel power plant complex. Emissions of NO2 and SO2 from stacks [5 numbers] and a waste oil incinerator were studied to evaluate the pollutant dispersion patterns and the risk of nearby population. Emission source strengths from the individual point sources were also evaluated to determine the sources of significant attribution. Results demonstrated the dispersions
of pollutants were influenced by the dominant easterly wind direction with the cumulative maximum ground level concentrations of 589.86 micro g/m³ [1 h TWA NO₂] and 479.26 micro g/m³ [1 h TWA SO₂]. Model performance evaluation by comparing the predicted concentrations with observed values at ten locations for the individual air pollutants using rigorous statistical procedures were found to be in good agreement. Among all the emission sources within the facility complex, SESB-Power [diesel power plant] had been singled out as a significant source of emission that contributed >85% of the total pollutants emitted.

Thermodynamic and environmental consideration of advanced gas turbine cycles with reheat and recuperator.
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Islamic Azad University - School of the Environment and Energy, Science and Research Campus - Department of Energy Engineering
International Journal of Environmental Science and Technology 2007; 4 (2): 253-262 (18 ref.)
Keywords: Gases; Engineering; Thermodynamics; Environment
Abstract: The role of gas turbine power plants in electrical energy production has been considerably increased in the last two to three decades. Various methods have been proposed to improve the performance of gas turbine cycles. In this research, two methods, a reheat cycle [RC] and a cycle with a reheat and a recuperator [RHC], were investigated and compared with a simple cycle [SC]. The main objective of this paper is to study the performance of an RC and RHC under actual conditions. In this regard, all processes are treated as actual, and in particular a relatively simple and reliable approach is used to predict the amount of cooling air. The results obtained on the basis of a model developed for this research show that reheating in the context of a realistic study may lead to an improvement both in efficiency and in specific net work using recuperator cause to decrease NOx emission.

Pre-Eclampsia

urine

Comparison of predictive value of 8, 12 and 24-hour proteinuria in pre-eclampsia.
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Hamadan University of Medical Sciences - School of Medicine - Department of Obstetrics and Gynecology
Pakistan Journal of Medical Sciences 2007; 23 (2): 182-184 (13 ref.)
Keywords: Proteinuria; Pregnancy; Pregnancy Complications
Abstract: Hypertensive disorders of pregnancy are common major complications of pregnancy and are responsible for significant morbidity and mortality in the fetus the newborn infant and the mother. The objective of this study was to determine if a patients’ eight and/or 12-hour urine total protein values correlate with the 24-hour value to confirm the diagnosis of preeclampsia. The study population included 57 patients with hypertensive disorders of pregnancy. Patients’ urine was collected over 24 hours with the first 8 hours, next 4 hours, and remaining 12 hours in separate containers. The urine volume and total protein were measured in the 8, 12, and 24-hour samples. The 8 and 12 hour results were compared to the results by use of single regression analysis. Of the 57 patients, 49 had no proteinuria, six had mild proteinuria, and two had severe proteinuria. The results of the 8-hour sample correlated with those of the 24-hour sample for patients with mild [P<0.05] and severe disease [P<0.05]. The 12 hour sample correlated with the 24-hour sample for patients with no disease [p<0.02], mild proteinuria [P<0.02], and severe proteinuria [p<0.01]. Total protein values for 8- and 12-hour urine samples correlate positively with values for 24-hour samples for patients with proteinuria. The results for 12 and 24 hour samples correlate for patients without proteinuria.

Pregnancy

Diet history and birth weigh relationship among Saudi pregnant women.
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King Saud University - College of food and Agricultural Sciences - Food Science and Nutrition Department
Pakistan Journal of Medical Sciences 2007; 23 (2): 176-181 (29 ref.)
Keywords: Diet; Birth Weight; Meternal Nutrition Physiology; Eating
Abstract: The aim of this study was to see the relationship between food intake pattern and its effect on birth weight. 1771 Saudi pregnant women who were admitted for delivery at the government maternity hospitals in Riyadh city of Saudi Arabia who gave birth to singleton live-born babies were interviewed immediately after delivery. During the pregnancy the average energy and protein intakes were 1815.7+/−624Cal. and 86+/−30.9g, respectively. Intakes of vitamins A and B12 supply 90% and 92% of RDA for each nutrient, respectively. The intake of 94%, 91% and 90% of women were below 85% of RDA for folate, iron and vitamin B1, respectively. Mothers of heavier infants have significantly higher average intake of most nutrients. Intake level of individual nutrients correlates significantly with NAR index which parallel the findings for individual nutrient intakes and was the only variable in the regression equation calculated.
Pregnancy, Ectopic

surgery

Laparoscopic management of atypical presentation of ectopic pregnancy.
Nahar, Shamsun; Begum, Shahida; Islam, M. Saiful
E-mail:sara@khulna.bangla.net
Khulna Medical College
Pakistan Journal of Medical Sciences 2007; 23 (2): 198-201 (10 ref.)
Keywords: Pregnancy, Ectopic-diagnosis; Laparoscopy; Pregnancy Complications; Pregnancy; Disease Management
Abstract: Analysis of management in 22 ectopic pregnancies clinically presented as an atypical form. Twenty two patients with suspected ectopic pregnancy were successfully managed laparoscopically during three years period at Victory Nursing and infertility management centre, Khulna, Bangladesh. All patients had dull ache pain in lower abdomen or any one of the iliac fossa. All cases were hemodynamically stable and ambulatory. Ultrasonography findings were complex Heterogeneous mass without any free fluid in 8 cases, definitive gestational sac in 6, and sac like structure in 8 cases. Urinary beta*hCG was positive in 40.9% and negative in 59% cases. Pre-operative diagnoses were chronic ectopic pregnancy in 11, ruptured corpus luteum in six and chocolate cyst in five cases. Operating diagnosis were chronic ectopic pregnancy 14, unruptured tubal and cornual pregnancy 5, ovarian ectopic in three cases. Surgical procedures were salpingostomy, salpingectomy, salpingo-ophrectomy, partial ovarian resection and only sac removal with peritoneal toileting. Operating time was 30*120 minutes. The average post- operative stay was 24*48 hours without any complications. Unruptured early ectopic may present with minimal symptomatology. Hence in all women of child bearing age the provisional diagnosis of ectopic pregnancy may be kept in mind while examining and investigating a patient.

Primary Health Care

Working at the interface between primary and secondary care.
Al Saweer, Abeer
Ministry of Health
Bahrain Medical Bulletin 2007; 29 (2): 69-70 (8 ref.)
Keywords: Comprehensive Health Care; Practice Guidelines; Patient Care

Prolactin

[Evaluation of binding of FITC-prolactin conjugate to prolactin receptor].
Sabet, M. Sirati; Tehrani, F. Karami
E-mail:sirati_m@yahoo.com
Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 15-19 (18 ref.)
Keywords: Receptors, Prolactin-physiology; Fluorescein-5-isothiocyanate; Flow Cytometry
Abstract: Prolactin is an important mammalian hormone and the associated receptor is recognized in many different cells. Radioligand and histochemical methods are both used for assaying prolactin receptor. To produce FITC-prolactin conjugate and also to study the ability of conjugate to bind prolactin receptor. In this experimental study FITC was bound to prolactin in alkaline solution. FITC-prolactin conjugate was separated from free FITC by chromatographic method. Later, the ability of FITC-prolactin conjugate to bind prolactin receptor of peripheral blood mononuclear cells (PBMC) was assessed by flowcytometry. Fluorescence emission was detected in 2.1% of the cells in absence of FITC-prolactin. Following the addition of FITC-prolactin conjugate to cells for one hour and further washing, the fluorescence emission was detected in 27.8% of cells. For PBMC, these data were 0.02% and 11.8%, respectively. Regarding the data obtained in our study, FITC-prolactin conjugate can bind prolactin receptor. Therefore, this conjugate could be used for assessing prolactin receptor by fluorometric method.

Propolis

chemistry

Antimicrobial activity of Iranian propolis and its chemical composition.
Yaghoubi, M.J.; Ghorbani, G.H.; Soleimanian Zad, S.; Satari, R.
E-mail:Mj_yaghoubi@yahoo.com
Isfahan University of Technology - College of Agriculture - Department of Animal Sciences
DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences 2007; 15 (1): 45-48 (26 ref.)
Keywords: Propolis-therapeutic uses; Anti-Infective Agents; Flavonoids
Prostatic Neoplasms

drug therapy

Luteinizing hormone-Releasing hormone analogue-Induced cataract in a patient with prostate cancer.
Al Enezi, Ahmad; Kehinde, Elijah O.; Behbehani, Abdulla M.; Sheikh, Zafar A.
Mubarak Al Kabeeb Teaching Hospital - Department of Surgery, Division of Urology
Medical Principles and Practice 2007; 16 (2): 161-163 (11 ref.)
Keywords: Corticotropin-Releasing Hormone-analogs and Derivatives; Corticotropin-Releasing Hormone-therapeutic use; Cataract-chemically induced; Prostatic Neoplasms-complications; Neoadjuvant Therapy; Neoplasm Metastasis
Abstract: To report a case of right posterior subcapsular cataract induced by 3-monthly depot luteinizing hormone-releasing hormone [LHRH] analogue therapy in a patient with early prostate cancer. A 52-year-old male with static myopia of several years’ duration was given a 3-month depot LHRH analogue [goserelin 10.8 mg] as part of neoadjuvant treatment for early prostate cancer. Four weeks after the treatment, the patient developed right posterior subcapsular cataract commonly associated with steroid treatment. The patient had right eye cataract extraction followed by insertion of a new lens. This report shows a case of a posterior subcapsular cataract as an adverse reaction to depot goserelin acetate. This is a feature commonly seen in steroid-induced cataract. Patients with prostate cancer and poor vision if due to cataract may not be ideal patients for depot preparations of LHRH analogues.

Pseudomonas aeruginosa

enzymology

Characterization of an intracellular protease from pseudomonas aeruginosa.
Begum, Shahanara; Ahmed, Ifthikhar; Alam, Faisal; Samsuzzaman; Hassan, Parvez; Absar, Nurul; Ashraful Haq, Jalaluddin
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Rajshahi Medical College - Department of Microbiology
Pakistan Journal of Medical Sciences 2007; 23 (2): 227-232 (14 ref.)
Keywords: Peptide Hydrolases-isolation and purification; Chromatography, Ion Exchange
Abstract: An intracellular protease was extracted and purified from Pseudomonas aeruginosa by ion-exchange chromatography on DEAE-cellulose followed by CM*cellulose and rechromatography on DEAE-cellulose. The purified protease was found to be homogeneous as judged by polyacrylamide disc gel electrophoresis [PAGE]. The molecular mass of the protease as determined by gel filtration on G-150 was about 48,000 and about 49,000 on SDS-PAGE. The enzyme is monomeric in nature. The purified protease is a glycoprotein with neutral sugar content of 0.6%. The Km value of the protease was found to be 0.48% against casein as substrate. The enzyme is stable up to 600C and showed maximum activity around 500C. The enzyme activity was affected with the changes of pH and the maximum proteolytic activity was observed at pH 8.0. The protease activity was inhibited in the presence of EDTA, Cu2+, Mn2+and Hg2+ whereas the presence of Ca2+, K+, Na+ and ascorbic acid enhanced the activity.

Psychiatry

Managing psychiatric emergencies.
Ramadan, Mohamed I.
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Mohave Mental Health Clinic
Keywords: Emergencies; Emergency Treatment; Behavioral Symptoms-therapy; Psychotic Disorders; Psychomotor Agitation; Suicide; Mental Disorders; Emergency Services, Psychiatric
Abstract: Behavioral emergencies are common; goals of the intervention are rapid evaluation, containment and referral to appropriate follow up. Clinicians will be likely called on to assess and manage agitation, acute psychosis and suicidality alone or in combination. Reaching an accurate diagnosis must be emphasized. Physician should be aware of the differences among the major psychiatric disorders, also to look for medical reasons in patients with psychiatric presentations. Mechanisms that lead to agitation also predispose to impulsivity, aggression and psychosis. This patient population needs careful and special approach in order to evaluate, treat and refer. Suicide is a serious, growing and complex public health problem and its rate continue to rise. This article will discuss how to assess acute psychosis, agitation, impulsivity, aggression and suicidality.
Public Health Informatics

Clues on medical literature search.
Shakir, Douraid K.; Faidhi, Basma A.
E-mail: dshakir@hotmail.com
Department of Cardiology and Cardiovascular Surgery
Keywords: Medical Informatics; MEDLINE; Evidence-Based Medicine; Medical Subject Headings; Antihypertensive Agents; Cerebrovascular Accident-prevention and control

methods

Using information wisely: Developing a responsive public health information system.
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Salford Primary Care Trust
Sudanese Journal of Public Health 2007; 2 (1): 5-9 (9 ref.)
Keywords: Public Health Informatics-standards; Information Management; Information Dissemination; Public Health
Abstract: Informed decision making is the basis of public health. But, if the information is unreliable or insufficient, costly mistakes could be made. This paper summarises some of the common errors in using information. These may be relevant to clinical and public health in both developing and developed countries. It goes on to describe the vision for, and actions to develop a responsive public health information system.

