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

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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
Antibodies, Antinuclear

immunology

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

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

E-mail:aalwan@squ.edu.om

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

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

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

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

Figure (1): Sample of IMEMR citation
Subject Index
**ABO Blood-Group System**

**Distribution of ABO blood groups and Rhesus factor in Southwest Saudi Arabia.**
Sarhan, Mohammed A.; Saleh, Kamel A.; Bin Dajem, Saad M.
E-mail:mohammed_sarhan@yahoo.com
King Khalid University - Faculty of Science - Department of Biological Sciences


**Keywords:** Rh-Hr Blood-Group System; Phenotype

**Abstract:** To document the distribution of the ABO and rhesus Rh blood groups in a random sample of Saudi students from the King Khalid University, Abha, Kingdom of Saudi Arabia, and to compare our results from that of other studies in the Kingdom and elsewhere. The subjects included in this study were 944 males from the southwest region of Saudi Arabia including Aseer, Jizan, and Najran regions. The ABO blood groups and Rh factor from 944 Saudi males were determined. The frequency of ABO blood groups and Rh status were calculated separately. This study was carried out at King Khalid University, Abha, Kingdom of Saudi Arabia, from January to March 2008, and the ethical approval was obtained from the Research Ethical Committee, College of Science, King Khalid University. The frequencies of ABO groups showed 56.8% for group O, 33.4% group A, 6% group B and 3.8% group AB trend. Only 7.2% of them were found to be Rh-negative. The frequencies of ABO and Rh phenotypes in the southwest population of Saudi Arabia are similar to those reported in most areas of the Arabian Gulf region.

**Abortion, Spontaneous**

**Risk factors of abortion among pregnant women in almukalla MCH Hospital, Hadhramout, Yemen.**
Balafair, Amer S.
Hadhramout University of Modern Science and Technology - Faculty of Medicine

**Assiut Medical Journal** 2008; 32 (3): 77-84 (14 ref.)

**Keywords:** Risk Factors; Diabetes Mellitus; Hypertension; Maternal Age; Maternal-Child Health Centers; Pregnancy; Case-Control Studies

**Abstract:** Abortion is a common health problem in our community and worldwide. However, there are a lot of contradictions among the studies regarding the risk factors of this problem. The aim of this study is to identify the risk factors of abortion in our locality. This is a case-control study conducted in the period from November 2007 to April 2008. 448-pregnant women were enrolled in the study. They were classified into 224 women with pregnancy loss at or less than 24 weeks of pregnancy as study group, and 224 women who completed their pregnancy as control group. Data were collected by using questionnaire about personal data, economic status, number of gravidity and parity, drug use, special habits and medical diseases in relation to abortion. The data were, analyzed manually and by using excel program and special statistical elements [OR, CI 95% and P-value. In respect to risk related to age, the significant risk is found in age group more than 35 years old; P value = 0.00. The probability of abortion increased if the number of gravidity is 2-5 or more than 5; P value = 0.004, 0.001 respectively, and the number of parity has significant association with abortion if equal or more than 5; P value = 0.00. Infection with toxoplasmosis has strong association with abortion; OR = 7.55, P value - 0.002. Other medical diseases have no significant association with abortion like thyroid disease; OR - 1.51, P value - 0.6, diabetes mellitus; OR = 1.3, P value = 0.6], hypertension; OR = 7.75, P value = 0.6 and urinary tract infection; OR = 0.61, P value - 0.2. Same results were obtained about leuteal phase support drugs; P value 0.09. The economic status has no significant association with abortion [enough and incur, P value = 47.5, 0.32 respectively]. Special habits like Qat chewing, smoking and coffee drinking have no association with abortion; P value > 0.05 for all of them. Age more than 35 year old, infection with toxoplasmosis in pregnant women, number of gravidity more than 2, and number of parity equal or more than 5 have strong association with abortion . Economic status, other medical diseases, luteal phase support drugs and special habits like Qat chewing ,smoking and coffee drinking have no significant association.

**Acalculous Cholecystitis**

**complications**

**Acute acalculous perforated cholecystitis.**
Murtaza, Badar; Malik, Imran Bashir; Mahmood, Asad; Saeed, Saira; Sharif, Muhammad Ashraf
E-mail:badar_murtaza@yahoo.com
Combined Military Hospital - Department of General Surgery

**JCPSP - Journal of the College of Physicians and Surgeons Pakistan** 2009; 19 (3): 183-185 (10 ref.)
Keywords: Acalculous Cholecystitis-diagnosis; Acalculous Cholecystitis-pathology; Risk Factors; Multiple Organ Failure-therapy; Acute Disease; Peritonitis; Cholecystectomy

Abstract: A case of acute acalculous perforated cholecystitis with acute generalized peritonitis in a middle aged cachectic man, presenting late in a moribund condition, is reported. He underwent emergency laparotomy [subtotal cholecystectomy], went into multi-organ failure and was managed accordingly. The patient recovered in about 2 weeks and was followed-up regularly.

Accidents, Traffic

mortality

Pattern of motorcyclist’s mortality in Mazandran province, northern Iran.
Janmohammadi, N.; Pourhossein, M.; Hashemi, S.R.
E-mail:dr jamohammadi@yahoo.com
Babol University of Medical Sciences - Shahid Beheshti Hospital - Department of Orthopaedics
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 81-84 (24 ref.)
Keywords: Accidents, Traffic-trends; Accidents, Traffic-epidemiology; Motorcycles; Mortality-trends; Head Injuries, Closed-mortality; Head Injuries, Closed-epidemiology; Cross-Sectional Studies
Abstract: Road traffic accidents [RTA] is recognized internationally as the major threat to human health and, motorcycle collision victims form a high proportion of those killed or injured in RTA. This study was performed to evaluate the patterns of motorcyclist's mortalities. All motorcyclists' corpses that were presented to the legal medicine center of Mazandaran Province during January 2002 to January 2004 were enrolled and the patterns of motorcyclist's mortalities were determined. Of the 89 bodies, 93.3% were male and 84.2% were riders. About 60% sustained injuries from collision with a car. Two third of the deaths occurred in the first half of the year. Three fourth of the death occurred in heavy traffic volume time of a day [7 am to 10 pm] peaking at 9 pm [21%]. Fifty seven percent died on the rural roads collisions and 47% on the urban road collisions. Head injury was the main cause of death [50.6%]. Motorcyclist's mortalities were prevalent in young motorcycle riders [males], collision with a car, first half of the year, heavy traffic volume time, riding on rural roads, and head injury was the main cause of death.

Achilles Tendon

injuries

Spontaneous atraumatic achilles tendon rupture in healthy individuals: biomechanical aspect.
Syed, Shakir; Bhatti, Arshad; Shah, Mian Munawar
E-mail:drshakirsyed@yahoo.com
The Royal Shrewsbury Hospital - Department of Trauma and Orthopaedic
Keywords: Achilles Tendon-physiopathology; Risk Factors; Rupture, Spontaneous; Ultrasonography
Abstract: Achilles tendon rupture bilaterally secondary to predisposing factors such as steroid, fluoroquinolones, SLE, RA etc. Other factors are well-described in the literature but this is an extremely rare phenomenon in the absence of risk factors. Available reports in healthy athletes, all had history of severe trauma. We report an unusual presentation of bilateral and unilateral spontaneous rupture of Achilles tendon in healthy lifeguards without any marked trauma. Knowledge of training environment will alert the trainers, athletes and surgeons to recognise training environment at risk and take preventive measures.

Acid-Base Imbalance

etiology

Acid-base disturbances and related factors in patients under general anesthesia.
Lak, M.; Arghizadeh, H.
E-mail:marziehlak@yahoo.com
Baqiyatallah University of Medical Sciences - Department of Anesthesiology
Acne Vulgaris

The efficacy of topical solution of 0.3% ciprofloxacin in treatment of mild to moderate acne vulgaris.
Valli, A.; Faghihi, G.; Zaghian, N.; Koosha, M.
E-mail: anahitavali@yahoo.com
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Acne Vulgaris

therapy

The efficacy of topical solution of 0.3% ciprofloxacin in treatment of mild to moderate acne vulgaris.
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Adverse Drug Reaction Reporting Systems

Adverse drug reaction reporting by hospital pharmacists in Saudi Arabia.
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Keywords: Drug Toxicity; Pharmacists; Hospitals; Attitude

Abstract: To study hospital pharmacists attitude and behavior toward reporting of adverse drug reactions [ADRs] in different hospitals throughout Saudi Arabia. This is a descriptive study on a sample of 510 hospital pharmacists who were asked to answer a self-administered questionnaire. The first section of questions sought to obtain pharmacists and pharmacy demographics, references available and continuing education activity. It also covered general questions that were intended to measure the extent of the respondent's knowledge regarding the Saudi ADR reporting system and pharmacists' behavior toward it. Another section of the questionnaire explored pharmacist's attitude to reporting
and factors that may affect their attitude. The response rate by pharmacists was 67.1% in which more than half were Saudi pharmacists [56.7%]. The study showed that 45.6% of pharmacists were aware of the ADR reporting program in Saudi Arabia. Almost all the respondents considered the reporting of ADR to be an essential part of their professional responsibility and acknowledge the importance of reporting. Only 7% of pharmacists in the study submitted an ADR report to the Ministry of Health, while 23.1% of them claimed they submitted an ADR report to their hospitals. The study also showed many barriers affecting ADR reporting by hospital pharmacists such as insufficient clinical knowledge [42.7%], all serious side effects are detected before marketing [35.7%], unknown address of the reporting agency [33.6%], reporting form not available [33.3%], do not know how to report [22.6%] and finally the form is complicated to be filled [17.3%]. When looking at the factors that could encourage ADR reporting, the study showed that the publication of an ADR bulletin [64.3%] and receiving a feedback from the program [64.1%] are important factors to be considered. Hospital pharmacists in Saudi Arabia seem to have a good knowledge regarding the country's ADR reporting system but they are still considered underreporting. Many barriers were identified in the study that is negatively affecting ADR reporting. The results highlight the importance of promoting and improving the current ADR reporting system in Saudi Arabia and try to overcome any barrier that could prevent such progress.