Publishing

Speedy peer review and reducing publication time.
Jawaid, Shaukat Ali; Jafary, Maqbool H.
E-mail: shaukat@pulsepakistan.com
Pakistan Journal of Medical Sciences 2007; 23 (2): 155-156 (4 ref.)
Keywords: Peer Review; Manuscripts

Purpura, Thrombocytopenic, Idiopathic

diagnosis

Retrospective analysis of patients with Idiopathic thrombocytopenic purpura from Eastern Anatolia.
Kaya, Ermin; Erkurt, Mehmet Ali; Aydogdu, Ismet; Kuku, Irfan; Ozhan, Onur; Oner, Ramazan Ilyas; Ulutas, Ozkan
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Inonu University - Turgut Ozal Medical Center - Department of Hematology, School of Medicine
Medical Principles and Practice 2007; 16 (2): 100-106 (28 ref.)
Keywords: Purpura, Thrombocytopenic, Idiopathic-therapy; Retrospective Studies; Splenectomy; Adrenal Cortex Hormones
Abstract: We evaluated the clinical features and the effects of various treatment modalities on the clinical course in patients diagnosed with idiopathic thrombocytopenic purpura [ITP]. Retrospective investigation of the medical records of 168 patients at our center between 1994 and 2005 was done. Of the 168 patients, 115 [68.4%] were women and 53 [31.6%] men. At initial diagnosis, the median age of the patients was 33 years [range: 15-91] and 139 [82.7%] had signs of bleeding. Follow-up was complete in 130 patients and the median follow-up was 27 months [range: 3-132]. Initial treatment with either standard or high-dose steroid as first-line therapy was begun in 123 [73.2%] of the 168 patients. Complete remission [CR] was achieved in 56% of the patients. Sixty-one [61] patients who were followed up regularly received second-line therapies. CR was achieved in 45.8% of the patients who received steroids as second-line therapy. Within a median follow-up of 7 months, 27.2% of these patients relapsed. Splenectomy was performed in 26 patients and CR was obtained in 72% of the 25 patients regularly followed up. CR obtained by splenectomy was significantly higher than that obtained by steroids [p < 0.001]. The 10-year disease-free survivals in patients who used steroids and who underwent splenectomy were 15 and 61.6%, respectively. Steroid therapy is effective both in the initial and relapse periods. Splenectomy is the treatment of choice for those ITP patients refractory to steroid therapy and younger than 40 years of age.
Pyelonephritis

pathology

Bilateral emphysematous pyelonephritis and emphysematous cystitis with autosomal-dominant polycystic kidney disease: Is conservative management justified?
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Al Amiri Hospital - Department of Surgery [Urology Unit] and Nephrology
Medical Principles and Practice 2007; 16 (2): 155-157 (10 ref.)

Abstract: To report a case of bilateral emphysematous pyelonephritis [EPN] and emphysematous cystitis in a 64-year-old diabetic male with autosomal-dominant polycystic kidney disease [ADPKD]. A 64-year-old diabetic male presented with worsening of renal function and fluid overload. Diagnosis was confirmed by computerized tomography [CT scan] and conservative management with broad-spectrum antibiotics was instituted. There was good clinical response and repeated CT scan showed complete resolution. This case shows that conservative management is an acceptable alternative to surgery in EPN occurring with ADPKD. However, it is recommended that patients should be closely monitored, both clinically and radiologically, and percutaneous catheter drainage or surgical intervention carried out whenever deemed necessary.

Pyloric Stenosis, Hypertrophic

diagnosis

Idiopathic hypertrophic pyloric stenosis combined with left paraduodenal hernia in an adult.
Papaziogas, Basilio; Lazaridis, Charalambos; Souparis, Anastasios; Koutelidakis, Ioannis; Grigoriou, Marios; Dragoumis, Dimitris; Atmatzidis, Konstantinos
E-mail:papaziog@med.auth.gr
Medical Principles and Practice 2007; 16 (2): 151-154 (11 ref.)

Abstract: We report a case of primary hypertrophic pyloric stenosis combined with a paraduodenal hernia in a 35-year-old woman. The patient presented with signs of obstructive ileus. CT of the abdomen revealed a marked dilatation of the stomach and the proximal jejunum as well as a circumferential thickening of the antral-pyloric region with characteristics indicating hypertrophic pyloric stenosis. Exploratory laparotomy revealed the presence of a paraduodenal hernia containing jejunal loops and marked thickening of the pyloric region. The jejunum was reduced to its normal place and the ostium of the paraduodenal hernia closed with a running suture. The hypertrophic pyloric stenosis was treated with pyloromyotomy. Since the patient had no predisposing factors for the development of secondary pyloric stenosis, we considered the pyloric stenosis as congenital in origin. To our knowledge this is the first reported case of congenital pyloric stenosis combined with the presence of a paraduodenal hernia in an adult.

Rectal Fistula

diagnosis

Multiple fistula in Ano in an HIV seropositive patient [The danger of stigmatisation].
Elusoji. S.O.; Osime, O.C.
University of Benin Teaching Hospital
Pakistan Journal of Medical Sciences 2007; 23 (1): 122-123 (12 ref.)

Abstract: A 45-year-old man presented with a nine-month history of recurrent discharge from the anal region. He also had a history of weight loss. Examination revealed multiple fistulas-in-ano. The patient initially refused an HIV screening test; but later agreed. The result revealed HIV positive. As a result of the stigmatization associated with the diagnosis, the patient bluntly refused to bring the wife for screening and that he was not going to inform the wife of his diagnosis. The patient discharged himself against advise and went to seek traditional “doctors” herb. However, we were reliably informed that he died few months afterwards. The aim of this presentation is to highlight the degree to which stigmatization can influence patients’ decision regarding HIV/AIDS and to emphasize the role of adequate health education to create more awareness. This will minimize the morbidity and mortality associated with HIV/AIDS.
Referral and Consultation

Patient views for self-referral to specialists.
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Kashan University of Medical Sciences - School of Medicine - Department of Health Management
Keywords: Physician Self-Referral; Specialism; Insurance, Health; Delivery of Health Care; Physicians, Family; Private Sector; Public Sector
Abstract: Except in emergency cases, all patients should be seen first by a primary healthcare physician who decides whether a referral to secondary care is necessary. The present study examined the reasons for patient self-referral to specialists. A random sample of 1036 individuals was selected from people attending public outpatient clinics and specialists' offices in the private health sector. Of the sample, 40% were insured by the closed loop referral; 14% by the semi-closed-loop referral; and 46% were open referral. The data were analysed using X[2] statistical test. Of the closed-loop referral system patients, 6.8% were self-referred, as were 29.7% of semi-closed referral system patients and 75.5% of open referral system patients. There was a significant association between insurance type and patient self-referral to specialty care [X[2] = 504; P< 0.0001]. The main reasons patients gave for by-passing GPs and self-referring to specialists were: the specialist's high degree of skill in the specific area of the health problem [54%]; waste of time to see the GP for a referral [14.9%]. The findings of this study demonstrate the high degree of difference in the rates of referral by GP and self-referral according to the healthcare delivery system.

Renal Dialysis

Relationship between P-wave dispersion and effective hemodialysis in chronic hemodialysis patients.
Ozmen, Namik; Cebeci, Beker Sittik; Kardesoglu, Ejder; Atasoyu, Enes Murat; Unver, Suat; Celik, Turgay; Aparci, Mustafa; Dinceturk, Mehmet
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Medical Principles and Practice 2007; 16 (2): 147-150 (18 ref.)
Keywords: Chronic Disease; Kidney Failure, Chronic; Body Weight; Electrocardiography
Abstract: To investigate whether or not P-wave dispersion [PWD] can be used as a good indicator of effective hemodialysis. The study included 35 patients [20 males, 15 females, mean age 61 +/- 10 years] who regularly received hemodialysis treatment for chronic renal failure. Following hemodialysis, the patients whose hemodynamic parameters were preserved and who reached body weight were included. Twelve-lead resting electrocardiogram [ECG] at a speed of 25-50 mm/s, the value of total body fluid [TBF] and bioelectric impedance using bipedal bioelectric impedance equipment were obtained before and immediately after hemodialysis. Blood samples were also taken for the assessment of blood electrolytes, urea and creatinine. PWD was defined as the difference between the maximum and minimum P-wave duration calculated on a standard 12-lead ECG before and after dialysis. The following parameters were obtained before and after hemodialysis: blood pressure 132 +/- 21 vs. 130 +/- 10 mm Hg [p > 0.05], TBF 33.9 +/- 6 vs. 32 +/- 5.6 liters [p = 0.001], impedance 499 +/- 110 vs. 596 +/- 136 omega [p = 0.001], P-max 103.1 +/- 8.9 vs. 106.3 +/- 12.7 ms [p > 0.05], P-min 70.2 +/- 11 vs. 72.5 +/- 7.9 ms [p > 0.05], PWD 32.2 +/- 11.9 vs. 33.8 +/- 13.4 ms [p > 0.05]. Although statistically significant decreases were observed in urea and creatinine levels after hemodialysis, no such changes were observed in blood electrolytes. The P-max and PWD did not change significantly after hemodialysis, hence these two parameters can be used as an indicator of effective hemodialysis.

Renin-Angiotensin System

genetics

Genetic variation in the renin-angiotensin system and response to endurance training.
Bae, Joon Seol; Lee, Seung Taek; Kang, Byung Yong; Lee, Kang Oh
Yonsei University - College of Science - Department of Biochemistry
Medical Principles and Practice 2007; 16 (2): 142-146 (17 ref.)
Keywords: Exercise; Physical Endurance; Polymorphism, Genetic
Abstract: To investigate the relationship between genetic variation in the renin-angiotensin system and the effect of 12-week endurance training in Korean women. Seventeen women who participated in an endurance training program for 12 weeks were genotyped for the angiotensinogen M235T polymorphism, angiotensin II type 1 receptor A1166C polymorphism, angiotensin-converting enzyme [ACE] T-3892C polymorphism, and angiotensin II type 2 receptor C3123A polymorphism. The following clinical parameters were measured before and after the endurance training program: blood pressure, body composition, ventilatory response, total cholesterol, triglyceride, and glucose. Of the genetic markers investigated, the frequency of the T allele for the ACE T-3892C polymorphism was significantly associated with the response in body mass index and VO[2max] after 12 weeks of endurance training [p< 0.05]. None of the other polymorphisms were significantly associated with the effect of training. The significant association between ACE T-3892C and the change in body mass index and VO[2max] in Korean women are attributed to training, suggesting that this genetic variation is a useful genetic marker for clarifying the interindividual response to endurance training.
Rhabdomyosarcoma

diagnosis

Rhabdomyosarcoma of the larynx.
Nikakhlagh, Soheila; Saki, Nader; Mostofi, Nepton Emad; Peyvasteh, Mehran
Imam Khomeini Hospital - Department of Otolaryngology
Pakistan Journal of Medical Sciences 2007; 23 (2): 280-282 (16 ref.)
Keywords: Laryngeal Neoplasms; Rhabdomyosarcoma-surgery; Rhabdomyosarcoma-radiotherapy
Abstract: Rhabdomyosarcoma of the larynx is a very unusual neoplasm and delays in diagnosis are common because the presenting symptoms are often mistaken for inflammatory or benign laryngeal disease, therefore a high index of suspicion is necessary to make diagnosis. We report a 13 years old girl with diagnosis of laryngeal rhabdomyosarcoma. The optimum treatment of head and neck rhabdomyosarcoma has not been defined. Therapeutic modalities include an aggressive surgery without major morbidity. Radiotherapy and chemotherapy is also preferred for the treatment of rhabdomyosarcoma.

Salmonella

drug effects

Activity of synergistic combination amoxy cassia against salmonella.
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University of Karachi - Immunology and Infectious Disease Research Laboratory - Department of Microbiology
Keywords: Cassia; Phytotherapy; Drug Resistance, Multiple; Salmonella typhi-drug effects; Typhoid Fever-drug therapy; beta-Lactams; Amoxicillin-therapeutic use; Drug Therapy, Combination; Mice, Inbred BALB C; Microbial Sensitivity Tests; Drug Synergism
Abstract: The object of this study was to formulate new, cost effective anti-microbial combination for Multi Drug Resistant [MDR] Salmonella enterica Serover Typhi [SEST] based on the synergistic activity of amoxicillin with the aqueous fruit solution of Cassia fistula [CFF], a medicinal plant found in Pakistan which when tested alone have weak antimicrobial activity against blood isolates of MDR SEST. MIC of MDR SEST for amoxicillin and CFF alone was 750 micro g/ml and 3750micro g/ml. The MIC of amoxicillin in combination with CFF was 23.4-187.5 micro g/ml and 0.37-1.56 micro g/ml for MDR and MDS SEST respectively. Fractional Inhibitory Concentration Index [FICI] using checker-board titration suggested synergism for 80% MDR and MDS SEST tested, no antagonism observed. Time kill kinetics showed difference > log2 in CFU of CFF having sub-lethal amoxicillin concentrations. This novel combination is named as Amoxy-cassia. In vivo it is found to be non toxic at 1gm/body weight of mice.

Salvia

Antibacterial and cytotoxic activity of the acetone extract of the flowers of salvia sclarea and some natural products.
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Keywords: Plant Extracts-therapeutic use; Phytotherapy; Plants, Medicinal; Acetone; Flowers; Anti-Bacterial Agents; Antibiotics, Antineoplastic; Biological Products
Abstract: The aim of this study was to investigate the antibacterial and the cytotoxic activity of the acetone extract of the flowers of Salvia sclarea and of some natural products [scareol, scareolide and ambrox]. The antibacterial and the cytotoxic activity were determined by the dilution method. Scareolide, ambrox and scareol demonstrated a good antibacterial activity against Staphylococcus aureus ATCC 25923, Pseudomonas aeruginosa ATCC 27950, Escherichia coli ATCC 25922 and Enterococcus faecalis ATCC 29212. The acetonic extract of the flowers of Salvia sclarea has a significant cytotoxic activity against Hep-2 cells.

Sarcoma, Ewing's

diagnosis

Unusual cause of lung mass.
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Cork University Hospital
Keywords: Lung Neoplasms; Bone Neoplasms; Lung-pathology; Radiography, Thoracic; Tomography, X-Ray Computed
Schizophrenia

blood

Increased levels of nitric oxide, cortisol and adrenomedullin in patients with chronic schizophrenia.