**Affect**

**Relation between worry domains and health related quality of life in medical sciences students.**
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**Payesh - Health Monitor** 2009; 8 (1): 85-92, 96 (20 ref.)

**Keywords:** Students, Medical; Quality of Life; Questionnaires

**Abstract:** To determine the relationship of worry domain with quality of life [QOL] in Tehran University of Medical Sciences [TUMS] Students. In this descriptive correlation study, 400 medical university students [231 women, 169 men] from 7 different schools related to TUMS completed corresponding versions of QOL [SF-36] and worry domain questionnaires. In this process, after the participants gave informed consent, they were administered the WDQ, and QOL in random order and in the same time period [8 Am. to 12 md.]. A demographic survey that solicited information about the participants' age, gender, and the other necessary demographic information was also completed. The results of the present study indicated that worry was in a severe level in 4.8% and in medium level in 34.3% of students. The results also indicated that worry and quality of life were negatively direct related. A regression analysis revealed that Quality of life was significantly negatively related to worry level [P < 0.0001, r = 0.682]. It appeared that it is important for university policy makers to plan for reduce worry domain and increase the QOL of students in order to improve student's health.

**Albizzia**

**The analgesic and anti-inflammatory activities of the extract of albizia lebbeck in animal model.**
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Tokushima Bunri University - Faculty of Pharmaceutical Sciences


**Keywords:** Phytotherapy; Analgesics; Anti-Inflammatory Agents; Plant Extracts-therapeutic use; Models, Animal

**Abstract:** The extract of the bark of Albizia lebbeck Benth. Obtained by cold extraction of mixture of equal proportions of petroleum ether, ethyl acetate and methanol was chosen for pharmacological screening. In rat paw edema model induced by carrageenan, the extract at the 400 mg/kg dose level showed 36.68% [p < 0.001] inhibition of edema volume at the end of 4h. In the acetic acid-induced writhing test, the extract at the 200 and 400 mg/kg dose level showed 39.9% and 52.4% inhibition of writhing, respectively. In radiant heat tail-flick method the crude extract produced 40.74% [p < 0.001] and 61.48% [p < 0.001] elongation of tail flicking time 30 minutes after oral administration at the 200 and 400 mg/kg dose level, respectively.

**Albuterol**

**chemical synthesis**

**Utility of certain spectrofluorimetric methods for analysis of two pharmaceutical binary mixtures.**
Emara, Kamla M.; Abdel Wadood, Hanaa M.; Bakr, Marwa F.
Assiut University - Faculty of Pharmacy - Department of Pharmaceutical Analytical Chemistry
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 183-195 (34 ref.)

**Keywords:** Chemistry, Pharmaceutical; Epinephrine; Spectrometry, Fluorescence

**Abstract:** Simple and very sensitive spectrofluorimetric methods were developed for determination of adrenaline [I] - procaine hydrochloride [II] mixture and salbutamol sulfate [III] - guaifenesin [IV] mixture. adrenaline [I] in the first mixture was determined by coupling with 5-diazo-l,2,4-triazolo-3-carboxylic acid [DTCA] reagent in alkaline medium forming fluorogenic product which can be measured at 340 nm [lambda ex. 245 nm], while procaine hydrochloride [II] gave no fluorescence. salbutamol sulfate [III] was analyzed by reaction with ethyl acetoacetate [eaa] forming coumarin derivative, which can be measured at 320 nm lambda ex. 280 nm], guaifenesin [iv], the second drug in mixture has a considerable native fluorescence in methanol was measured at 310 nm [lambda ex. 230 nm]; all variables affecting reaction conditions were optimized. linear correlations were obtained over the range of 19-100, 37-400 and 22-150 ng/ml for [I], [III] and [IV], respectively. the proposed methods were successfully applied for the analysis of the studied drugs in their pure and commercial dosage forms and the obtained results were in good agreement with those obtained from the reported methods; no significant difference in the accuracy and precision as revealed by the accepted values of t-and f-tests, respectively.

**Almitrine**

Determination of binary mixture of raubasine and almitrine dismesylate by derivative spectrophotometry.

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**Keywords:** Secologanin Tryptamine Alkaloids; Spectrophotometry

**Abstract:** A first derivative spectrophotometric [[1]D] and derivative ratio [1DD] methods were utilized to determine raubasine [I] and almitrine dismesylate respectively using methanol as a solvent. A linear relationship was obtained in the range from 6-20 microg ml\(^{-1}\) raubasine for the [[1]D] method and 10- 24 microg ml\(^{-1}\) almitrine dismesylate for the [[1]DD] method. By applying the proposed methods, it was possible to determine raubasine in its pure powdered from with accuracy 99.94 +/- 0.860 \([n = 8]\) for the [[1]D] method and almitrine dismesylate with accuracy 100.07 +/- 0.784 \([n = 8]\) for the [[1]DD] method. Laboratory prepared mixtures containing different ratios of [I], [II] were analyzed by the proposed methods. The proposed methods were validated and found to be suitable assay methods for raubasine [I] and almitrine dismesylate [II] in pharmaceutical formulations.

**Ambroxol**

**pharmacokinetics**

Stability study of ambroxol hydrochloride sustained release pellets coated with acrylic polymer.

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**Keywords:** Ambroxol-administration and dosage; Acrylic Resins; Delayed-Action Preparations; Drug Stability

**Abstract:** The aim of the present study is to perform stability study of Ambroxol Hydrochloride sustained release pellets stored in different storage conditions. The drug loaded beads were prepared by Extrusion-Spheronization technology then coated with ammonio methacrylate copolymer Type A [Eudragit RL 30 D] and ammonio methacrylate copolymer Type B [Eudragit RS 30 D] at a ratio of 2:3 [8% polymer by weight on dry basis] in Fluid Bed Coater [Wurster column]. Stability study of pellets was performed as capsule dosage form in Aluminium-PVDC packaging mode at room temperature, 40°C, 40°C/75% RH and 30°C/70% RH for three months. After one month the size of the pellets was changed in all conditions. The color of the pellets remains unchanged up to the 2nd month in all conditions except at 40°C/75%RH and in this case some pellets become brown. But after 3[rd] month, pellets become brownish in all conditions except at room temperature. At RT the color of pellets remains unchanged during the stability study. The mean drug content decreased gradually in all conditions. In acid media the initial drug release was 23% but after 1[st] month it was decreased to 13-15% in all conditions. In the buffer media \([pH 6.8]\) the drug release was increased a little bit in all conditions except at 30°C/70% RH with the passes of storage time. Stability studies at 30°C/70% RH revealed consistent drug release \([f2 > 50]\) throughout the stability period. The physical properties of pellets as well as the in vitro release profile of the drug was found to be a function of the different storage conditions as well as the physico-chemical nature of the polymers.
**Amino Acids, Neutral therapeutic use**

Dietary supplemtations of amino acids: evidence for enhanced serotonergic functions following haloperidol withdrawal in rat medial prefrontal cortex.

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**JCPSP - Journal of the College of Physicians and Surgeons Pakistan** 2009; 19 (3): 139-145 (25 ref.)

**Keywords:** Tryptophan; Valine; Serotonin-chemical synthesis; Serotonin-metabolism; Catalepsy; Haloperidol-adverse effects; Rats, Wistar; Amino Acids-therapeutic use; Substance Withdrawal Syndrome-drug therapy; Prefrontal Cortex-drug effects; Dietary Supplements

**Abstract:**

To investigate the effects of orally supplemented amino acids L-Tryptophan [Trp] and L-Valine [Val] in rats repeatedly injected with haloperidol following one week of drug withdrawal, with particular reference to extrapyramidal symptoms [EPS] and serotonin [5-hydroxytryptamine; 5-HT] metabolism in medial prefrontal cortex [mPFC]. Experimental study. Place and Duration of Study: Department of Biochemistry, University of Karachi from December 2007 to February 2008. The study was conducted on thirty six locally bred male Albino Wistar rats. Freshly prepared amino acids [Val and Trp] were added in the drinking water of rats on alternate days and haloperidol at doses of 5.0 mg/kg or saline were injected twice daily for three weeks following one week of withdrawal. Locomotor/ exploratory activities were scored in activity boxes and open field apparatuses. Catalepsy was monitored on an inclined surface. The animals tested for locomotor activity and catalepsy for two weeks follow-up post-injections plus one week of drug withdrawal were decapitated to collect mPFC regions of rat brain for neurochemical analysis by high performance liquid chromatography with electrochemical detection [HPLC-EC]. There was significant increase [p < 0.01] in locomotor activity in rats orally supplemented with Val and Trp following one week of drug withdrawal from repeated administration. Marked reduction in cataleptogenic effects of the drug was also observed. Significant [p < 0.01] increases in the brain Trp and mPFC 5-HT metabolism in Val and Trp supplemented animals were also noticed. These findings help to demonstrate the effect of dietary amino acids, in particular, Trp to potentiate mPFC serotoninergic modulation of neuroleptic activity.

**Amnion**

Amniotic membrane dressing vs conventional topical antibiotic dressing hospitalized burn patients.

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**IRCMJ - Iranian Red Crescent Medical Journal** 2009; 11 (1): 66-70 (16 ref.)

**Keywords:** Burns-therapy; Biological Dressings-utilization; Biological Dressings-adverse effects; Anti-Infective Agents, Local; Silver Sulfadiazine-therapeutic use; Silver Sulfadiazine-administration and dosage; Silver Sulfadiazine-adverse effects; Burns-complications; Burns-mortality

**Abstract:**

Different natural and synthetic materials were used for temporary burn wound coverage; however, they are associated with disadvantages including high price which prohibit their widespread use, especially in developing countries. Among all, human amniotic membrane is the only easily available and cost free coverage. Its effects on burn wounds have been studied in this survey. One-hundred and twenty four patients with 20-50% second and third degree burns and without any other disease were randomly assigned into two groups. The first 61 patients [control group] underwent traditional method of dressing with silver sulfadiazine and gauze which were changed twice a day. The remaining 63 patients underwent dressing with human amniotic membrane [amnion group], being changed every 3-4 days. Patients in the control group had significantly lower albumin and needed more albumin infusion [231.80 +/- 234 gr. versus 111.51 +/- 143.82 gr.], received more blood transfusion [1.75 +/- 2.52 bags versus 0.65 +/- 1.18 bags], had significantly more intense pain and so received more narcotics than amnion group [7.97 +/- 7.56]. Wound infection was higher in the control group [65.66% versus 46.91%] and so was the incidence of sepsis [24.62% versus 6.10%]. There was 8.53% mortality in the control group versus 0% in the amnion group. All of the above-mentioned differences were statistically significant. Amniotic membrane dressing in deep and more extensive burns leads to better homeostatic, immunologic and local results and because of its low price, its use is strongly recommended.
Anacardiaceae

chemistry

Polyphenolic compounds from the leaves of schinus terebinthifolius raddi.
Farag, Salwa F.
Assiut University - Faculty of Pharmacy - Department of Pharmacognosy
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 319-329 (25 ref.)
Keywords: Plant Leaves; Plant Extracts; Quinic Acid-analogs and derivatives; Tannins; Chromatography, High Pressure Liquid; Phenols; Caffeic Acids; Flavonoids; Glycosides; Galactose; Catechin
Abstract: Two quinic acid esters, 5-O-caffeoylquinic acid [1] and 5-O-coumaroylquinic acid [2]; three myricetin glycosides, myricetin 3-O-alpha-L-rhamnopyranosyl [r"-> 6"] beta-D-galactopyranoside [3], myricetin 3-O-beta-D-glucuronide [4], and myricetin 3-O-beta-D-galactopyranoside [5]; 1,6-digalloyl-beta-D-glucose [6]; and [+] catechin [7] were isolated and identified for the first time from the leaves of Schinus terebinthifolius Raddi. Furthermore, investigation of tannic acid content was carried out by HPLC.

Analgesia

methods

Appropriate analgesia for breast surgery by paravertebral anesthesia.
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Shahid Beheshti University [MC] - Shohada Hospital
Keywords: Anesthesia, Conduction-methods; Mastectomy, Segmental; Patient Satisfaction; Pain Measurement; Breast-surgery
Abstract: Due to the increasing number of breast masses and a more precise attention to them, a greater number of patients refer to clinics for biopsy or resection of breast and axillary lymph nodes. An appropriate anesthesia method can decrease hospitalization time, its expenditure and postoperative complications. Paravertebral anesthesia [1] is a simple and feasible method in most cases and can provide a very suitable analgesia for biopsy and operation and postoperative analgesia. Paravertebral block was used for analgesia for 15 women having breast masses who were candidates for biopsy and pathology examination by frozen section. Biopsy was performed only by a single paravertebral injection [we did not insert catheter for continuous analgesia] with sedation. The patients' satisfaction and analgesia were evaluated postoperatively. First pain complaint and burning which demanded opioid prescription was considered at the end of analgesia of the block. The patients were evaluated for analgesia for 24 hours. Paravertebral block provides an appropriate analgesia for breast surgery, and with good technical performance it offers a high rate of success. Average duration of analgesia was 17 hours and the patients did not need opioid in this period; 60% of the patients [9 people] were discharged at the same day of the surgery in the afternoon. Those patients requiring mastectomy following the biopsy were anesthetized with tracheal intubation and atracurium muscle relaxant, and no opioid drug was used in their surgery. All the patients [15 people] expressed their satisfaction with paravertebral block. Breast surgeries with paravertebral block were performed with a high rate of analgesia and patients' consent, a good reduction in patients' expenditure and much lower incidence of complications and early ambulation of patients. Other regional methods like thoracic epidural block, intercostals block and local infiltrations are also used for these surgeries. However, as the duration of surgeries differs from one another, a safe and comprehensive method is important, and paravertebral block has these characteristics.

Andrographis

Evaluation of beneficial effects of antioxidant properties of aqueous leaf extract of andrographis paniculata in STZ-induced diabetes.
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Al Ameen college of Pharmacy - Department of Pharmacology
Keywords: Phytotherapy; Antioxidants; Diabetes Mellitus, Experimental; Plant Leaves; Plant Extracts-therapeutic use; Rats, Wistar

Abstract: The beneficial effects of antioxidant properties Andrographis paniculata [Andrographis] were studied in the diabetic animals. Hyperglycemia, characteristic feature of diabetes mellitus leads to decreased antioxidant defense and hence development of oxidative stress, which in involved in the etiology of development of diabetic complications. The evidences suggest that good glycemic control and/or use of antioxidants may play an important role in the prevention of complications associated with diabetes. Diabetes was induced with single intraperitoneal injection of streptozotocin [45 mg/kg, i.p] dissolved in freshly prepared citrate buffer [pH 4.5], resulted in elevation of blood glucose levels, decrease in the superoxide dismutase and catalase activity. Oral administration of Andrographis [400 mg/kg, p.o] resulted in significant decrease in the blood glucose levels and increase in the activity of SOD and catalase. In conclusion Andrographis decreased the blood glucose levels in diabetic animals may be due to its antioxidant properties.

Anemia, Sickle Cell

complications

Anemic crisis due to Mycoplasma pneumoniae complication in sickle cell patients.
Zafer, Mubarak H.; Gamel, Abdul Moneim S.; Ansari, Mohamed A.; Hamid, Mohamed E.
King Khalid University - College of Medicine - Department of Pathology
Keywords: Mycoplasma pneumoniae; Anemia, Sickle Cell-diagnosis