Yilmaz, Necat; Herken, Hasan; Cicek, Hulya Kanbur; Celik, Ahmet; Yurekli, Muhittin; Akyol, Omer

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University of Gaziantep - Faculty of Medicine - Department of Biochemistry and Clinical Chemistry

Medical Principles and Practice 2007; 16 (2): 137-141 (27 ref.)

Keywords: Hydrocortisone-blood; Nitric Oxide-blood; Adrenomedullin-blood; Dehydroepiandrosterone Sulfate; Chronic Disease

Abstract: To investigate the levels of serum cortisol, dehydroepiandrosterone sulfate [DHEA-S], nitric oxide [NO] and adrenomedullin [AM] in schizophrenic patients. Sixty-six male patients with chronic schizophrenia and 28 normal male subjects participated in this study. The duration of disease was 145 +/- 120 [mean +/- SD] months. Serum levels of cortisol and DHEA-S were measured by electrochemiluminescence; plasma nitrite levels as an index of NO were measured with the Griess reaction, while plasma AM concentration was measured by using high-performance liquid chromatography. Patients [12.48 +/- 3.2 micro g/dl], as compared to controls [10.31 +/- 3.1 micro g/dl], had higher levels of baseline cortisol [p < 0.05]. DHEA-S levels were lower in patients though this did not reach statistical significance [302 +/- 156 micro g/dl compared to control, 322 +/- 96 micro g/dl, p > 0.05]. The mean levels of plasma AM and NO in the schizophrenic group [44.33 +/- 5.07 pmol/l and 36.27 +/- 17.6 micro mol/l] were significantly higher than the levels in the control group [14.56 +/- 4.03 pmol/l and 32.54 +/- 7.14 micro mol/l; p < 0.001, p < 0.03, respectively]. There was a positive association between duration of disease and cortisol/DHEA-S ratio and cortisol level. The data show that schizophrenia is associated with abnormal levels of cortisol, DHEA-S, NO and AM.

Selegiline

pharmacology

[Evaluation of deprenyl effect on Bcl-2 protein expression in spinal motoneuron of adult rat following sciatic nerve root avulsion].

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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 20-24 (17 ref.)

Keywords: Sciatic Nerve; Rats, Sprague-Dawley; Motor Neurons; bc1-Associated Death Protein; bc1-X Protein

Abstract: Avulsion of sciatic nerve ventral root leads to cell death of motor neurons. Deprenyl has a neuroprotective effect on spinal cord motoneurons. To evaluate the effect of deprenyl on Bcl-2 protein expression in adult rats after ventral root avulsion of sciatic nerve. This was an experimental study performed in Jondishapour University of Medical Sciences [Ahvaz, Iran] in 2005. Twenty four Sprague-Dawley adult male rats were divided into two experimental and control groups and each group further subdivided into three subgroups of 4 members. Rats were anesthetized with ketamin and xylazin injections followed by avulsion of left sciatic nerves. One hour later experimental subgroups were intraperitoneally injected with 0.25 mg/kg of deprenyl and control subgroups received an equal volume of distilled water intraperitoneally. Two intact rats were also considered as sham group. The first injection was performed one hour after avulsion and repeated daily for one, two and six weeks. Later, animals were sacrificed and the spines removed at L1 lumbar segment equal with L4-L6 spine segment. The segments were lysed in lysis buffer and centrifuged. Optical densities of supernatants were measured using a spectrophotometer. The normality of data was confirmed by Npartest. Optic density of Bcl-2 protein in two weeks experimental group [0.55 +/- 0.79] was significantly [p=0.042] higher than two weeks control group [0.424 +/- 0.058]. It seems that Bcl-2 protein expression is increased by deprenyl drug.

Self Care

[A survey on knowledge and skills of self-care among discharged patients in cast].

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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 95-96 (2 ref.)

Keywords: Data Collection; Knowledge; Fractures, Bone; Casts, Surgical

Abstract: This study was carried out to determine the knowledge and skills of self-care among discharged patient in cast. Sixty discharged patients participated in the survey by completing a questionnaire while their performance was observed. The results indicated that the level of knowledge and skills in subjects were ranked as moderate [50%] and lower than of what was expected. It is suggested that patients in plaster to be trained by health care workers [nurses] before discharge.
Sepsis

drug therapy

Neonatal sepsis and use of antibiotic in tertiary care hospital.
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Khulna Medical college, Hospital
Pakistan Journal of Medical Sciences 2007; 23 (1): 78-81 (20 ref.)

Keywords: Infant, Newborn, Diseases; Infection; Anti-Bacterial Agents-administration and dosage; Anti-Bacterial Agents-therapeutic use; Pneumonia; Meningitis; Hospitals

Abstract: Neonatal infections currently cause 1.6 million deaths in developing countries. Resistance to commonly used drug is emerging as the most important problem globally. Therefore rational use of antibiotic is a priority to reduce the burden of treatment failure. To evaluate the magnitude of neonatal infections in the neonatal ward of a medical institution and pattern of antibiotic use in these cases. This was a cross sectional retrospective study. All the cases of neonatal infections admitted between October 2003 to September 2005 were included in the study. Relevant informations like age, sex, birth weight, investigations, diagnosis, antibiotic use and outcome were noted in the predesigned proforma. Infection within first week of birth was regarded as the early onset infections and infections thereafter were considered as late onset infections. Eleven hundred and ninety six cases got admitted in the neonatal ward during the 24 months of study period. Three hundred and thirty four neonates with sepsis constituted 27.8% of the total cases. Majority of these cases were early onset infections [70.7%]. Septicemia was the commonest [34.6%] major infections followed by pneumonia [19.5%]. The dominant minor infections were umbilical sepsis [10.5%] and pyoderma [6.9%]. The most frequently used antimicrobial agent was third generation cephalosporin [36.2%] and next in order was the combination of ampicillin and gentamycin [18.9%]. Regarding outcome 78.1% cases recovered well. Among the rest of the cases with unsatisfactory progress, 12.3% died in the hospital. Neonatal sepsis constituted nearly one third of the health problem in neonatal ward and majority of them are early onset infections. Septicemia is the most frequently encountered infections and costly third generation cephalosporin topped the list of antibiotic use.

Sewage

University Sains Malaysia - School of Civil Engineering
International Journal of Environmental Research 2007; 1 (2): 96-103 (12 ref.)

Keywords: Water Pollutants, Chemical-metabolism; Carbon

Abstract: Semi-aerobic leachate is characterized by organic matter [COD, BOD] which is relatively low in concentration and difficult to biodegrade. In conventional treatment systems, the low biodegradability is attributed to partial stabilization of leachate at the landfill. Biological treatment of leachate in Malaysia is not well established and any important data for the treatment process is not available. The behavior of microbes is unknown for semi aerobic leachate. This research was conducted to establish some of the important data in the biological treatment of semi-aerobic leachate with and without the influence of powdered activated carbon [PAC]. For the present study, semi aerobic leachate was collected from Pulau Burung andfill Site [PBL5], Nibong Tebal, Penang, Malaysia. The experiment involved operating two 16 L laboratory-scale activated sludge reactors in parallel at room temperature and adjusted to pH of 6.5 +/- 0.5. One of the reactors was supplemented with powdered activated carbon [PAC] of 75-150 micro m size to observe its effect on leachate biodegradation. The results showed enhanced reactor performance due to PAC addition COD, NH4-N, NO3-N, TKN, BOD and colour removals was higher.

Shigella flexneri

isolation and purification

Comparing invasive and non-invasive of isolated Shigella flexneri by electron microscopy of cell culture SDS-PAGE and Congo red method.
Vala, Mojdeh Hakemi; Nowrooz, Jamileh; Ghazi, Farideh; Tabatabai, Parvaneh Nabavi; Haghighi, Saeed
Iran University of Medical Sciences - Medical School - Department of Medical Microbiology
IBJ - Iranian Biomedical Journal 2007; 11 (1): 47-52 (22 ref.)

Keywords: Shigella flexneri-pathogenicity; Microscopy, Electron; Cell Culture Techniques; Congo Red; Electrophoresis, Polyacrylamide Gel
Simplexvirus

ultrastructure

Intercellular trafficking of VP22, a herpes simplex virus type 1 tegument protein.
Bamdad, Taravat; Bell, John C.
Tarbiat Modares University - School of Medical Sciences - Department of Virology
IBJ - Iranian Biomedical Journal 2007; 11 (1): 53-57 (15 ref.)
Keywords: Herpesvirus 1, Bovine; Viral Structural Proteins; Cell Line; Gicetinae

Soil

Comparison of extractability of Cd, Cu, Pb, and Zn with sequential extraction in contaminated and non-contaminated soils.
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Iwate University - Faculty of Agriculture - Laboratory of Plant Physiology and Nutrition
Keywords: Environmental Pollution; Metals, Heavy; Extraction and Processing Industry-methods; Cadmium; Copper; Lead; Zinc
Abstract: Various extraction procedures were employed for measuring extractable concentrations of potential toxic elements in soil. The extractability of Cd, Cu, Pb and Zn in four contaminated and four non-contaminated soils of Japan, was compared by single extraction [CaCl2, DTPA, NH4Cl, 0.1 M HCl and 1 M HCl ] and sequential extraction procedures [[six operationally defined chemical phases, viz. water soluble [F1], exchangeable [F2], carbonate [F3], oxide [F4], organic [F5] and residual [F6] fractions]]. Extractability of metals from soils samples varied depending on metals and/or extractants used. Among the extractants, 1 M HCl extracted the largest proportion of Cd [79 to 96% of total], Cu [61 to 83%], Pb [51 to 99%] and Zn [23 to 52%] from soils followed by 0.1 M HCl, NH4Cl, DTPA and CaCl2. In all the extractants, the proportion of extractability of metals was higher in the contaminated soils than the non-contaminated soils. Regardless of soils and extractants, relative extractability was higher for Cd as compared to other three metals. The use of 1 M HCl may be recommended for first-level screening of soil contamination with heavy metals. The other four weak extractants are believed to provide a better assessment of bioavailable/mobile metals content in soils than 1 M HCl extractant. However, 0.1 M HCl mobilized all four metals irrespective of soil types, therefore, might be the best choice if only one extractant is to be used. The sequential extraction procedures showed 22 to 64% of total Cd was in the mobile fraction [sum of F1 to F3], while the corresponding values for Cu, Pb and Zn in this fractions were 2 to 23% suggesting higher mobility of Cd than other three metals. The single extraction procedures are simple and easy to perform and obtained results are comparable with sequential extraction procedure.

Spasms, Infantile

drug therapy

Comparative study of corticotrophin vs. vigabatrin therapy in infantile Spasm.
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Royal Hospital
Pakistan Journal of Medical Sciences 2007; 23 (1): 141-144 (12 ref.)
Keywords: Adrenocorticotropic Hormone-therapeutic use; Vigabatrin-therapeutic use; Electroencephalography
Abstract: Twenty six patients were diagnosed as infantile spasm, on the basis of fixed criteria and they were divided into symptomatic [17 patients] and cryptogenic [9 patients] groups according to history, presentation and investigations. Corticotrophin as Tetracosactrin was given to eleven patients and fifteen patients received Vigabatrim [VGB]. The response to VGB was significant [73%] compared to steroids [63%], irrespective of the etiology, thus emphasizing that VGB could be considered as the first line therapy for infantile spasm.

Spectrophotometry

Derivative spectrophotometry in the visible region using absorbance versus log wavelength or wavenumber determination of cyanocobalamin in injection solutions.
Wahbi, Abdel Aziz; Hassan, Ekram; Barary, Magda; Khamis, Essam; Hamid, Dalia
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University of Alexandria - Faculty of Pharmacy - Pharmaceutical Analytical Chemistry Department
Keywords: Vitamin B [12]; Spectrum Analysis
Abstract: Two approaches have been adopted to increase the steepness of the slopes and the sharpness of the curvature of an absorption curve in the visible region. These are recording [i] A [1cm] versus log wavelength or [ii] A [1cm] versus wavenumber. The computer program was tested by calculating the ratios of the first derivative optima for
a Gaussian band, and proved that changing wavelength into log wavelength or wavenumber is effective to squeeze an absorption curve non-linearly. Spectrophotometric identification of cyanocobalamin in the visible region was carried out using the ratios \([\delta D1/\delta D2]\) calculated for lambda, log lambda and \(v\) scales. The ratios were highly reproducible and independent of concentration. First, second and fourth-order derivative determination of cyanocobalamin in injection solutions was performed in the visible region at 20040.08, 17452.01, \([20040.08 - 17452.01]\) cm\(^{-1}\) for \(D1[v]\), \(D2[v]\) \(\delta D1 [D11 - D12] [v]\), respectively, and at 18018.02 cm\(^{-1}\) for \(D2[v]\) and \(D4[v]\).

### Spectrophotometry, Ultraviolet

Multivariate calibrations in UV spectrophotometric analysis.

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University of Karachi - Department of Chemistry


**Keywords:** Calibration-standards

**Abstract:** Calibration allows the user to relate instrumental measurements to the sample of interest. Multivariate calibration allows for the analysis of several measurements from several samples or specimens. The method contributes to the two steps procedure where step one involves the calibration of data and second step involves the prediction that are made or based on the calibration. In calibration, indirect measurements are made from samples where the amount of the analyte has been predetermined, usually by an independent assay or technique. These measurements, along with the predetermined analyte levels, comprise a group known as the calibration set. This set is used to develop a model that relates the amount of sample to the measurements by the instrument. In some cases, the construction of the model is simple due to a certain relationship, such as Beer's Law in the application of UV spectroscopy. Unlike spectroscopy, other cases can be much more complex, and it is in these cases where construction of the model is time-consuming step. Once the model is constructed, it can predict analyte levels based on measurements of new samples. It can be used to separate samples from interferences without the need of highly selective measurements for the analyte. Calibration techniques [used in the calibration step] differ in determining coefficient values for the preceding or similar equations.

### Sperm Injections, Intracytoplasmic

A study of babies born after intracytoplasmic sperm injection.