Anesthesia, Caudal

methods

Comparison of the effect of sevoflurane and halothane anesthesia on the fall in heart rate as a predictor of successful single shot caudal epidural in children.
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Saudi Medical Journal 2009; 30 (1): 72-76 (18 ref.)
Keywords: Halothane; Methyl Ethers; Child; Heart Rate-drug effects; Anesthetics, Local; Predictive Value of Tests
Abstract: To investigate the effect of sevoflurane anesthesia on heart rate HR fall with the injection of the initial drug in caudal space to confirm the correct needle placement. After the ethical approval was obtained from the hospital’s ethics committee, a prospective, randomized, clinical study was designed in Yeditepe University Hospital, in 2007. Children aged 1-12 years, scheduled for infraumbilical surgery under general anesthesia, and caudal block were included in the study. Anesthesia was induced, and maintained by sevoflurane in group S n = 85, and by halothane in group H n = 82. Baseline HR was recorded before the caudal block was performed. The HR changes during the initial dose, and total drug injection were recorded followed by 2 more HR recordings taken 5, and 10 minutes after caudal injection. The success of the block was recorded by a blind observer. There were 167 children included in the study. Caudal block success was 96.5% in group S, and 97.6% in group H. Basal HR was 110.9 +/- 10.9 in group S, and 105.9 +/- 10.1 in group H. Following the initial drug injection, mean HR was 109.8 +/- 10.9 in group S, and 102.9 +/- 9.9 in group H. It was significantly lower than the baseline in group H. The only significant decrease in the HR of the patients in group S was at the tenth minute following caudal injection. The decrease in HR with drug injection has no value to predict the success of caudal block under sevoflurane anesthesia.
Anesthesia, General

adverse effects

Comparison of intraocular pressure and hemodynamic response subsequent to tracheal tube versus laryngeal tube insertion during general anesthesia.
Shiraz University of Medical Sciences - Department of Anesthesiology
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 52-56 (9 ref.)
Keywords: Anesthesia, General-instrumentation; Anesthesia, General-physiology; Intraocular Pressure; Blood Pressure; Heart Rate; Intubation, Intratracheal-adverse effects; Laryngeal Masks-adverse effects; Anesthesia, General-pharmacology; Hemodynamics
Abstract: It is well accepted that intraocular pressure should be controlled during general anesthesia (G/A) for intraocular procedures. This study was performed to compare the effects of the laryngeal and tracheal tubes on intraocular pressure (IOP), mean arterial pressure (MAP) and heart rate (HR) during the course of G/A. Eighty adult patients were randomly allocated to two groups for cataract surgery. Group A [n=40] underwent laryngeal tube (LT) placement and group B [n=40] had tracheal tube (TT) insertion. Anesthesia was induced by midazolam, fentanyl, propofol and atracurium and was maintained by propofol and 50% nitrous oxide in oxygen. IOP, MAP and HR were measured before and 3 minutes after induction of G/A, 1 and 5 minutes after tube placement, at the end of the operation, and 1 minute after extubation. The IOP at 1 minute after removal of the tracheal tube was significantly higher in the TT group than the LT group. The MAP at 1 minute and heart rate at 1 and 5 minutes after placement of the tubes were significantly higher in TT group than the LT group. In the course of G/A, using the same anesthetic agents such as propofol, and atracurium, LT had better control than TT on IOP, MAP and HR.

Anesthetics, Local

administration and dosage

Comparison of 3 doses of ropivacaine for epidural anesthesia in transurethral surgery.
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Erciyes University - Medical Faculty - Department of Anesthesiology
Keywords: Anesthetics, Local-therapeutic use; Anesthesia, Epidural; Transurethral Resection of Prostate; Urinary Bladder Neoplasms-surgery
Abstract: To investigate the use of 3 different doses of ropivacaine on the quality of anesthesia and hemodynamics in epidural anesthesia for transurethral surgery. The current study was conducted in the Department of Anesthesiology, Medical Faculty of Erciyes University, Turkey, between May 2004 and June 2006. The study recruited 81 males of ASA I- II group, ages 60-80 years, undergoing transurethral resection of prostate or bladder tumors. Patients were randomly assigned to 3 groups receiving epidural ropivacaine in different doses and concentrations. Group I n = 27 received 15 ml 102.5mg of 0.75% solution, group II n = 27 received 10ml 75mg of 0.75% solution, and group III n = 27 received 10 ml 50mg 0.5% ropivacaine. The quality of the blocks and the hemodynamic changes were compared. Motor block was significantly less in group III than in groups I and II. The sensory block level was T6 or more in 55% of patients in group I, 35% in group II, and 21% in group III. The duration of sensory block was less, and the time to achieve the T10 level was greater in group III. Hypotension and bradycardia were more frequent in group I. Effective anesthesia with few side effects was obtained with low dose ropivacaine.

Anterior Cruciate Ligament

surgery

[The aftermaths of the extensor system after reconstruction of the anterior cruciate ligament by the patellar tendon]
Meherzi, M.H.; Karray, B.; Bouaziz, M.; Zaalouni, I.; Nouri, H.; Ouertatani, M.; Ghannouchi, M.
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**Maghreb Medical** 2009; 29 (391): 227-231 (17 ref.)

**Keywords:** Arthroscopy; Patellar Ligament; Postoperative Complications; Retrospective Studies

**Abstract:** A few articles in the literature studied the sequelle of the withdrawal of the extensor system after reconstruction of the anterior cruciate ligament by Kenneth JONES methods. The goal of this work was to value these aftermaths clinics, radiological and isokinetics. It is a retrospective study of 113 patients operated in the institute of orthopedics MT KASSAB with a reconstruction of the anterior cruciate ligament by Kenneth JONES technique under arthroscopy. These patients were seen in order to appreciate the functional results, arthrometric [by Telos], isokinetic [by an isokinetic dynamometer [BIODEX]] and radiological [patellar height, calcifications, femoro-patellar osteoarthritis and the positioning of femoral and tibial tunnels by Aglietti's and Locker-Vielpeau's index]. At a middle review of 32 months: 36 patients [32%] had some pains, 33 patients had dyasesthesia to the external face of the knee or one gene to the level of the withdrawal site. The variation of the patellar height was not meaningful \( p = 0.052 \) a limit value and it was not correlated to the occurence of anterior pain \( p = 0.38 \). Eleven calcifications of the patellar tendon were noted, six to the level of his patellar insertion and five in full tendon. None of these calcifications did require a surgery. Three patients had a pinch of the femoro-patellar spacing with osteophytes. The postoperative amyotrophy of quadriceps was 0.83 cm. The muscular deficit of quadriceps was lower to 7% compared to the controlateral side. Thirteen sportsmen had accidents of isokinetic curves accompanied by pains. The withdrawal of the extensor system is delicate dragging a fragilisation of this system with a risk of fracture. The essential opposition point between the withdrawal of a patellar tendon and the one of the ischiojambier rest the post-operative morbidity. It is classic to say that the patellar withdrawal is source of problems that they are about previous pains, aftermaths dyasesthesia, cartilaginous lesion, patellar lowering or muscular deficit of quadriceps. The aftermat hs on the site of withdraw al of the patellar tendon are radiologically frequent but the most often asymptomatic.

**Anti-Inflammatory Agents, Non-Steroidal**

**analysis**

Simultaneous determination of the two non-steroidal anti-inflammatory drugs; Diflunisal and Naproxen in their tablets by chemometric spectrophotometry and HPLC.

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**Pakistan Journal of Pharmaceutical Sciences** 2009; 22 (1): 8-17 (24 ref.)

**Keywords:** Diflunisal-analysis; Naproxen-analysis; Spectrophotometry; Chromatography, High Pressure Liquid

**Abstract:** Chemometric spectrophotometry and HPLC were applied to the simultaneous determination of the two non-steroidal anti-inflammatory drugs; diflunisal \([I]\) and naproxen \([II]\). The applied chemometric techniques are multivariate methods including classical least squares \([CLS]\), principal component regression \([PCR]\) and partial least squares \([PLS]\); and the second derivative of the ratio spectra \([2Dr]\) method. To develop the multivariate methods, the UV absorption spectra of the standard solutions of the training and validation sets in methanol were recorded in the range of 242-274 nm at 2 nm intervals. The specificity of the studied multivariate methods has been tested. In the \([2Dr]\) method, analytical signals at 235 and 259 nm were selected for the determination of \([I]\) and \([II]\), respectively. The HPLC method depends on reversed-phase separation using C18 column. The mobile phase consists of a mixture of acetonitrile - acetate buffer \([pH 4.2; 50 mM]\) \([60:40, v/v]\). The UV detector was set at 255 nm. The developed methods were validated and successfully applied to the simultaneous determination of \([I]\) and \([II]\) in their tablets. The assay results obtained using the chemometric methods were statistically compared to those of the HPLC method and good agreement was observed.

**Antibiotic Prophylaxis**

Single and simple antibiotic prophylaxis for elective cholecystectomy.

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Military Hospital - Department of General Surgery


**Keywords:** Cholecystectomy; Surgical Wound Infection-microbiology; Surgical Wound Infection-prevention and control; Gallstones; Gentamicins-therapeutic use; Escherichia coli; Klebsiella

**Abstract:** To determine the postoperative infection result after use of a single and simple antibiotics for prophylaxis in open elective cholecystectomy. Descriptive [quasi-experimental] study. Place and Duration of Study: This study was conducted in Military Hospital, Rawalpindi from December 2006 to January 2008. One hundred and sixteen patients requiring elective open cholecystectomy were included. Patients with acute cholecystitis, jaundice and choledocholithiasis were excluded. Only two doses of Gentamycin were used as prophylactic antibiotic for operation.
Special precautions were taken for maintaining sterilization during surgery. Out of 116 cases, 111 [95.7%] patients had smooth postoperative recovery and only 5 [4.3%] patients developed surgical site infection. Culture sensitivity of these 5 patients revealed E. coli in 2 [40%] cases, 01 [20%] patient had Klebsiella, while 2 [40%] had mixed growth. Single antibiotic prophylaxis for elective cholecystectomy is recommended provided strict aseptic measures are taken during surgery along with good surgical technique.

Aortic Coarctation

Management of coarotation of the Aorta; the use of multi-slice CT Scan in case selection.
El Said, Howaida Galal; Zaki, Aly Omar; Soliman, Hazem Hamed; Sorour, Khalid Ali
Cairo University - Department of Pediatric
Keywords: Tomography, X-Ray Computed; Echocardiography; Angioplasty, Balloon; Surgical Procedures, Operative; Disease Management
Abstract: Treatment options for native coarctation of the aorta [CoA] are catheter-based intervention [balloon angioplasty with or without stenting] or surgical repair. Selection of the appropriate treatment modality is crucial for safe management and is dictated by several factors including aortic anatomy and CoA morphology. Assessment of these factors is most commonly achieved using echocardiography coupled with either conventional angiography or magnetic resonance angiography. Multidetector computed tomography [MDCT] or multi-slice CT scan, although commonly used for diagnosis and follow-up of CoA following definitive treatment, has not been previously evaluated as a tool for deciding the optimal treatment modality. Aim is to evaluate employment of MDCT for selection of the appropriate treatment modality in patients with native CoA. Between May 2004 and June 2007, 17 patients with a mean age of 10 years [1 month-16 years] were referred for management of echocardiographically- documented isolated native CoA. MDCT scans of the heart and aorta were obtained in all patients using a 16-row CT scanner. The choice of definitive management strategy, whether catheter-based or surgical, was decided based on aortic anatomy and CoA morphology depicted in the MDCT images. Four of the 17 patients included in the study were deemed unsuitable for catheter-based intervention based on the MDCT images. Of the four patients, one had dense annular calcification of the proximal descending aorta, two had aneurysms of the ascending or descending aorta related to the CoA site and one had a hypoplastic aortic arch. Findings were confirmed at surgery. Surgeries were successful and uncomplicated. Balloon angioplasty with/without stent placement was performed in the remaining 13 patients. In this group, the peak systolic gradient decreased from a mean of 77 mmHg to a mean of 7 mmHg and the CoA site diameter increased from a mean of 2.4mm to a mean of 13mm. There were no complications. MDCT readily delineates aortic and CoA site anatomic and morphologic features that may negate catheter-based intervention in favor of surgical repair. This may help avoid complications and enhance successful and safe management of patient, whether infants, children or adolescents with native CoA.

Apomorphine

pharmacology

The study of apomorphine effects and heterogeneity in the medial prefrontal cortex on the dopaminergic behaviors of rats.
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Shiraz University of Medical Sciences - School of Medicine - Department of Pharmacology
Iranian Journal of Basic Medical Sciences 2009; 11 (4): 205-214 (49 ref.)
Keywords: Dopamine; Mastication; Prefrontal Cortex; Substance-Related Disorders; Behavior; Rats; Genetic Heterogeneity
Abstract: While the nucleus accumbens and the striatum have received much attention regarding their roles in stereotyped behaviors, the role of the medial prefrontal cortex [mPFC] has not been investigated to the same degree. Few studies have reported the role of the mPFC in dopaminergic induction of locomotor hyperactivity. The mPFC is a heterogeneous area [the anterior cingulated, prelimbic, and the infralimbic] with particular inputs and outputs to subcortical regions that may have different effects on stereotyped behaviors. In this work, apomorphine, a non-specific dopamine agonist, was microinjected into the three different subregions of the mPFC for induction of stereotyped behaviors to show the role of the three subareas of the mPFC on behaviors and its heterogeneity. Cannulas implanted in the infralimbic, the prelimbic or the anterior cingulated areas of the mPFC. Apomorphine microinjected at five doses and then behaviors recorded. There were significant differences among three areas. The rats receiving apomorphine in the anterior cingulated showed less sniffing and climbing but more chewing behaviors. Yawning observed more
significantly in the rats given apomorphine in the prelimbic area. The rats getting apomorphine in the infralimbic of the mPFC showed more climbing behavior. It was indicated that manipulation of the dopaminergic system in mPFC alters behaviors and with regard to this, there may be heterogeneity among its three subregions.

Arthroplasty, Replacement, Knee

 methods

Comparison of bilateral and unilateral total knee arthroplasty in Iranian hospital, Dubai.
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Iranian Hospital - Department of Orthopaedic
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 76-80 (11 ref.)
Keywords: Arthroplasty, Replacement, Knee-adverse effects; Arthroplasty, Replacement, Knee-rehabilitation; Delirium-etiologie; Knee Prosthesis-adverse effects; Knee Prosthesis-rehabilitation; Treatment Outcome
Abstract: There have been many studies in the literature on the advantages and disadvantages of bilateral versus staged or unilateral knee arthroplasty. In this study, the results of bilateral and unilateral total knee arthroplasty cases during the past 3 years were compared. The records of all cases undergoing total knee arthroplasty between March 2005 and February 2008 were studied retrospectively. There have been 62 patients [105 knees] operated, from seven different countries. Among these cases, 43 cases had bilateral TKA, from which 36 patients underwent simultaneous intervention, four patients had staged TKA with one-week gap and three cases were staged with one-year gap between interventions. Except for two cases of postoperative delirium [probably due to transient fat emboli] and three cases of transient renal impairment, there had been no complications in the simultaneous bilateral cases. The need of blood transfusion was significantly higher in simultaneous cases [1.7 unit/patient] compared to unilateral cases [0.6 unit/patient]. There were no major problems with the simultaneous bilateral total knee arthroplasty. In the case of bilateral varus deformity, the postoperative rehabilitation was easier and the patients were more satisfied. Moreover, considering the fact that most of our patients came from various countries, simultaneous total knee replacement effectively reduced the hospitalization costs and related expenses.

Aspergillosis

immunology

Effect of invasive aspergillosis infection on the immune responses of Cancer mice.
Sohrabi, Nooshin; Khosravi, Ali Reza; Hassan, Zuhair Mohammad; Mahdavi, Mehd; Amini, Abbas Ali; Tebianian, Majid
Tehran University - Faculty of Veterinary Medicine - Mycology Research Centre
Iranian Journal of Basic Medical Sciences 2009; 11 (4): 242-249 (35 ref.)
Keywords: Mice, Inbred BALB C; Neoplasms; Cytokines; Membrane Proteins; Toll-Like Receptor 2
Abstract: Using a cancer murine model of invasive aspergillosis [IA], we investigated the expression of TLR-2, Dectin-1 and the level of cytokine production by CD4+ T helper cells in different groups of mice [with or without cancer], also, the effect of invasive aspergillosis on the immune response pattern of cancer mice. Patterns of susceptibility and resistance to infection obtained with different groups of mice injected with Aspergillus fumigatus conidia. TLR-2 and Dectin-1 analyzed applying flowcytometry and cytokine production of cultured splenocytes by ELISA method. Cancer mice that challenged with A. fumigatus conidia showed significant increase in TLR-2 and Dectin-1 levels compared with the two other control groups [normal mice challenged with A. fumigatus and non-infected cancer mice]. Moreover, it showed insignificant decrease in IFN-gamma and IL-10 levels and insignificant increase in TNF-alpha level. The data demonstrated remarkable rise in IL-4 level and the mortality of cancer mice that intravenously infected with A. fumigatus. Probably IA causes stimulation in innate immunity and Th2 cells, also some disorganization in cytokine production in CD4+ T helper cells. We hypothesize that concomitance of IA and cancer may change the microenvironment for local or systemic immune responses. Other complementary studies could help supporting our hypothesis.
Asthma

blood

Serum levels of resistin in asthmatic children.
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El Minia University - Faculty of Medicine - Department of Pediatrics

Keywords: Resistin-blood; Disease Progression; Immunoglobulin E; Child

Abstract: Bronchial asthma is the most common chronic inflammatory disease of childhood. Macrophages play an important role in the inflammatory process in asthma. Human resistin predominantly present in macrophages. The aim of this study is to determine the serum level of resistin in asthmatic children. The study included 60 children, 45 with asthma and 15 healthy children as controls. They were selected from Chest Disease Clinic and inpatients ward of Department of Pediatrics, Suzan Moubarak Hospital for Pediatrics, Faculty of Medicine, El-Minia University. Asthmatic children were divided into mild intermittent, mild persistent, and moderate persistent asthma groups. Serum resistin level was assayed by ELIZA technique. The results showed significant higher serum level of resistin in all asthmatic children compared with control group [P < 0.000]. Also there were significant higher levels in mild persistent and moderate persistent asthma compared with control group [P < 0.001] while the difference between mild intermittent asthma and control group was not significant [p > 0.05]. There were significant differences among levels of serum resistin in asthmatic groups with higher level in the more severe groups [P < 0.001]. In all asthmatic children, there was significant positive correlation between serum level of resistin and peripheral blood eosinophils [PBE] count [r = 0.83, p < 0.0001] while significant negative correlation with percentage of predicted value of both FEV[1] and PEF [r = -0.89 and 0.88 respectively, both ps < 0.0001]. There was no relation between resistin serum level and the serum level of lgE in all asthmatic children [r = 0.24, p < 0.1]. We concluded that the serum level of resistin is increased in asthmatic children compared with control. Serum resistin levels increase with increasing disease severity of asthma. Resistin may play a role in inflammatory process in asthmatic children but has no role in allergic reaction in atopic asthma.