Arif, Ayesha; Aslam, Noshaba; Zafar, Tariq; Tajammul, Arif

Allama Iqbal Medical College - Department of Paediatrics

**Pakistan Pediatric Journal** 2007; 31 (1): 8-16 (40 ref.)

**Keywords:** Fertilization-in Vitro; Growth; Child Development; Prospective Studies; Cohort Studies

**Abstract:** With the advent of ART [assisted reproduction techniques] the face of fertility for humans has changed. Couples previously unable to have children of their own now have a practical option to aid in pursuit of their fertility. With growing numbers of IVF [in vitro fertilization] and ICSI [intra cytoplasmic sperm injection] pregnancies, concerns regarding normality of these babies along with apprehension about their long term health are also mounting. This study was conducted to assess the growth and development of babies conceived by ICSI at the time of birth at the age of one month and subsequently at twelve months. To assess growth and developmental outcome of ICSI babies up to one year in comparison with babies born by spontaneous conception. A prospective cohort study. Twenty eight ICSI babies. All patients who underwent ICSI with a successful outcome from 15-10-2001 till 31-12-2004 were included. The outcome of pregnancy and gestational age were noted. The resulting neonates were evaluated critically at birth, 4 weeks and one year with regard to growth and development. The results were compared with age-matched controls and conclusions drawn. Growth parameters: weight, length and head circumference. Comparison of weight, length and head circumference between the observed mean and the mean of normal population at various ages for both boys and girls separately revealed that most of the babies had weight, length and head circumference within normal ranges. After correction for gestational age, all the pre-term babies caught up growth within the first year of life. ICSI babies do not have an adverse outcome with regards to their growth. However long term follow up is necessary to properly assess the developmental outcome. This needs to be confirmed by multicenter studies.

### Staphylococcus aureus

drug effects

In vitro synergy of fusidic acid and amikacin against methicillin resistant staphlococcus aureus.

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Ziauddin Medical University - Department of Pharmacology

**Pakistan Journal of Medical Sciences** 2007; 23 (2): 245-248 (19 ref.)

**Keywords:** Methicillin Resistance; Drug Synergism; Fusidic Acid-therapeutic use; Amikacin-therapeutic use; Vancomycin; Microbial Sensitivity Tests; Drug Resistance, Microbial

**Abstract:** To test in vitro combination of fusidic acid and amikacin against infections caused by methicillin resistant Staphlococcus aureus [MRSA]. In vitro study conducted in Department of Pharmacology and Microbiology, Dr. Ziauddin Medical University. The duration of study was March 2004- February 2005. Antibiotic susceptibility testing was done by Kirby Bauer’s disc diffusion method and by minimum inhibitory concentration [MIC] by broth macrodilution and
 checkerboard technique for synergy. FIC [fractional inhibitory concentrations] were calculated. MIC of fusidic acid was 0.03-1 micro g/ml and amikacin 0.5-16 micro g/ml respectively. The combination of these demonstrated synergy. Evidence of synergy correlated directly with the MICs of fusidic acid and amikacin. Combination therapy with fusidic acid and amikacin may be a reasonable alternative in the treatment of infections caused by MRSA isolates and encourages clinical evaluation.

**Stress**

**Serotonin-1A receptor responsiveness in stress and following adaptation to stress.**

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**Keywords:** Receptor, Serotonin, 5-HT1A; General Adaptation Syndrome; Rats, Wistar; 8-Hydroxy-2-[di-n-propylamino]tetralin; Serotonin Agonists

**Abstract:** Stress is one of the environmental factors that may predispose psychiatric illness such as, depression. Stress may come from external environment in the form of stimuli such as heat, cold, loud noise and lack of oxygen. A deficiency of serotonin [5-hydroxytryptamine; 5-HT] is described in human depression. Parallel studies on experimental animals show that exposure to an uncontrollable stress inducing situation elicits behavioral deficits and increases serotonin metabolism in the brain. Stress-induced behavioral deficits and the increases of brain serotonin did not occur when the stress was administered repeatedly for 5 days, suggesting adaptation has occurred. The present study shows that responses to 8-hydroxy-2-[di-n-propylamino]tetraline [8-OH-DPAT], a selective 5-HT 1A agonist decreased following exposure to single stress and the decreases were normalized following adaptation to stress. The drug 8-OH-DPAT was also found to attenuate stress-induced behavioral deficits. The results are discussed in the context of stress-induced psychiatric disorder such as, depression and its treatment by 5-HT 1A agonist.

**Students, Nursing**

**Research programs for nursing students: Does it improve their Knowledge?**

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Pakistan Journal of Medical Sciences 2007; 23 (1): 153 (1 ref.)

**Keywords:** Clinical Nursing Research; Education, Nursing; Nursing Education Research; Nursing Research; Knowledge

**Substance-Related Disorders**

**complications**

**Massive hemoptysis in intravenous drug users: Case report and review of literature.**

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Queen Elizabeth Hospital

Annals of Thoracic Medicine 2007; 2 (1): 36 (3 ref.)

**Keywords:** Hemoptysis-etiology; Hemoptysis-diagnosis; Review Literature

**Surgical Flaps**

**Distally based sural artery flap: A workhorse to cover the soft tissue defects of lower 1/3 Tibia and Foot.**

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Dow University of Health Sciences and Civil Hospital - Department of Orthopaedics

Pakistan Journal of Medical Sciences 2007; 23 (1): 103-107 (17 ref.)

**Keywords:** Soft Tissue Injuries-surgery; Tibia; Foot; Reconstructive Surgical Procedures; Sural Nerve-blood supply; Orthopedics

**Abstract:** To present our experience of soft tissue cover of lower one third of tibia and foot, treated by an Orthopaedic Surgeon without any special training and reliability of this flap. Eleven patients, ten males and one female, with soft tissue defect of lower one third tibia and foot requiring soft tissue cover were treated from March 1999 to February 2004. The flap was outlined at the posterior aspect of junction of upper and middle 1/3 leg. The pivot point of the pedicle was at least 5cm i.e., 3 fingers" breadth above the lateral malleolus to allow anastomosis with the peroneal artery. Skin incision was started along the line in which the fascial pedicle would be taken. The subdermal layer was dissected to expose the sural nerve, accompanying superficial sural vessels and short saphenous vein. The subcutaneous fascial pedicle was elevated, with a width of 2cm to include the nerve and these vessels. At the proximal margin of the flap, the nerve and the vessels were ligated and severed. The skin island was elevated with the deep
fascia. The donor site defect was closed directly when the flap was less than 3cm wide. A larger donor site defect along with the pedicle was covered with a split thickness skin graft. All flaps except one survived. Most flaps showed slight venous congestion which cleared in a few days. There was no loss of split skin graft. Distally based Sural artery flap remains the choice for reconstruction of soft tissue defects of lower 1/3 tibia and foot. The dissection is easy, quicker and can be done by an Orthopaedic surgeon without any special training.

**Surgical Procedures, Elective**

**psychology**

**Preoperative anxiety before elective surgery.**

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Civil Hospital - Surgical Unit II  
**Keywords:** Anxiety; Preoperative Care  
**Abstract:** To ascertain the preoperative anxiety level and different factors responsible in patients admitted for an elective surgical procedure in a tertiary care public hospital. Anxiety levels were measured in admitted patients of the Civil Hospital, Karachi, Pakistan awaiting elective surgery from October to January 2006. In the afternoon preceding surgery, patients were asked to complete 2 visual analogue scales [VAS] regarding anxiety about the proposed surgery and anesthesia [range, 0 = 'not anxious at all' to 100 = 'extremely anxious']. They were then asked to select different factors responsible for their anxiety from a list. Mean anxiety score for surgery was 57.65+/-25.1 and for anesthesia was 38.14+/-26.05. There was a statistically significant high level of pre-operative anxiety in females as compared to males [p<0.01]. The most common factors contributing to anxiety were concern about family in 173 [89.6%] patients, fear of complications in 168 [87%], results of operation in 159 [82.4%], and postoperative pain in 152 [78.8%]. Fifty-six percent of patients thought that their anxiety would be lessened by a detailed explanation regarding the operation and anesthesia. Our patients experience very high levels of preoperative anxiety. This can be easily measured in the preoperative period and allows detection of patients with high anxiety, encouraging appropriate steps to ameliorate this. Establishment of preoperative counseling clinics and properly informed consent taken before surgery will help in reducing preoperative anxiety.

**Surgical Sponges**

**adverse effects**

**Neurosurgical gossypiboma radiologically mimicking a lumbar abscess.**

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Ayfom Kocatepe University - School of Medicine - Neurosurgery Department  
Neurosciences 2007; 12 (2): 163-165 (10 ref.)  
**Keywords:** Abscess-diagnosis; Diskectomy-adverse effects; Postoperative Complications; Neurosurgery; Magnetic Resonance Imaging; Lumbar Vertebrae  
**Abstract:** Lumbar discectomy is the most common operative technique at neurosurgery clinics around the world. The complications of lumbar disc operation include infections, dural tear, bleeding, vascular, and intestinal injuries. Infectious complications of lumbar disc surgery are superficial and profound tissue infections, meningitides, and epidural abscesses. Although retained surgical sponges [gossypiboma] are well known intraoperative complications in other surgical branches, they have not been widely reported in neurosurgery. In this report, we present a case of retained surgical sponge at the operation site and discuss with the literature.

**Tachycardia, Paroxysmal**

**diagnosis**

**Paroxysmal orthostatic tachycardia syndrome [POTS] with co-existing chronic fatigue syndrome: A review of three cases and discussion.**

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Dorset county Hospital - Department of Medicine for older people  
Pakistan Journal of Medical Sciences 2007; 23 (1): 124-127 (12 ref.)  
**Keywords:** Fatigue Syndrome, Chronic-diagnosis; Syncope, Vasovagal; Syndrome; Tachycardia, Paroxysmal-therapy  
**Abstract:** Orthostatic intolerance appears in many guises including overt dysautonomia, vasovagal syncope and orthostatic tachycardia. We present details of three patients referred to our syncope clinic, who satisfied the chronic fatigue criteria of the centre for disease control and prevention. Head-up tilt testing induced significant hypotension and increased heart rate in all three patients, consistent with the clinical and autonomic manifestations of postural orthostatic tachycardia syndrome. We report on the emerging evidence available which does suggest a direct relationship between these two syndromes.
Tamarindus

**chemistry**

Two triterpenes lupanone and lupeol isolated and identified from tamarindus indica linn.
Imam, Shehla; Azhar, Iqbal; Hasan, M. Mohtasheemul; Ali, M.S.; Ahmed, S. Waseemuddin
University of Karachi - Faculty of Pharmacy - Department of Pharmacognosy

**Keywords:** Plant Preparations; Triterpenes; Plants, Medicinal

**Abstract:** Tamarindus indica, a useful medicinal plant was subjected to phytochemical investigation. Two triterpenes [lupanone and lupeol] have been isolated from the leaves of this plant. Their structures were elucidated with the help of physico-chemical methods and spectroscopic techniques. The lupanone and lupeol from this plant are being reported for the first time.

Tetanus

diagnosis

Clinical study of neonatal tetanus at Tehsil headquarter hospital.
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Tehsil Headquarter Hospital
*Pakistan Pediatric Journal* 2007; 31 (1): 34-37 (18 ref.)

**Keywords:** Infant, Newborn, Diseases; Prognosis; Cohort Studies; Tetanus Toxoid; Immunization; Tetanus-epidemiology

**Abstract:** To know the clinical aspects of neonatal tetanus including its prognostic factors. Observational cohort study. Paediatric department, Tehsil Headquarter Hospital, Liaquetpur. Every case of neonatal tetanus diagnosed clinically was registered for the study. Forty-one case of neonatal tetanus were included. 12.19% cases were females. All were delivered at home with 97.56% delivered by untrained dais. 95.12% mothers belonged to rural and 97.56% mothers were unvaccinated. The mean age and weight at presentation were 6.341 days and 2.949 kg and mean duration of symptoms were 38.049 hours. Refusal to take feed in 100%, convulsions in 73.17%, inability to open the mouth in 97.56%, fever in 34.15% and excessive cry in 51.22% of cases were the main symptoms. For cutting of umbilical cord knife in 34.15%, blade in 19.51%, scissors in 29.27%, razors in 7.32% and unknown in 7.32% cases were used. The umbilical stump was painted with desi ghee in 19.51%, oil in 4.88%, surma in 39.02% ash in 21.95%, talcum in 2.44%, cow dung in 2.44% and unknown in 9.76% cases. Of the 41 cases, 34.14% were cured, 36.58% expired and in 29.27% the fate was unknown. The expired versus survived group showed the difference between the age of onset 4.80 vs 8.714 days [p=0.002], duration of symptoms 20.8 vs 62.571 hours [p=0.0001] and hospital stay 2.8 vs 14.571 days [p=0.0001]. convulsions with apnea 7 vs 3 cases [p=0.2993], weight 2.940 vs 3.007 kg [p=0.717], female sex 2 vs 2 cases and fever 7 vs 3 cases [p=0.2993]. The cure rate of neonatal tetanus is very low.