Asthma, Exercise-Induced

diagnosis

Sensitivity and specificity of self-reported symptoms for exercise-induced bronchospasm diagnosis in children.
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Tehran University of Medical Sciences - Growth and Development Research Center

Keywords: Asthma, Exercise-Induced-epidemiology; Bronchial Spasm-diagnosis; Sensitivity and Specificity-standards; Soccer; Spirometry-utilization; Foot Ball; Bronchial Spasm-epidemiology; Epidemiology-utilization; Cross-Sectional Studies

Abstract: Exercise-induced bronchospasm [EIB] is a common condition in elite athletes. The purpose of this study was to evaluate the diagnostic value of self-reported EIB symptoms in children. In a cross sectional study in 2005, all soccer player boys of 3 football schools of Shahr Rey a town in the south of Tehran, enrolled in this study. All subjects were asked for the presence of four cardinal symptoms of EIB [cough, wheeze, shortness of breath, chest pain/discomfort] during and after exercise. Self reported symptom-based EIB was defined as having at least two out of four symptoms. Findings were compared to spirometric criteria as a gold standard test. A total of 371 boys were enrolled in this study. The mean age of children was 11.67 +/- 1.53 years [range 7-16 years]. According to spirometric findings, 74 [19.9 %] subjects had EIB. The sensitivity and specificity of self-reported symptoms for EIB diagnosis were 13.0 % and 89.9 %, respectively. Self-reported symptoms of EIB in children can be useful for epidemiological study. Our results in Iran are comparable with studies in other countries and point to a relatively high prevalence of EIB among athlete children.
Atherosclerosis

diagnosis

Vascular insufficiency or neurologic problem? the importance of physical examination.
Hodjati, H.; Johari, H. Ghoddusi; Davani, Zeraatian Nejad
Shiraz University of Medical Sciences - Trauma Research Center - General Surgery Department
Keywords: Atherosclerosis-complications; Aorta, Abdominal-pathology; Iliac Artery-pathology; Intermittent Claudication-etiology; Leriche Syndrome-diagnosis; Leriche Syndrome-etiology; Leriche Syndrome-therapy; Ischemia-etiology; Ischemia-complications; Neurologic Manifestations; Physical Examination

Attitude of Health Personnel

Nursing attitude to spirituality and spiritual care.
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University of Social Welfare and Rehabilitation - Department of Nursing
Payesh - Health Monitor 2009; 8 (1): 31-37, 102 (14 ref.)
Keywords: Nurses; Spirituality; Spiritual Therapies; Nursing; Cross-Sectional Studies; Questionnaires
Abstract: To assess nurses’ attitude toward spirituality and spiritual care in the care of psychiatric patients/clients. A cross sectional study was conducted to assess the attitude of nurses of Razi psychiatric center on spirituality and spiritual care and providing an educational plan. Samples consist of 107 nurses of Razi psychiatric center. Data were collected using the Spirituality and Spiritual Care Rating Scale [SSCRS]. Data were analyzed with statistical software [SPSS] with using descriptive methods and statistical tests. Results showed mean score of attitude on spirituality and spiritual care was 63.40 [SD +/- 4.57]. Majority of participants scored between 33-92 which was highest scores for the questionnaire. It shows that attitudes of nurses of Razi psychiatric center to spirituality and spiritual care were positively high. Nurses- attitude for spirituality and spiritual care is positive and they believe that nurses must give spiritual care for their patients.

Autistic Disorder

complications

Is thermal regulation processing involved in the etiology of self injury of skin in autism?
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Shiraz University of Medical Sciences - Research Center for Psychiatry and Behavioral Sciences - Department of Psychiatry
Keywords: Autistic Disorder-psychology; Autistic Disorder-diagnosis; Body Temperature Regulation; Social Isolation-etiology; Social isolation-psychology; Self-Injurious Behavior-etiology; Self-Injurious Behavior-complications; Sensation-analysis; Down Syndrome; Mental Retardation

Bardet-Biedl Syndrome

diagnosis

Hypokolemic paralysis and megaloblastic anaemia in laurence-moon-bardet-biedl syndrome.
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E-mail:draman_ullah2000@yahoo.com
Jinnah Postgraduate Medical Centre
Keywords: Bardet-Biedl Syndrome-genetics; Bardet-Biedl Syndrome-epidemiology; Anemia, Megaloblastic; Hypokalemia; Hypokalemic Periodic Paralysis

Abstract: Laurence-Moon-Bardet-Biedl syndrome is a rare, genetically heterogeneous autosomal recessive disorder, characterized by progressive retinal dystrophy, polydactyly, obesity, hypogonadism, mental retardation, and renal dysfunction. Other manifestations include diabetes mellitus, heart disease, hepatic fibrosis and neurological features. Herein, 2 patients with Laurence-Moon-Bardet-Biedl syndrome are described, who had features of persistent hypokalemia and megaloblastic anemia.

Behcet Syndrome

diagnosis

[Internal iliac artery aneurysms in behcet's disease, two cases report]
Boujlel, M.; Turki, I.; Lahmandi, Mohamed; Ben Massoued, M.; Nouira, K.; Bassar, S.; Menif, E.
La Rabta Central University Hospital - Medical Imaging Department - Tunisia

Maghreb Medical 2009; 29 (391): 250-251 (16 ref.)

Keywords: Behcet Syndrome-complications; Iliac Aneurysm-diagnosis; Iliac Aneurysm-surgery

Abstract: Behcet's disease is a vasculitis more frequent in Japan, in the Middle East and in some Mediterranean countries. It is characterized by a classical triad of recurrent uveitis, oral and genital ulcerations. It is a systemic vasculitis affecting predominantly the venous system. Arterial manifestations in Behcet's disease are less common especially aneurysms who may in some cases quickly involve the vital prognosis. We report two cases of Behcet's disease with arterial internal iliac aneurysms complicated in the two patients by a rupture.

Benzoic Acid

analysis

Determination of benzoic acid and salicylic acid in commercial benzoic and salicylic acids ointments by spectrophotometric method.
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Dubai Pharmacy College


Keywords: Salicylic Acid-analysis; Ointments; Spectrophotometry; Chemistry, Pharmaceutical

Abstract: Commercial benzoic acid and salicylic acid ointments have been analyzed for benzoic acid and salicylic acid content by using a spectrophotometric method. Since benzoic acid and salicylic acid exhibit overlapping spectra, absorbance measurements are made at two wavelengths, i.e. 271 nm and 303 nm in ethanol [96%v/v] for simultaneous determination of the two compounds. The method is direct and involves only one step of absorbance measurement in the assay. The precision of the method, based on the analysis of synthetic mixtures of the two compounds, is within 2%. The recoveries of benzoic acid and salicylic acid in the ointments range from 99.9 to 100.6% and 99.5 to 101.3%, respectively and are comparable with those of the USP method [99.8 to 100.5% and 100.2 to 101.7%, respectively]. The proposed method is simple, rapid, precise and convenient for the assay of benzoic acid and salicylic acid in commercial preparations.

Bezoars

diagnosis

[Association of trichobezoard, gastric polyposis and splenomegaly]
Sahloul Central University Hospital - Hepatology and Gastroenterology Department - Sousse, Tunisia

Maghreb Medical 2009; 29 (391): 243-244 (20 ref.)

Keywords: Splenomegaly; Polyps; Stomach Diseases
Abstract: Gastric trichobezoar is a rare disease, usually present as a mass of hair in the stomach, and rarely associated with a gastric polypsis. We report the case of a twenty year old girl admitted in our service to explore a chronic anaemia. Clinical exam reveals an epigastric mass and Splenomegaly. Endoscopy and radiology concluded to a giant trichobezoar with gastric polyps treated by gastrotomy and excision of the mass.

Biomedical Research

Bibliometric analyses of biomedical research outputs in Lebanon and the United Arab Emirates [1988-2007].

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University of Sharjah - College of Medicine

Saudi Medical Journal 2009; 30 (1): 130-139 (43 ref.)