Teucrium

The effect of teucrium polium [Calpoureh] on liver function, serum lipids and glucose in diabetic male rats.
Shahraki, Mohammad Reza; Arab, Mohammad Reza; Mirimokaddam, Ebrahim; Palan, Mony Jey
Zahedn University of Medical Sciences - Faculty of Medicine - Department of Physiology

**Keywords:** Diabetes Mellitus-veterinary; Rats, Sprague-Dawley; Lipids-blood; Liver Function Tests; Blood Glucose; Plant Extracts; Phytotherapy

Textile Industry

Decolorisation of exhausted reactive dye bath using ozonation for reuse.
Sundrarajan, M.; Vishnu, G.; Joseph, K.
E-mail: sundrarajan@yahoo.com
Anna University - Centre for Environmental Studies

**Keywords:** colorizing Agents; Ozone

**Abstract:** Exhausted Reactive dye bath samples of Turquoise Blue, Olive Green and Navy Blue shades were collected from cotton knit wear dyeing units in Tirupur. Ozonation was conducted in a column reactor system fed with ozone at the rate of 0.16 g/min to assess the efficiency in reducing the color, chemical oxygen demand and total organic carbon. Complete decolorization of the effluent was achieved in 10 min contact time and ozone consumption of 153 mg/L for Turquoise Blue, 128 for Olive Green and 143 for Navy Blue shades effluents respectively. The corresponding COD removal was 43 %, 44 % and 43 % for the three shades while TOC removal efficiency was 45 %, 45 % and 40 % respectively. The results from the reusability studies indicate that the dyeing quality was not affected by the reuse of decolorized dye bath for two successive cycles. It is concluded that ozonation is efficient in decolorization of exhausted dye bath effluents containing conventional reactive dyes. However, the corresponding removal of COD from the textile effluent was not significant.
Thyroid Function Tests

[Evaluation of thyroid function tests in hemodialyzed patients].
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Journal of Qazvin University of Medical Sciences and Health Services [The] 2007; 10 (4): 46-50 (15 ref.)
Keywords: Renal Dialysis; Hypothyroidism; Hyperthyroidism

Abstract: Chronic renal failure and hemodialysis can cause some abnormalities in thyroid function tests [TFT]. To evaluate TFT abnormalities in hemodialyzed patients of Qazvin. In a descriptive study, blood samples were taken from all hemodialyzed patients at Bu-Ali hospital [Qazvin, Iran] in 2005. RIA and IRMA techniques were used to measure the serum levels of T3, T4, T3RU and TSH. Mean central statistical data were estimated. Forty percent of cases were found to have no abnormalities in any parameters of TFTs, however, in 58% of cases, one or more parameters were shown to be abnormal. The most prevalent abnormality was related to T4 [all less than normal levels] and the least one associated with FTI. While the majority of abnormal T3 and FTI were diminished type, it was an elevated type for the majority of abnormal T3RU and TSH. Twenty-two out of all abnormal TFT cases were detected to have hypothyroid criteria and 1 case with hyperthyroid criteria, nonetheless, a true hypo or hyper thyroid criteria was not established for the rest of abnormal TFT cases. The rate of thyroid involvement in hemodialyzed patients by laboratory criteria was higher than patients with no hemodialysis and most cases were affected by hypothyroidism. Regarding the high prevalence of non-specific abnormalities of the TFT results, they must be interpreted with caution in hemodialyzed patients.

Tobramycin

toxicity

Histological study on the effect of tobramycin dosage regimens on renal proximal tubular cells in the rats.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 71-77 (28 ref.)
Keywords: Tobramycin-administration and dosage; Kidney Tubules, Proximal-drug effects; Rats, Wistar; Aminoglycosides-toxicity

Abstract: The present study was undertaken to show the potential nephrotoxicity of tobramycin, given in two different dosage regimens, on the proximal convoluted tubules by using the light and transmission electron microscopic techniques. Thirty-five rats were divided into three groups: Group I served as control, Group II received tobramycin at 4mg/Kg of body weight intraperitoneally every 8 hours for ten days, and Group III received once-daily dosing of intraperitoneal injection of tobramycin at 12mg/Kg of body weight for ten days. The rats were sacrificed 3 days after the last injection. Small pieces of the right kidneys of all the animals were processed for light and electron microscopic examination. The study showed that tobramycin resulted in certain structural and ultrastructural changes in the proximal convoluted tubules. These changes included vacuolar degeneration in the epithelial cells, increased number of lysosomes with variably sized myeloid bodies, mitochondrial oedema, and loss of apical microvilli. These changes were clearly evident following multiple-daily dosing and were less obvious following once-daily dosing. Furthermore, regenerating tubular epithelial cells were evident following once-daily dosing administration. The experimental tobramycin toxicity can be reduced by administering equivalent amounts of the antibiotic in a once-daily dosing as opposed to multiple-daily injections. It is hoped that this study will contribute in the selection of a more appropriate dosing regimen for tobramycin in human beings.

Toxoplasma

immunology

Detection of toxoplasma gondii antigens in sera from experimentally infected mice.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 100-102 (15 ref.)
Keywords: Antigens, Protozoan-blood; Toxoplasma-isolation and purification; Mice; Immunoblotting

Abstract: Detection of Toxoplasma antigen in serum of mice by Immunoblotting. Serum samples isolated from Balb/C mice experimentally infected with T. gondii, RH strain. IgG isolated from rabbits that were immunized with T. gondii Immunoblotting was performed to detect T. gondii antigens in sera of mice. School of Public Health. Tehran University of Medical Sciences. Serum samples from mice experimentally infected with T. gondii RH strain. The value of Immunoblotting in diagnosis of toxoplasmosis in acute stage of infection. The antigen bands detected in serum sample of mice were experimentally infected with T. gondii tachyzoite in Immunoblotting. Six bands demonstrated on seventh post infection day six bands were identified. Similarly on sixth day fourth bands, on day five three bands and on fourth post infection day two bands were identified. No band was detected in control group sera. Immunoblotting is a sensitive method for diagnosis of acute stage of toxoplasmosis.
Trace Elements

Preliminary assessment of trace metals and polycyclic aromatic hydrocarbons in the sediments.
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University of Nigeria - Faculty of Physical Sciences - Department of Pure and Industrial Chemistry

Keywords: Polycyclic Hydrocarbons, Aromatic; Geologic Sediments

Abstract: Total concentrations of Cd, Cr, Co, Fe, Pb, Ni, Mn and Zn were determined by atomic absorption spectrophotometry in the surface sediments of Taylor Creek, Southern Nigeria. The most concentrated trace metals, ranging from 113.2 to 5160.7 mg/g-dry weights were Fe, Pb, Mn, Ni and Zn. There was no significant variation in sediment-associated metal levels (P>0.05). The Metal Pollution Index [MPI] was highest at Agbia/Nedugo and is attributed to local contamination of the Creek. The concentrations of low molecular weight polycyclic aromatic hydrocarbons [PAHs] were also detected and quantified in the sediments by capillary gas chromatography equipped with a flame ionization detector. The concentration levels of 178.1-1266.3 mg/g-wet weights were high for the PAHs. The results indicate that the pollutants, which are bio-accumulatable, could contribute to inferior biodiversity, and shifts in community composition from sensitive to tolerant taxa.

Trochlear Nerve Diseases

An unusual case of isolated trochlear nerve palsy.
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Neurosciences 2007; 12 (2): 149-151 (10 ref.)

Keywords: Multiple Sclerosis; Magnetic Resonance Imaging

Abstract: Trochlear nerve palsy is rarely encountered in children and only 5% are truly isolated. Multiple sclerosis [MS] is also extremely uncommon in children. This report describes an otherwise healthy 10-year-old boy who presented with a 5-day history of vertical diplopia with associated dizziness, decreased appetite, and unsteadiness. He had no past medical history of infection and no previous history of neurological symptoms. Ophthalmologic assessment revealed full ocular ductions and right hyperdeviation in primary gaze during alternate cover test. This hyperdeviation increased during left gaze, and right head tilt consistent with paresis of the right oblique muscle. Brain MRI revealed multiple well-defined hyperintense T2 lesions in the periventricular and subcortical white matter, and brainstem, suggestive of MS. His symptoms resolved after 2 weeks with no treatment. To conclude, isolated trochlear nerve palsy can be the initial clinical manifestation of childhood MS. Long term follow up is needed to confirm the diagnosis of MS.

Tuberculosis

Knowledge of tuberculosis: A survey among tuberculosis patients in Omdurman, Sudan.
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University of Gezira - Faculty of Pharmacy

Keywords: Knowledge; Health Knowledge, Attitudes, Practice; Cross-Sectional Studies; National Health Programs; Guidelines; Patient Education

Abstract: A cross-sectional study was conducted in different health settings in Greater Omdurman Province with the objective of measuring the patients' knowledge about tuberculosis and its treatment. One thousand tuberculosis patients were randomly selected. Results revealed general unawareness with the disease and its treatment among the interviewees. Only 36.2% of them had satisfactory knowledge about tuberculosis and its treatment. The level of this knowledge was inversely proportional with respondent's age. Males [38.7%] were more knowledgeable than females [31.4%]. The level of satisfactory knowledge increased with increasing educational level. Respondents treated at health facilities implementing the ational Tuberculosis Programme guidelines [34.5%] were more knowledgeable compared to those treated at general hospitals and private clinics where there is no commitment to the guidelines [23.1%]. Increasing coverage of programme implementation to include general hospitals and private sector, the designing of special health educational programmes and interventions directed toward tuberculosis patients to increase their general awareness about the disease and its treatment were recommended.
diagnosis

Application of restriction enzyme analysis technique based on 65KDA heat shock protein gene for fingerprinting and differentiation of mycobacterium tuberculosis clinical strains isolated from tuberculosis patients in Ahwaz, Iran.

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Pakistan Journal of Medical Sciences 2007; 23 (2): 216-219 (14 ref.)

Keywords: Mycobacterium tuberculosis-isolation and purification; Restriction Mapping; Heat-Shock Proteins-genetics; DNA Fingerprinting; Laboratory Techniques and Procedures; Prospective Studies; Cross-Sectional Studies

Abstract: Application of identification methodology of restriction enzyme analysis [REA] for fingerprinting of the expanded population of Mycobacterium tuberculosis [MTB] isolates. A total of 150 clinical isolates from patients referred to TB reference laboratory, Public Health Centre, Ahwaz, Iran, were identified as MTB by using conventional culture and biochemical tests from January to December 2004. The PCR-REA method uses a PCR step based on amplification of a 439 bp fragment of hsp65 gene involving genus specific primers and restriction enzyme analysis by digestion of products with HaeIII and BstE II enzymes were employed. The identical restriction patterns similar to MTB reference strains equal to 160 / 145 / 72bp fragments for Hae III and 250 /120/82bp fragments for Bst EII digests were seen in 145 isolates [96.6%]. The diverse patterns were observed for five isolates in Hae III digest as 180 / 100 / 80 bp, 194/ 72 bp and 160/ 145 bp representing the possible intra-species variation within studied MTB strains , while their Bst EII digestion patterns showed no variation. The PCR-REA technique revealed three different new patterns for Hae III digest. However to verify that they are indeed MTB isolates, a sequence-based analysis of the exceptional isolates should be performed.

Tuberculosis, Meningeal

drug therapy

Detection of rifampin resistant tuberculosis meningitis by polymerase chain reaction linked single strand conformation polymorphism analysis of cerebrospinal fluid.

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Mashhad University of Medical Science - Department of Microbiology and Virology
Neurosciences 2007; 12 (2): 105-108 (23 ref.)

Keywords: Rifampin-therapeutic use; Drug Resistance, Microbial; Polymerase Chain Reaction; Cerebrospinal Fluid; Mycobacterium tuberculosis-drug effects; Polymorphism, Single-Stranded Conformational

Abstract: To rapidly detect rifampin resistance in Mycobacterium tuberculosis isolates causing meningitis in northeast Iran. This study presents the results of a polymerase chain reaction-single strand conformation polymorphism [PCR-SSCP] analysis for the evaluation of rifampin resistance directly from the CSF of 47 patients strongly suspicious to have tuberculosis meningitis in Emam Reza University Hospital, Mashhad, Iran over 3 years [2002 to 2005]. Each CSF sample underwent microscopic examination, culture and DNA amplification by 2 PCR protocols and subsequent detection of mutations by SSCP analysis. Among these patients, no mutations were revealed in the rpoB segment by SSCP. The SSCP analyses of these samples shows complete susceptibility to rifampin. The use of this method can radically reduce the time needed to provide clinicians with data useful in aiding the selection of appropriate drugs.

Tuberculosis, Pulmonary

diagnosis

Value of gastric lavage for diagnosis of pulmonary tuberculosis.

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Pakistan Journal of Medical Sciences 2007; 23 (1): 51-53 (11 ref.)

Keywords: Gastric Lavage

Abstract: To evaluate the sensitivity of gastric lavage specimen for observation of acid fast bacilli and isolation of mycobacterium in patients proved to be suffering from pulmonary tuberculosis. A total number of 886 hospitalized patients in different hospitals of Urmia City were tested for pulmonary tuberculosis. Fifty-three patients were eventually enrolled in the study and one gastric lavage specimen was taken from each patient. Among these fifty three, 44 had positive gastric lavage results and 43 were positive on culture, while both positive results of smear and culture were matched in all patients proved to be suffering from pulmonary tuberculosis. The highest positive rate was in 20 to 49 and 20 to 29 years for the culture and smear respectively but the lowest culture positive rate was in those patients who were in children and those over 60 years of age. Gastric lavage can be a valuable alternative specimen instead of sputum for diagnosis of tuberculosis in children and elderly patients if both smear and culture results are applied.
**Tuberous Sclerosis**

**diagnosis**

*Tuberous sclerosis.*
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**Pakistan Pediatric Journal** 2007; 31 (1): 42-44 (8 ref.)

**Keywords:** Spasms, Infantile; Tuberous Sclerosis-drug therapy; Tuberous Sclerosis-epidemiology

**Abstract:** Tuberous Sclerosis is an autosomal dominant disorder. It occurs with frequency of 1:5800-30000. It present as cutaneous and systemic manifestations. We report here a case of Tuberous sclerosis in a 10 month old infant who presented with infantile spasms and ash leaf lesions. Treatment with steroids showed good response.

**Twins**

*Twin pregnancy one sac with missed miscarriage, second with molar pregnancy.*
Shami, Nabeela; Anwar, Shaila; Akmal, Iram; Asif, Shaheena

Ghurki Trust Teaching Hospital - Lahore Medical and Dental college - Department of Obstetrics and Gynaecology

**Pakistan Journal of Medical Sciences** 2007; 23 (1): 132-134 (6 ref.)

**Keywords:** Pregnancy; Diseases in Twins; Pregnancy Complications; Abortion, Missed; Hydatidiform Mole-diagnosis

**Abstract:** A 32 years old lady G4P2A1, presented with gestational amenorrhoea of 13 weeks and complain of vaginal bleeding one week back. Ultrasound examination revealed an irregular gestational sac with no fetal pole and another well circumscribed mixed echogenicity lesion filling the whole of uterine cavity. Features were consistent with molar pregnancy. Suction curettage was done. Histopathology report revealed complete hydatidiform mole and missed miscarriage.

**Urban Renewal**

**standards**

*Measuring urban sustainability: Developing a conceptual framework for bridging the gap between theoretical levels and the operational levels.*
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**International Journal of Environmental Research** 2007; 1 (2): 188-197 (40 ref.)

**Keywords:** Urbanization; City Planning; Program Evaluation

**Abstract:** The issue of sustainable development has been widely acknowledged and spread rapidly after United Nations conference on environment and development in Rio in 1992. Considerable attention is given to urban settlement areas. Thus, role of urban development is seen as a challenging issue under circumstances. Outcomes of the current patterns of world population growth and industrial development are agreed and reported as major causes of un-sustainability in long term. Whereas by turn of century almost half of the world's population is lived in urban areas; it is expected that this figure will reach to 8.1 billion -60.5% of world population- by year 2030. This is twofold; on the one hand cities are the places of the excessive use of energy and resources, of production of waste and pollution, of crimes and deprivations and socio-cultural un-stab ility, and so forth. However, some question will arise: is there a simple and universal model of sustainable urban form? How would decision makers be able to assess the rightness of their programs and actions in terms of sustainability of urban forms? And to what extent the concept of urban sustainability can be translated to some measurable elements? This paper therefore, aims to develop a conceptual framework within which the notion of urban sustainability-as a broad conceptual term - can be translated into some quantities which can be measured and evaluated with more assertion. Through this model, characteristics of sustainable urban form, systematically are defined and translated into some indicators. It is hoped that this model can provide easement and clarification for researchers and decision-makers in their assessment of cities' form and function towards achieving sustainability.

**Urinary Bladder Calculi**

**surgery**

*A comparison of open vesicolithotomy and cystolitholapaxy.*
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Foundation University Medical College

**Pakistan Journal of Medical Sciences** 2007; 23 (1): 47-50 (15 ref.)
Keywords: Cystoscopy-methods; Surgical Procedures, Operative-methods; Postoperative Complications

Abstract: To compare Vesicolithotomy with Transurethral optical cystolitholapaxy. Comparative Observational study. Study was conducted at Department of Surgery, Fauji Foundation Hospital Rawalpindi, from October 2002 to April 2005. Study comprises of 40 patients, which were divided into two equal groups of twenty each. All patients having stones less than 30 mm in size were included. Group-I patients were treated with open vesicolithotomy and Group-II patients with transurethral optical cystolitholapaxy. All 40 patients were between age of 16 -76 years [mean age 52 years and 54.5 years in Group-I and II respectively] and female to male ratio were 1:2.3. Average hospital stay was long [7.33 days] in Group-I. 2.5% patients had UTI postoperatively in both groups and transient haematuria [5%], urethral trauma [5%] and recurrent stone formation [5%] was noted in Group-II patients. Transurethral optical cystolitholapaxy is a better way of managing Vesical stones because it is minimally invasive with short hospital stay. Complications noticed with this procedure are minor and can be reduced by experienced surgeon.

Urinary Tract Infections

drug therapy

Antimicrobial susceptibility testing for escherichia coli strains to fluoroquinolones, in urinary tract infections.

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Keywords: Microbial Sensitivity Tests; Anti-Infective Agents, Urinary; Escherichia coli-drug effects; Fluoroquinolones; Drug Resistance, Microbial

Abstract: Urinary Tract Infections [UTIs] are one of the most common infectious diseases diagnosed all over the world. Meanwhile most episode of UTIs are caused by Escherichia coli [up to 85%] and frequently fluoroquinolones are preferred as initial agents for empiric therapy of UTIs. Widespread use of fluoroquinolones has resulted in an increasing incidence of resistance these agents all over the world. The aim of this study was to assess, susceptibility of Escherichia coli strains from UTI patients against common fluoroquinolones. Antimicrobial susceptibility testing was determined by disk agar diffusion [DAD] and Minimal Inhibitory Concentration methods as described by the National Committee for Clinical Laboratory Standards [NCCLS]. One hundred sixty four clinical isolates of E. coli were collected by urine cultures from patients with UTI. The extent of resistant to nalidixic acid, ofloxacin, norfloxacin and ciprofloxacin, by disk diffusion method was 49.3%, 44.5%, 41.4% and 40.2%, respectively. Resistance to ciprofloxacin by MIC method was 4.9%. This study represents high level resistant of E. coli isolates from UTI patients. It is because of inappropriate and incorrect administration of antimicrobial agents in blind cases. This problem remarks significance of performing antimicrobial susceptibility testing before empiric antibiotic therapy. To overcome this problem use of unnecessary antibiotics therapy should be limited.

epidemiology

Association of urinary tract abnormalities in children with first urinary tract infection.

Ahmadzadeh, Ali; Askarpour, Shahnam
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Pakistan Journal of Medical Sciences 2007; 23 (1): 88-91 (14 ref.)

Keywords: Urinary Tract-abnormalities; Urinary Tract Infections-diagnosis; Vesico-Ureteral Reflux

Abstract: Urinary Tract Infections [UTI] may be a variety of presentation of underlying urinary tract abnormalities including vesicoureteral reflux [VUR], obstructive uropathy, urolithiasis, and ureteral duplication. The long-term complications of UTI with these conditions are renal scarring, hypertension, and chronic renal failure. The aim of this study was to determine the incidence of urinary tract anomalies associated with first UTI. We reviewed 158 patients [aged one month to 15 years] who were hospitalized with symptomatic UTI during a 2-year period [2001-2003]. Patients with incomplete investigations were excluded from the study. One hundred twenty six patients [100 girls and 26 boys] were included in the study. Ninety-seven [77%] were under 5 years. Confirmed cases of UTI underwent renal and urinary tract ultrasonography [US], voiding cystourethrogram [VCUG] ,and 99mTc-dimercaptosuccinic acid [DMSA] scan. The most common presentation were fever [83%] and dysuria [48%]. The commonest causative agent was E coli [88%]. VUR was found in 50 [39.6%], 39 girls, and 11 boys. Other urinary tract abnormalities were renal stone in 10 [8%] patients, pelvic ureteric junction obstruction in 8 [6.3%], neurogenic bladder in two boys and one girl, double collecting system in 2 girls, posterior urethral valves in two boys and ureterocele in one girl, respectively. Forty percent of patients had VUR and 20% had other associated abnormalities in urinary tract. We recommend that US, VCUG and DMSA scan should be routinely performed on all patients after the first UTI.
Urogenital Abnormalities

epidemiology

Urogenital anomalies associated with analorectal malformations.
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Pakistan Journal of Medical Sciences 2007; 23 (2): 172-175 (18 ref.)
Keywords: Anal Canal-abnormalities; Rectum-abnormalities; Urinary Tract; Genitalia; Cross-Sectional Studies
Abstract: Urogenital anomalies are frequently associated with analorectal malformations which are a common source of significant morbidity. The aim of this study was to evaluate the incidence and nature of associated urogenital anomalies in patients with Anorectal Malformations [ARM]. Documents of 104 patients with ARM were studied from 2003 to 2005. All patients underwent sonography of urinary tract and lumbosacral radiography. Other imaging studies were done in selected cases and voiding cystourethrography [VCUG] performed in 62 patients. Urologic malformations were found in 44 patients [42.3%] without sexual preponderance [p>0.05]. Genital anomalies were detected in 16 cases [15.5%] with a significantly high frequency in males [p<0.05]. The incidence of associated urogenital anomalies was significantly higher in "high" form of anomaly than those with "low" form [p<0.05]. Vesicoureteral reflux [VUR], hydronephrosis, and renal agenesis were the most common urologic anomalies respectively. Cryptorchidism and hypospadiasis were the most frequent genital anomalies. Sacrospinal anomalies were detected in 22% of patients. The high incidence of associated urogenital anomalies necessitates a careful investigation of all patients with ARM. VCUG is essential even with normal sonographic findings.

Uterus

abnormalities

Post menopausal bleeding in patient with infantile uterus.
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Ghurki Trust Teaching Hospital - Lahore Medical and Dental College - Department of Obstetrics and Gynaecology
Pakistan Journal of Medical Sciences 2007; 23 (2): 290-292 (5 ref.)
Keywords: Postmenopause; Uterine Hemorrhage-etiology; Endometrial Hyperplasia; Hysterectomy
Abstract: A 58 years old female patient married for 40 years, nulliparous, presented in outpatient department with the complaint of postmenopausal bleeding off and on for six months. Her total abdominal hysterectomy and bilateral salpingoopherectomy was performed. Uterus was small in size [infantile]. Histopathology revealed endometrial hyperplasia with atypia.

Vascular Diseases

pathology

Surrogate markers: Atherosclerotic vascular disease and periodontal infection.
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Pakistan Journal of Medical Sciences 2007; 23 (1): 153-154 (4 ref.)
Keywords: Atherosclerosis; Periodontal Diseases; Periodontitis; Biological Markers

Vascular Neoplasms

Intraocular vascular tumors.
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Cleveland Clinic Foundation - Cole Eye Institute - Department of Ophthalmic Oncology
Keywords: Retinal Neoplasms; Choroid Neoplasms; Hemangioma; Sturge-Weber Syndrome; Diagnosis, Differential
Abstract: It is important to distinguish between uveal and retinal vascular tumors. Choroidal hemangiomas are benign hamartomatous disorders and are classified as circumscribed or diffuse. Circumscribed tumors occur sporadically, without any associated local or systemic anomalies. In contrast, a diffuse choroidal hemangioma is usually evident at birth and generally occurs as a part of neuro-oculo-cutaneous hemangiomatosis [Sturge-Weber syndrome]. Retinal vascular tumors include capillary hemangioma, cavernous hemangioma, arteriovenous communications [Wyburn-Mason syndrome], and vasoproliferative tumor. Each subtype has a characteristic clinical feature and an attempt should be made to differentiate them because of specific systemic associations, treatment, and prognosis associated with them.
**Vehicles**

Evaluation of the optimal performance of passenger vehicle by integrated energy-environment-economic modeling.

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*International Journal of Environmental Science and Technology* 2007; 4 (2): 189-196 (12 ref.)

**Keywords:** Environmental Pollution; Bioelectric Energy Sources-economics; Mathematical Computing; Models, Theoretical

**Abstract:** Analysis of multi dimensional interactions of flow of energy in passenger vehicle is a complex task that necessitates development and utilization of analytical tools. Development of analytical tools with high complexity is usually based on conclusions of many concepts and theories from different scientific disciplines. In this approach, Passenger vehicle is supposed to be organized in the form of a firm and appears in the market that oriented towards establishing an effective energy supply system which may be identified as delivering the product [person kilometer or tone kilometer] with minimum operation costs. To this end, an optimization model named power software founded on theory of firm of microeconomics has been developed using technique of mathematical programming. Base on this theory, the car owner tries to minimize the total cost of the system subject to the satisfaction of the required transport services and technological, economical, environmental and institutional constraints. The approach and the application of the model shall be demonstrated with the help of a case study. The result of this study shows the extent of optimal energy usage subject to meeting the required certain urban transport service.

**Viscum album**

**microbiology**

The relationship among infection intensity of viscum album with some ecological parameters of host trees.


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*International Journal of Environmental Research* 2007; 1 (2): 143-149 (12 ref.)

**Keywords:** Infection; Trees

**Abstract:** We investigated the relations among infection intensity of European mistletoe [Viscum album L.] with host tree features in Nour Forest Park, located in Caspian Forests in North of Iran. The number of 30 circular plots with an area of 0.1 ha were sampled in all places have an aggregation of infested trees. Parameters including DBH, height, distance to stand edge, distance to conspecific tree, bark diameter and the number of adult mistletoe per tree for all infected individuals were recorded. Results showed that the mistletoe abundance and infection intensity in Parrotia persica was more than the other host species and also, have positive significant relation with DBH, distance to conspecific and locating in the stand edge, but no significant relation observed about height of host trees. Results of this study suggest that individual differences among host trees [specially DBH] play an important role in explaining local abundance and distribution of mistletoe plants.

**Vulva**

**injuries**

Management of traumatic vulval avulsion in a 7 year old Girl, a case report.

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**Keywords:** Perineum-injuries; Wounds and Injuries-surgery; Wounds and Injuries-therapy; Anesthesia, General; Disease Management

**Abstract:** Management of a 7 year old girl who has been injured by explosion of a bombed car resulting in compound fractures of right tibia and fibula, and injury to the external genitalia which was deep enough to expose both inferior pubic rami and extending to the right thigh exposing the adductor muscles.

**Waste Disposal, Fluid**

Performance of upflow anoxic bioreactor for wastewater treatment.

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Keywords: Bioreactors; Biotechnology; Nitrogen

Abstract: Laboratory scale studies were conducted in an up-flow anoxic bioreactor [UFAB] using synthetic fertilizer wastewater for ascertaining the denitrification efficiency. The performance of the reactor was compared using ethanol and topioca starch as the carbon source. The initial NO3-N concentrations [50-250 mg/L] and hydraulic retention time [HRT, 12-24 h] were varied to evaluate the COD and NO3-N removal. The results from this study shows that ethanol gave very good denitrification efficiency [78-98%] compared to topioca starch [68-96%].