Keywords: Bibliometrics

Abstract: We assessed the role of bibliometric methods in representing quantitative and qualitative differences in biomedical research outputs in Lebanon and the United Arab Emirates UAE. Data on biomedical research productivity for years 1988-2007 were obtained from PubMed then imported into a specifically designed local database system and normalized to the population size for each country. Data reveal a continuous increase in research production in Lebanon, whereas a plateau phase is observed in the UAE between 1998 and 2007. In Lebanon, most of the citations originated from the capital city of Beirut, mainly the American University of Beirut. Detailed analysis of biomedical research objectives in Lebanon indicate a focus on internal medicine, anesthesiology, surgery, transplantation, medical genetics, pediatrics, obstetrics, neoplasms, and pain management. In the UAE, most of the biomedical publications originate from Al-Ain University. Detailed analysis of biomedical research objectives in the UAE indicate developed interest in pediatrics, obstetrics, clinical dysmorphologies, transplantation, dermatology, diabetes, and consanguinity. Biomedical research outputs quickly recovered in Lebanon following a long war 1974-1992 mainly supported by uninterrupted activities in private higher education institutes. In the UAE, the plateau phase for biomedical research output size could be due to the limitation of most of the research in the country to Al-Ain University. This situation may only improve when other institutes offering biomedical programs engage also in research activities.

Birth Weight

Gestational weight gain and fetal birth weight in rural regions of Rasht / Iran.

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Guilan University of Medical Sciences - Department of Community Medicine


Keywords: Cohort Studies; Poverty Areas; Demography-statistics and numerical data; Weight Gain-physiology; Epidemiologic Measurements; Health Personnel-utilization; Overweight-complications; Thinness-complications; Chi-Square Distribution-utilization; Infant, Low Birth Weight; Institute of Medicine U.S.-organization and administration; Fetal Macrosomia-etiology; Obesity-complications; Body Mass Index; Pregnancy-abnormalities; Pregnancy-physiology

Abstract: Proper nutrition during pregnancy is essential for optimal fetal growth. Investigation of the relation between pregnancy weight gain and birth weight in rural regions of Rasht, center of Guilan Province in Iran, was the purpose of this study. In this cohort study, prenatal data of 918 women who attended local health centers with singleton term pregnancies were recorded. Maternal demographic characteristics, anthropometric measurements, total pregnancy weight gain and birth weight were analyzed using Chi-square test, independent t-test, Pearson correlation and logistic regression with 95% confidence intervals. More than 50% of underweight women and women with normal weight and almost 30% of overweight and obese women gained weight less than what is mentioned in the Institute of Medicine [IOM] recommendations. The incidence rate of LBW was 7.1% and that of macrosomia was 5%. Mean weight gain of women with LBW was significantly less than mean weight gain of women who had an infant with a birth weight more than 2500 g [P = 0.002]. Women who gained weight less than the recommended range had higher rate of LBW in their infants [P = 0.01] and the incidence of macrosomia in women with a weight gain above the recommended weight was higher than that in others [P = 0.012]. Pregnancy weight gain less than what is mentioned in the IOM guideline was the only predictor for LBW [OR = 2.79, CI = 1.16-6.73, P = 0.02]. Pregnancy weight gains less than what is mentioned in the IOM recommendation was a significant predictor of LBW, regardless of pre-pregnancy BMI.
Bites and Stings

epidemiology

Epidemiology of animal bites in Rafsanjan, southeast of Islamic Republic of Iran, 2003-05.
Sheikhholeslam, N.Z.; Rezaeian, M.; Salem, Z.
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Rafsanjan Medical School - Department of Infectious Diseases
Keywords: Incidence; Dogs; Cats; Rabies Vaccines; Tetanus Toxoid-therapeutic use
Abstract: The incidence of animal bites in the Islamic Republic of Iran has been increasing in recent years. In a descriptive study of 1542 patients referred to a health centre in Rafsanjan city from 2003 to 2005, the incidence of animal bites in the area was estimated as 180, 195 and 241 per 100 000 in 2003, 2004 and 2005 respectively. Of the patients, 74% were bitten by dogs, 23% by cats and 3% by other animals [monkeys, rats, foxes, bats, donkeys, etc.]. The mean time delay from injury to initial management was 15.1 [SD 29.8] hours. Rabies vaccine was given to 85% of cases, rabies vaccine plus rabies immunoglobulin to 15% and tetanus toxoid vaccine to 66%.

Blood Donors

Prevalence of HBS Ag virus, anti-hepatitis C virus and anti-HIV among volunteer blood donor in Taiz private hospital, Yemen Republic.
Oshaish, Hussein A.; El Shazly, Hewaida; Elabsii, Abdul Rhman
Faculty of Medicine - Department of Internal Medicine
Assiut Medical Journal 2008; 32 (3): 163-170 (22 ref.)
Keywords: Blood-virology; Hepatitis C Antibodies; Hepatitis B Surface Antigens; Seroepidemiologic Studies; Prevalence; HIV; Hepacivirus; Hepatitis B virus
Abstract: This sero-epidemiological cross sectional study was conducted to determine prevalence of hepatitis B and C infection and HIV virus among volunteered blood donors [VBD] in Taiz private hospital, Yemen Republic. The prevalence of HB sAg was 7% and the prevalence in males is double that of females .Prevalence was increasing with age and those settled in rural areas showed nearly double prevalence to those settled urban areas [48/69 Vs 21/69].The HBV prevalence was significantly related to history of previous surgery [p-.0002 after adjustment, odds 3.1]. The prevalence of HCV was about 1% [10 cases only] with one third of them was consistent, with studies done in Sana'a indicating that HBV is the commonest among blood donors. Vaccination campaign, population education about HBV mode of transmission will help in decrease its carrier state. About cases HIV was not reported in this study.

Body Height

analysis

Etiology of short stature in East Azerbaijan, Iran.
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Tabriz University of Medical Sciences - Children Hospital - Department of Pediatrics
Keywords: Body Height-ethnology; Fetal Growth Retardation-complications; Hypothyroidism-complications; Turner Syndrome-complications; Malnutrition-complications
Abstract: Short stature is a common problem encountered by pediatricians and is the most common cause for referral to pediatric endocrinologists. Although most children referred with short stature are normal and classified as normal variants of stature [constitutional growth delay and familial short stature], it may sometimes be the only obvious manifestation of an endocrine or systemic disease. The objective of this study was to assess the characteristics of patients referred to pediatric endocrinology clinic because of short stature and determination of the etiology. Three hundred-seventy nine children and adolescents were studied which referred with short stature to pediatric endocrinology clinic. After complete clinical and paraclinical evaluation and appropriate treatment [if needed], patients were followed for at least six months. From 379 studied patients with a mean age of 9.7 +/- 3.7 years, 192 [50.7%] were girls and 187 [49.3%] boys [P=0.066]; short stature in 132 [34.8%] of patients was not approved. Normal variants of Short stature [familial and constitutional] constituted 53.3% of etiology in short patients. In 11.5% of short patients,
no obvious etiology was found, and 9.8% were born with intrauterine growth retardation. Other causes were growth hormone deficiency, hypothyroidism, skeletal dysplasia, Turner syndrome, and malnutrition. A great number of children and adolescents referred with short stature to pediatric endocrinology clinics are not really short. Greater than half of short patients are normal variants of Short stature.

Stunting among primary-school children: a sample from Baghdad, Iraq.
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Al-Nahrain University - College of Medicine - Department of Community Medicine
Keywords: Growth; Cross-Sectional Studies; Students; Schools; Body Mass Index; Prevalence; Sex Distribution; genetic Factors; Thinness; Malnutrition
Abstract: The aim of this study was to establish baseline information about the prevalence and distribution of growth deficit [stunting] in a sample of Iraqi schoolchildren from the capital, Baghdad. A cross-sectional descriptive analysis of the growth status of 5286 primary-school children aged 7-12 years [2888 males, 2398 females] was conducted by measuring the prevalence of stunting [height-for-age Z-score < -2], and underweight [body mass index-for-age] using the NCHS/WHO and IOTF/WHO cutoff values respectively. The prevalence of stunting only, and concurrent stunting and underweight, were 18.7% and 13.5% respectively, with a slight predominance among girls. The study also demonstrated the progression of height deficit with increasing age.