Waste Products


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Keywords: Waste Management-economics; Industrial Waste-economics; Transportation

Abstract: Transfer-transport of the waste is one of key functional elements in solid waste management from technical and financial viewpoint. Unfortunately very few reach activities has been conducted in this field regarding local characteristic of phenomenon which urges undertaking local surveys and research projects. Tehran Organization of Waste Recycling and Composting has decided to investigate different transfer-transport options for new Tehran landfill in Houshang Site which is located in far distance from Current landfill in Kahrizak. The study surveyed 3 main options comprising of 8 alternatives. This alternatives covered so many aspects of transfer-transport like road or rail transport, compaction of waste, size of containers and system of loading/unloading. The surveyed showed that the two alternative of heavy compaction in 65m3 semi-trailers will be the most economical system that enjoys so many environmental-ecological advantages over current practice.

Water

analysis

Chemical analysis of drinking water from some communities in the Brong Ahafo region.

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Keywords: Water Pollutants, Chemical; Trace Elements; World Health Organization

Abstract: This study consisted of the determination of the trace metals and some physiochemical properties in drinking water samples from the Brong Ahafo region of the Republic of Ghana, where drinking water samples are not treated before it is consumed. The purpose was to ascertain the quality of water from these sources. Samples were taken from fifteen sampling points and analyzed for the following parameters Fe, Cu, Mn, Zn, Al, NO3-, NO2-, SO42-, PO42-, and Fusing the procedure outline in the Palintest Photometer Method. The data showed the variation of the investigated parameters in samples as follows: pH 5.57-7.54, conductivity [EC] 35-1216 micro s/cm, turbidity 3.25-72.50 NTU, PO42- 0.32-9.30 mg/L, F- 0.32-1.05 mg/L, NO3- 0.09-0.99 mg/L, NO2- 0.006-0.114 mg/L, SO42- 3.33-8.02 mg/L, Cu 1.19-2.75 mg/L, Fe 0.05-0.85mg/L, Zn 0.04-0.15 mg/L, Mn 0.003-0.011 mg/L and Al 0.05-0.15 mg/L. The concentrations of most of the investigated parameters in the drinking water samples from Brong Ahafo region were within the permissible limits of the World Health Organization drinking water quality guidelines. There were no correlations between metal concentrations in the drinking water samples.

Water Pollutants

analysis

Development of water quality test kit based on substrate utilization and toxicity resistance in river microbial communities.

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International Journal of Environmental Research 2007; 1 (2): 136-142 (15 ref.)

Keywords: Rivers-microbiology; Toxicity Tests; Sewage

Abstract: Methods for measuring toxicity or respiratory activity of microbial cultures can be used as tools for assessing the presence of chemicals and their impact on the streams. The proposed toxicity test is based on the respirometric characteristics of the bacteria according to the principals of Biolog's microplate system. As the microorganism are utilizing the carbon source [peptone], the reduction of the tetrazoliun dye as the redox indicator is taking place, leading to a developing change in the well's color. The tests provided us with information in regard to the toxicity range of the chemicals with activated sludge and Alcaligenes.
**Water Pollution**

**Enterococci vs coliforms as a possible fecal contamination indicator: Baseline data for Karachi.**

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**Keywords:** Feces; Water Microbiology; Enterococcus faecalis; Enterococcus; Enterobacteriaceae; Escherichia; Sewage

**Abstract:** Fecal contamination of drinking water is the major cause of water borne illnesses. For long time coliforms are exploited as fecal contamination indicator. However, recent studies indicate low survival rate of coliforms in stress conditions, hence it's use as indicator of fecal pollution is being abandoned in many parts of the developed world. Implementation of such strategy demands availability of local data in the cities like Karachi. The present study provides a comparison between coliforms and enterococcal load and its variation in sewage samples collected [June, August and November, 2006] from eighteen towns of Karachi. All the diluted samples were selective media to obtain colony-forming units (CFU) mainly for coliforms and enterococci. The bacteria isolated were identified on the basis of conventional microbiological methods. Observations thus obtained were subjected to rigorous statistical analysis. The total load of enterococci was found in range of 1.27-8.47 X 107 as compared to coliforms [3.03-13.9 X 107]. However, segregation of data reveals greater inter town variability in CFU/ml both in coliforms and enterococci as suggested by their cumulative standard deviation +1.5 X107. Furthermore, CFU/ml of both coliforms and enterococci also varies to variable scale when collected at different time intervals and at intra town level. Conclusively, the studies suggest high survival rate and lower variability of Enterococci compared to escherichia hence indicating its potential advantage to be used as fecal contamination indicator.

**Natural and human-Induced impacts on coastal groundwater.**

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**Keywords:** Water Pollutants; Water Pollutants, Chemical; Metals, Heavy; Environmental Monitoring

**Abstract:** Groundwater is the main source of potable water in most areas of Mazandaran province, like Sari and Babol city. Thus the safety of groundwater supplies is very important in these regions. Unfortunately attention to groundwater quality has remained limited in Iran. In recent years, the growth of industry, technology, population, and water use has increased the stress upon both land and water resources of Mazandaran province. The main pollutants of groundwater in Mazandaran province are domestic, industrial and agricultural wastewater discharges. In addition, contribution of municipal and rural solid wastes in deterioration of groundwater quality of the Mazandaran province is considerable. The quality of several water wells in Mazandaran province was investigated in this research. In tested water wells, the concentrations of Cu, Cr, Zn and NO3 are within WHO standard limits, but Pb, Se and Cd concentrations are often exceeding the WHO maximum permissible standard values. Results show that the current quality of groundwater in Mazandaran province does not present immediate health related concerns. However, the quality of water wells in Mazandaran province is not reliable because of relatively high rate of various pollutants discharges into groundwater resources. Consequently, establishment of both monitoring programs and appropriate regulations to minimize uncontrolled discharges into groundwater resources is ecessary for conservation of this valuable source of water supply in Mazandaran province.

**Yeasts**

**isolation and purification**

**Colony-PCR is a rapid and sensitive method for DNA amplification in yeasts.**

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**Iranian Journal of Public Health** 2007; 36 (1): 40-44 (15 ref.)

**Keywords:** Polymerase Chain Reaction; Nucleic Acid Amplification Techniques; Diagnostic Techniques and Procedures

**Abstract:** Yeast infections are increasing cause of morbidity and mortality in immunocompromised patients. In order to perform a DNA-based diagnostic test, availability of a rapid and easy-to-perform DNA extraction protocol is essential. In the present study we evaluated colony-PCR as the easiest way to amplification of target DNA. Instead of using templates of purified genomic DNA, we performed the PCR directly from yeast colonies or cultures. Serial cell dilution of three reference yeast strains including Candida albicans, Cryptococcus neoformans and Saccharomyces cerevisiae were used for determining the sensitivity of the colony-PCR. A total of one hundred yeast isolates were also tested. All reactions were performed using the universal fungal primers ITS1 and ITS4 complementary to the rDNA region. The colony-PCR resulted in a single band [with different sizes] for 106 cells or more for all reference species. Furthermore 96 out of 100 [98%] of samples showed a relevant single band after PCR. Directly application of the yeast cells obtained from culture colony for PCR reaction is a fast, reliable, cost-effective and simple method for performing any PCR-based protocol including diagnostic tests.
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Baysefer, Alper
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Begum, Shahanara
PSEUDOMONAS AERUGINOSA (enzymology)

Begum, Shahida
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Behbehani, Abdulla
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Behbehani, Abdulla M.
PROSTATIC NEOPLASMS (drug therapy)

Behdani, Mahdi
TUBERCULOSIS, MENINGEAL (drug therapy)

Behera, S.K.
WASTE DISPOSAL, FLUID

Behrouzirad, B.
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Bell, John C.
SIMPLEXVIRUS (ultrastructure)

Bener, A.
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Bener, Abdul Bari
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Beykaie, Seyed M.
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Bhatnagar, Tarun
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Biglari, S.
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Bilir, Ayten
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Bilong, C.F. Bilong
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Bin Dayna, Khalifa
ABDOMEN, ACUTE (diagnosis)

Binesh, Fariba
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Blake, A.
TACHYCARDIA, PAROXYSMAL (diagnosis)

Bostanci, Ilknur
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Bouzerna, N.
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Bukhari, Mulazim Hussain
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Burgazlioglu, Basak
BONE NEOPLASMS (secondary)

Butt, Tayaba Khawar
EPILEPSY (diagnosis)

Caglar, Sukru
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Caylak, Hasan
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Cebeci, Beker Sitki
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Celik, Ahmet
SCHIZOPHRENIA (blood)

Celik, Turgay
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Cengiz, Sahika L.
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Cetin, Emel Sesli
HEPATITIS B VIRUS (genetics)

Chaleshtori, M. Hashemzadeh
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Chander, Jagdish
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Chatzimavroudis, Grigoris
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Chaudhary, Ishtiaq Ahmed
URINARY BLADDER CALCULI (surgery)

NEURILEMMOMA (diagnosis)

Chaudhry, Naseer Ahmad
ASTROCYTOMA (diagnosis)

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Chedid, Fares
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Chitsaz, Ahmad
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Chohedri, A.
STUDENTS, NURSING

Chohedri, A.H.
CARDIOPULMONARY RESUSCITATION (education)

Christy, Beula
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Cicero, Hulya Kanbur
SCHIZOPHRENIA (blood)

Coskun, Abdulhakim
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Cruz, Damian M. Dela
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Dadashzadeh, Hussein
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Daeipoor, F.
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Dahifar, Hossein
HEPATITIS B VACCINES (immunology)

Dahoduh, F.
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Dakak, Mehmet
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Dallar, Yildiz
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Darabi, M.
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Daryabeigi Zand, A.
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Das, Banibrata
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Das, Taraprasad
MACULAR DEGENERATION

Dashti, H.
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Daviers, C.
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Davoodi, Jamshid
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Dawoodi, Ahmed
GLAUCOMA (surgery)

Demirci, Mustafa
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Demirdogen, Ezgi
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Dezfulimaneh, Mahwah
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Dhalli, Naranjan, S.
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Diba, K.
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Diejomoh, Michael
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Dilli, Dilek
INSULIN RESISTANCE

Dincturk, Mehmet
RENAL DIALYSIS

Dogankoc, Seyda
INSULIN RESISTANCE
Dragoumis, Dimitris
PYLORIC STENOSIS, HYPERTROPHIC (diagnosis)

Edrissian, Gh.H.
LEISHMANIA TROPICA (pathogenicity)

Edziri, Hayet
SALVIA

Ekemen, Serdar
MALATHION (toxicity)

El Enezi, Laila Soud
ELECTROCARDIOGRAPHY

El Gebely, Soliman
INSULIN (metabolism)

El Menyar, A.A.
CARDIOMYOPATHIES (pathology)

El Mouzan, Mohammad
ABDOMINAL PAIN (etiology)

El Nour, Amel El Amin Mohammed
DEATH CERTIFICATES

El Sheikh, El Sheikh El Tageny
DEATH CERTIFICATES

El Subai, Ibrahim
HEALTH PROMOTION (methods)

Enosolease, M.E.
LEUKEMIA, HAIRY CELL (epidemiology)

Erdemli, Esra
ILOPROST (therapeutic use)

Erdkurt, Mehmet Ali
PURPURA, THROMBOCYTOPENIC, IDIOPATHIC (diagnosis)

Errayes, Mehdi
GANGRENE

Ershadi, Mohammad Reza Yaghoobi
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Eshraghi, S.
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Eshraghian, M.R.
LEPTOSPIROSIS (epidemiology)

Eskandari, M.
METRONIDAZOLE (analogs and derivatives)

Esmaeili, M.H.
ASCORBIC ACID (pharmacology)

Etemadifar, Masoud
HYPOTENSION, ORTHOSTATIC (epidemiology)

Fadaie, S.
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Faidhi, Basma A.
PUBLIC HEALTH INFORMATICS

Faizi, Shaheen
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Fakheri, Ali
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Fallah, Mohammad
GIARDIASIS (drug therapy)

Fallahzadeh, H.
EDUCATIONAL MEASUREMENT

Far, Ali Peirovi
INTUBATION, INTRATRACHEAL (methods)

Faraj, Jafar H.
CERVICAL VERTEBRAE (injuries)

Fares, Youssef
NEUROFIBROMATOSIS 1 (complications)

Farhat, Rasheda
INSULIN RESISTANCE

Farhood, D.
INFANT, PREMATURE

Farhud, D.D.
DEAFNESS (genetics)

Farooq, Abdul Aziz
ACCIDENTS, TRAFFIC (classification)

Farooqi, Badar Jehan
STAPHYLOCOCCUS AUREUS (drug effects)

Farsiabi, M.M.
BIOELECTRIC ENERGY SOURCES (economics)

Fazeli, M.R.
PENICILLIN G (chemical synthesis)

Fekih, Abdel Waheb
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Finsterer, Josef
CARDIOMYOPATHIES (pathology)

Firouzabadi, M.
PHENYTOIN (pharmacokinetics)

Foto, S.
CRYPTOSPORIDIUM (isolation and purification)

Friday, O.U.
METALS, HEAVY

Galal, Ahmed
INSULIN (metabolism)

Gharagozloo, Soheila
ARTHRITIS, RHEUMATOID (blood)

Ghazi, Farideh
SHIGELLA FLEXNERI (isolation and purification)

Ghazvini, Kiarash
TUBERCULOSIS, MENINGEAL (drug therapy)

Gheiny, Simin
NAPHTHOQUINONES (toxicity)

Ghiasinejad, H.
WASTE PRODUCTS

Ghita, Faridah
EUCINOCOCCOSES (surgery)

Ghorbani, G.H.
PROPOLIS (chemistry)

Ghorbani, A.
SELF CARE

Ghorbani, Badourha
HEPATITIS B VACCINES (immunology)

Ghorbani, G.H.
PROPOLIS (chemistry)

Ghorishy, M.
HEPACIVIRUS (isolation and purification)

Ghosh, Lakshmi K.
NANOPARTICLES

Giampitri, E.A. Zevallos
AMYLOIDOSIS

Gilani, K.
CEFOTAXIME (chemistry)

Giri, D.
AIR POLLUTION (adverse effects)

Goel, Naveen K.
DRINKING
Gokoglu, Figen  
ALZHEIMER DISEASE (physiopathology)

Gomrokchi, A. Yoosef  
SELF CARE

Goof, Ala  
MECKEL DIVERTICULUM (complications)

Goyal, Monisha  
EPILEPSY (pathology)

Guzo, R. Oktay  
BONE NEOPLASMS (secondary)

Goyal, Monisha  
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Gozu, R. Oktay  
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Gozubuyuk, Alper  
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Grigoriou, Marios  
PYLORIC STENOSIS, HYPERTROPHIC (diagnosis)

Guieysse, B.  
WATER POLLUTANTS (analysis)

Gumus, Hakan  
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Gupta, Bijan K.  
NANOPARTICLES

Gupta, Madhu  
INSULIN RESISTANCE

Gurkok, Sedat  
ECHINOCOCCOSIS

Guzel, Aslan  
EOSINOPHILIC GRANULOMA (diagnosis)

Guzel, Ebru  
EOSINOPHILIC GRANULOMA (diagnosis)

Guzel, Ebru  
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Habiballah, Nemati Karimooy  
POLYNEUROPATHIES (virology)

Haghighi, Sassan  
ANTIBODIES, ANTIPHOSPHOLIPID (blood)

Hamid, Dalia  
sPECTROPHOTOMETRY

Hamid, Mohammad  
PAIN (therapy)

Hamid, Qutayba  
ASTHMA (physiopathology)

Hamid, A.A.  
SEWAGE

Hamid, A.A.  
SEWAGE

Hamid, M.  
URINARY TRACT INFECTIONS (drug therapy)

Hamza, S.  
FOREIGN BODIES

Haneef, S.M.  
ELECTROENCEPHALOGRAPHY (utilization)

Hanif, Ghazala  
BILIARY ATRESIA (diagnosis)

Haque, Asma  
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Harahsheh, Basel  
DUCTUS ARTERIOSUS, PATENT (complications)

Harandi, M. Fasihi  
ECHINOCoccus GRANULOSUS (genetics)

Harati, Hadi  
METABOLIC SYNDROME X (epidemiology)

Harik, Sami I.  
ANTICONVULSANTS (adverse effects)

Haroon, Tahir Saeed  
HIRSUTISM (etiology)

Hartskeerl, R.A.  
LEPTOSPIROSIS (epidemiology)

Hasan, M. Mohtasheemul  
TAMARINDUS (chemistry)

Hasani, Leila  
NEUROPEPTIDES (metabolism)

Hasana, Sadegh  
NEUROPEPTIDES (metabolism)

Hashemi, Abdulrazagh  
TUBERCULOSIS (diagnosis)

Hashimi, Ihsanullah  
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Hasnain, Isa M.  
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Hassan, Ahmed  
HUMAN PAPILLOMAVIRUS 18

Hassan, Batool  
ANTIBODIES, ANTINUCLEAR (immunology)

Hassan, Ekram  
SPECTROPHOTOMETRY

Hassan, Parvez  
PSEUDOMONAS AERUGINOSA (enzymology)

Hassanabady, H.  
POLYNEUROPATHIES (virology)

Hayati, Hussein  
MECKEL DIVERTICULUM (complications)

Hazim, Muhammad  
CARCINOMA, ADENOID CYSTIC (diagnosis)

Hegazy, Aly Mohamad  
ELECTROCARDIOGRAPHY

Hemmatti, Mitra  
NAPHTHOQUINONES (toxicity)

Heper, Aylin O.  
MULTIPLE SCLEROSIS (diagnosis)

Herbort, Carl P.  
FLUORESCEIN ANGIOGRAPHY

Herken, Hasan  
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Heydarian, M.R.  
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Hirji, Nasreen  
DERMATITIS, ATOPIC (drug therapy)

Hisamuddin, N.A.R.  
CONSCIOUSNESS DISORDERS (etiology)

Honarmand, H.  
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Hoseinbeigy, N.  
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Hoseinzadeh, Hamzeh  
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Hosseini, Mostafa  
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Hosseini, S.M.  VISCUM ALBUM (microbiology)
Hosseini, Seyed R.  HEADACHE (epidemiology)
Hosseinpur, L.  YEASTS (isolation and purification)
Hosseiny, Majdi  NEUROFIBROMATOSIS 1 (complications)
Hovsepian, Silva  ANTIBODIES, ANTIPHOSPHOLIPID (blood)
Hug, S. M. Imamul  SOIL
Hussain, Abdul-Attif  PYELONEPHRITIS (pathology)
Hussain, Akhtar  ANTITUBERCULAR AGENTS (toxicity)
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Ibrahimm, Souhik  SALVIA
Ibrahim, Yousif Abdel Hammed  DEATH CERTIFICATES
Imam, Shehla  TAMARINDUS (chemistry)
Imran, Nazish  ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY (epidemiology)
Iqbal, Reza  LEISHMANNIASIS, CUTANEOUS (diagnosis)
Islam, M. Saiful  PREGNANCY, ECTOPIC (surgery)
Jabalameli, F.  URINARY TRACT INFECTIONS (drug therapy)
Jabir, Mansour Atta  DEPRESSION (epidemiology)
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Jafarian Dehkordi, A.  BLEOMYCIN (toxicity)
Jayashree, R.  POLYSORBATES
Jindani, Hafiza  OSTEOGENESIS IMPERFECTA (diagnosis)
Jirous, Jiri  INSULIN RESISTANCE
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Kahlogullar, Gokmen  MULTIPLE SCLEROSIS (diagnosis)
Kalaci, Aydiner  MUSCLE, SKELETAL (pathology)
Kamal, Ahmed  ARTHRITIS, RHEUMATOID (physiopathology)
Kamarul, A.B.  CONSCIOUSNESS DISORDERS (etiology)
Kamath, Jagadish V.  PLANT LEAVES
Kanani, M.  PHENYTOIN (pharmacokinetics)
Kang, Byung Yong  RENIN-ANGIOTENSIN SYSTEM (genetics)
Kapoor, Madan Mohan  PYELONEPHRITIS (pathology)
Karabekir, H. Selim  SURGICAL SPONGES (adverse effects)
Karadag, Mehmet  BONE NEOPLASMS (secondary)
Karanis, P.  CRYPTOSPORIDIUM (isolation and purification)
Kardesoglu, Ejder  RENAL DIALYSIS
Karimi, Koroush  PLASMACYTOMA (diagnosis)
Kariminia, A.  GIARDIASIS (complications)
Kavari, S.H.  CARDIOPULMONARY RESUSCITATION (education)
Kawaguchi, L.  BRUCELLOSIS (epidemiology)
Kawai, S.  LOW BACK PAIN (radiography)
Keshem, M.A.  SOIL
Katsinelos, Panagiotis  HALITOSIS (etiology)
Katsinelos, Tzavarchis  HALITOSIS (etiology)
Kavakli, Kuthan  ECHINOCCOCCOSIS
Kavari, S.H.  CARDIOPULMONARY RESUSCITATION (education)
Kawaguchi, L.  BRUCELLOSIS (epidemiology)
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Kaya, Emin  PURPURA, THROMBOCYTOPENIC, IDIOPATHIC (diagnosis)
Kaya, Selcuk  HEPATITIS B VIRUS (genetics)
Kazemi, B.  URINARY TRACT INFECTIONS (drug therapy)
Kazemi, Seyed Hassan Moosa  LEISHMANNIASIS, CUTANEOUS (prevention and control)
Kazmi, Shahan Urooj  SALMONELLA (drug effects)
Kehinde, Elijah O.  PROSTATIC NEOPLASMS (drug therapy)
Kenani, Abderraouf
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Keshavarz, H.
TOXOPLASMA (immunology)
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Kessie, George
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Ketten, Marie Anne
FASCIITIS, NECROTIZING (etiopathology)
Khabiri, A.R.
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Khaki, A.A.
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Khamis, Essam
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Khamis, Iman
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Khan, Malik Muhammad Nazir
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Khan, Murad Moosa
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Khan, Rustam
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Khan, Saeed Akhtar
MEDULLOBLASTOMA (diagnosis)
Khan, Salma N.
CEREBROVASCULAR ACCIDENT (etiopathology)
Khan, Sarfaraz A.
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Khan, Shah Sattar
HEPATITIS B (epidemiology)
Khan, Zeeshan
SURGICAL PROCEDURES, ELECTIVE (pschology)
Khanal, S.N.
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Khattab, Omar Salem
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Kho, W.L. Freddy
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Khosravi, Azer D.
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Kia, Batool Etemadi
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Kia, E.B.
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Kim, S.H.
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Kiyatode, Yuikito
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Kombian, S.B.
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Koozhare, A.
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Krishnaiah, Sannapaneni
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Kuku, Irfan
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Kumandas, Sefer
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Kumar, Sharmila Mohan
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Kumar, Suresh
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Kundu, Juthika
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Kurtsoy, Ali
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Lari, Yazdi, H.
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Law, P.L.
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Lee, Kang Oh
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Lotfi, Abbas S.
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Maaita, Taghreed J.
LICHEN PLANUS (epidemiology)
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Mahmoodi, M.
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Mahloudpouri, Ata
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Mahloudpouri, Ata
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Mahloudzadeh Ni Knam, H.
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Mahnama, Seyyedeh Tayyebeh
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Majumdar, Mrityunjoy
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Makimura, K.
CRYPTOSPORIDIUM PARVUM (isolation and purification)

Maleki, F.
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Malekzadeh, R.
HELICOBACTER PYLORI (isolation and Purification)

Malik, Lamees Mahmood
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Malekzadeh, A.
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Makimura, K.
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Malik, Mahmood Ali
HIRSUTISM (etiology)

Malik, Muhammad Akbar
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Mallhi, Ashraf Ali
HEPATITIS B (epidemiology)

Mansour, Abbas Ali
DEPRESSION (epidemiology)

Markelov, Vladimir V.
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Maruthamuthu, S.
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Masarat, S.
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Masnavi, M.R.
URBAN RENEWAL (standards)

Mehrabani, H.
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Mehrdadi, N.
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Matloubi, A.A.
WATER POLLUTION

Matowe, W.C.
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Mehranbod, H.
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Mehradi, N.
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Memon, Saleh A.B.
PLEURAL EFFUSION (etiology)

Mengal, Alwan H.
EPILEPSY (epidemiology)

Menku, Ahmet
ECHINOCOCCUS GRANULOSUS (genetics)

Meshkat Al Sadat M.H.
OILS, VOLATILE (chemistry)

Meshkini, Ali
PLASMACYTOMA (diagnosis)

Mir Mohammad Sadeghi, H.
BLEOMYCIN (toxicity)

Mireftash, M.
URINARY TRACT INFECTIONS (drug therapy)

Mirhendi, H.
YEASTS (isolation and purification)

Mirhendi, S.H.
ECHINOCOCCUS GRANULOSUS (genetics)

Mirmokaddam, Ebrahim
TEUCRIUM

Mirmiran, P.
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Mirnia, S.K.
VISCUM ALBUM (microbiology)

Mirsalehian, A.
URINARY TRACT INFECTIONS (drug therapy)

Mirshahi, Manouchehr
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Mirza, Agha Zeeshan
CHEMISTRY, PHARMACEUTICAL

Mirza, Farhat
BLEOMYCIN (therapeutic use)

Mirzazadeh, A.
BRUCELLOSIS (epidemiology)

Mobiareek, Khalid F.
BRONCHIECTASIS (pathology)

Moghadam, M.H. Baghian
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Moghadam, Fatemeh
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Mohajery, M.
LEISHMANIASIS, CUTANEOUS (drug therapy)

Mohajir, M. Siddiq
FRUIT (physiology)

Mohamed, A.I.
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Mohamed, Gamal E.
HUMAN PAPILLOMAVIRUS 18

Mohamed, Gamal Khalafalla
DELIVERY OF HEALTH CARE (economics)

Mohammad, A.I.
OBESITY (surgery)

Mojtahedzadeh, M.
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Mohanan, S.
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Mohd, Asiya
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Mohebali, M.
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Moghadam, M.H. Baghian
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Moghaddas, Fatemeh
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Moghaddas, Masoumeh
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Mohsenifar, Afshin
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Mokhtari, Mashkoor
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Mohummad, Jan
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Mojtahedzadeh, M.
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Mokey, El Din, Ekbal
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Monavari, S.
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Morales, Jose
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Morcos, S.
CARDIOMYOPATHIES (pathology)

Mortazavi, Fakhrossadat
URGENETICAL ABNORMALITIES (epidemiology)

Mortazavi, S.B.
OCCUPATIONAL HEALTH

Mosayebi, Ghasem
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| 0256-4947 | Annals of Saudi Medicine |
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| N/A | Joint Centre for Research in Prosthetics and Orthotics [The]* |
| 1319-1683 | Journal of Family and Community Medicine* |
| 1319-1004 | Journal of King Abdulaziz University - Medical Sciences* |
| 1319-9218 | Journal of the Saudi Heart Association |
| N/A | MEJO - Middle East Journal of Ophthalmology* |
| 1319-6138S | Neurosciences |
| 1319-6995 | Pan Arab Journal of Neurosurgery |
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| 1319-3965 | Saudi Epidemiology Bulletin |
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| 1319-3767 | Saudi Journal of Gastroenterology [The] |
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| 1319-6308 | Saudi Journal of Sports Medicine [The]* |
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| 1013-9052 | SDJ - Saudi Dental Journal [The] |
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* No issues received since 2004
Last update March 2008

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