Brain

anatomy and histology

Evaluation of human brain volume by the tracing technique.
Mas, Nuket; Senan, Sevda; Firat, Murat; Tunce, Murvet; Basar, Ruhgun
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Kocatepe University - Faculty of Medicine - Department of Anatomy
Neurosciences 2009; 14 (1): 96-97 (5 ref.)
Keywords: Organ Size; Aging; Magnetic Resonance Imaging

pathology

A patient with left hemiparesis, seizure, and development delay on admission.
Incecik, Faruk; Herguner, Ozlem M.
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Cukurova University - Balcali Hospital - Department of Pediatric Neurology
Neurosciences 2009; 14 (1): 107-108 (3 ref.)
Keywords: Hemiplegia; Seizures; Syndrome; Congenital Abnormalities; Magnetic Resonance Imaging

Brain Abscess

diagnosis

Multiple cerebellar Aspergillus abscess in an X-CGD patient.
Metin, Ayse; Koker, Mustafa Y.; Ozturk, Mustafa H.; Sensoy, Gulnar
E-mail: drametin@gmail.com
Ministry of Health - Ankara Diskapi Childrens Hospital - Pediatric of Immunology
Neurosciences 2009; 14 (1): 94-95 (5 ref.)
Keywords: Aspergillosis; Cerebellar Diseases; Aspergillus-pathogenicity; Granulomatous Disease, Chronic; BCG Vaccine; Genetic Diseases, X-Linked; Brain Abscess-etiology; Magnetic Resonance Imaging
Brain Death

Brain death and organ donation in India, where do we stand? A personal experience.
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E-mail: drmichaelnpr@rediffmail.com
All India Institute of Medical Sciences - Department of Neurosurgery
Neurosciences 2009; 14 (1): 98-99 (5 ref.)
Keywords: Tissue and Organ Procurement; Education, Medical

Brain Diseases

diagnosis

Ethylmalonic encephalopathy. Another patient from Kuwait.
Ismail, E; Seoudiy, T; Morsi, E; Ahmad, A.H.
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Farwaniya Hospital - The Pediatric Department
Neurosciences 2009; 14 (1): 78-80 (16 ref.)
Keywords: Malonates; Mitochondrial Proteins; Brain Diseases-epidemiology; Magnetic Resonance Imaging
Abstract: We report a Kuwaiti girl with ethylmalonic encephalopathy. She presented at the age of 4 months with chronic mucoid diarrhea and delayed psychomotor development, and at 6 months she developed myoclonic epilepsy. She was found to have central hypotonia with pyramidal tract signs, acrocyanosis, and petechiae. Plasma lactate level was elevated. Blood spot and urine for organic acids results were consistent with the diagnosis of ethylmalonic encephalopathy. Cerebral MRI showed basal ganglia and white matter changes. Gene mutation study revealed homozygous deletion of exon 4 of the ETHE1 gene. The patient died at 14 months after extensive bronchopneumonia. Our objective is to alert physicians to the existence of such a devastating disease in our community and their role in the early diagnosis in the index patient for proper genetic counseling.

Brain Injuries

rehabilitation

Association between the functional independence measure and Glasgow coma scale regarding the rehabilitation outcomes of traumatic brain injury.
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Jordan University of Science and Technology - Department of Physiotherapy and Rehabilitation Sciences
Neurosciences 2009; 14 (1): 41-44 (23 ref.)
Keywords: Glasgow Coma Scale; Rehabilitation; Brain Injuries-epidemiology; Treatment Outcome
Abstract: To evaluate the outcomes of early comprehensive rehabilitation protocols for traumatic brain injury [TBI] using the functional independence measure [FIM], and to study the relationship between FIM and Glasgow coma scale [GCS] variables to determine which patients will be best served by rehabilitation therapies. Fifty-one subjects with diagnosed TBI receiving treatment at a single inpatient rehabilitation facility at Jordan University of Science and Technology, Teaching Hospital, Irbid, Jordan were enrolled in this experimental study between August 2006 and February 2008. Of the enrolled subjects, 47 completed the study. The mean age of the participants was 33 years [8 females and 39 males]. Glasgow coma scale was measured on admission. Functional independence measure score was measured on admission and on discharge. According to the GCS, the participants were divided into 3 groups as severe injury [GCS: 3-8 [n = 24]], moderate injury [GCS: 9-12 [n = 12]], and mild or no injury [GCS: 13-15 [n = 11]]. The FIM score and GCS and their relation were evaluated. Evaluation outcomes revealed a significant improvement in FIM scores after rehabilitation compared to the FIM admission [p = 0.00006] in severe TBI. In moderate TBI, the FIM scores were significantly improved [p = 0.0004] after rehabilitation. However, with minimal injury, the FIM scores were not significantly improved [p = 0.15]. Early rehabilitation interventions significantly improved the FIM scores in moderate and severe TBI patients.
Breast Neoplasms

classification

Age specific histologic types of carcinoma breast in Malaysians.
Sheikh, Muhammad Kamil; Khan, Farhat Aziz; Abdul Khalid, Imran Khalid Imran; Kumar, Gokula
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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 201-202 (5 ref.)

Keywords: Breast Neoplasms-pathology; Carcinoma, Ductal, Breast; Carcinoma, Intraductal, Noninfiltrating; Age Factors; Retrospective Studies

Abstract: The influence of age on various histological types of breast cancer at both age <50 years and >50 years to simulate menopause was studied retrospective from 2002 to 2004 in Malaysia. One hundred and fifty five cases were reviewed. Ninety two cases recorded at age < 50 years, 60 [65.2%, 95% CI: 54.6 - 74.8%] were infiltrating ductal carcinoma in 11[12.0%, 95% CI: 6.1-20.4%], ductal carcinoma in situ [DCIS] in 9 [9.8%, 95% CI: 4.6-17.8%], medullary carcinoma in 6 [6.5%, 85% Ct: 2.4-13.6%], invasive lobular carcinoma in 4 [4.3%, 95% Ct: 1.2-10.8%], mucinous carcinoma and poorly differentiated carcinoma in 2 cases [2.2%, 95% Ct: 0.3-7.6%]. At > 50 years of age, 63 cases were recorded. Forty seven [74.6%, 95% CI: 62.0- 84.7%] cases were of infiltrating ductal carcinoma, ductal carcinoma in situ in 9 [14.3%, 95% CI: 6.7-25.4%], mucinous carcinoma in 5 [7.9%, 95% Ct: 2.6-17.6%], medullary carcinoma [8.5%] and papillary carcinoma in 1 case each [1.6%, 95% CI: 0.0-8.5%]. Infiltrating ductal carcinoma was the commonest histology at both age < 50 years and >50 years.

drug therapy

Dual phase qualitative and quantitative 99mTc-mibi scintimammography for predicting response to neoadjuvant chemotherapy in breast cancer.
Maseeh-uz-Zaman; Nasir, Zafar; Raza, Tehseen; Hashmi, Hina; Hashmi, Adnan; Fatima, Nosheen
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Keywords: Neoadjuvant Therapy-methods; Technetium Tc 99m Sestamibi-diagnostic use; Radionuclide Imaging; Chemotherapy, Adjuvant; Cross-Sectional Studies

Abstract: To determine the role of dual phase 99mTc-MIBI scintimammography in predicting chemotherapeutic response in breast cancer. Cross-sectional study. Karachi Institute of Radiology and Nuclear Medicine [KIRAN], from September 2004 to March 2005. Female patients with locally advanced breast cancer being planned for the anthracycline-based neoadjuvant chemotherapy were included in this study. All subjects received a 740 MBq bolus intravenous injection of 99 mTc-MIBI. Ten minutes and 3 hours post-injection planar images were obtained in prone, lateral and supine positions using double head gamma camera. MIBI washout was scored as follows: >30% as a positive prognostic test [predicting a poor response to chemotherapy] and <30% as negative prognostic test [predicting a good response to chemotherapy]. Qualitative analysis of MIBI scans was also performed and categorized as visual wash-out or no visual washout as apparent on the early and delayed images. The criterion for the good and bad response was the reduction of >50% and <50% in the tumour burden respectively. Accuracy analysis, Chi-square test and Wilcoxon sign rank test were applied. There were 32 females [mean age: 46.3 years; median age 46 years; age range 33-65 years]. Quantitative dual phase 99mTc-MIBI scintimammography was found to be a good predictor of chemotherapeutic response in breast cancer. These were true positive in 8 patients and true negative in 19 patients with sensitivity [Sens.] 72%, specificity [Spec.] 90%, Positive Predictive Value [PPV] 80%, Negative Predictive Value [NPV] 86.5%, p < 0.03. Receiver Operating Characteristics [ROC] curve analysis demonstrates 30% as a cut-off value for the wash-out in quantitative dual phase MIBI for the prediction of the chemotherapeutic response. In comparison, qualitative scintimammography had Sens. 82%, Spec. 53%, PPV 29%, NPV 93% and p < 0.38. Statistical difference was found between early and delayed uptake ratios in the responders and non-responders. Quantitative dual phase 99mTc-MIBI scintimammography is a simple, reliable, non-invasive and effective tool for predicting the response to neoadjuvant chemotherapy. Furthermore, quantitative assessment is more precise than qualitative [visual wash-out] approach.
**economics**

**Breast cancer services at Assiut University Hospital 2004: cost and quality issues.**
El Gibaly, Omaira; Abdel Salam, Abdel Rady; Shehata, Samir; Abdel Badee, Ashraf
Assiut University - Department of Public Health

**Assiut Medical Journal** 2008; 32 (3): 171-180 (14 ref.)

**Keywords:** Health Services-economics; Health Care Costs; Quality of Health Care; Survival Rate; Hospitals, University

**Abstract:** A study was undertaken at Assiut University Hospital in 2004 to describe the processes of service delivery to breast cancer patients and to provide an answer the following question. To what extent are breast cancer services offered cost effective? Cost was estimated by identifying all medical records of breast cancer patients at the General Surgery and at the Oncology Departments for listing the dates admission to inpatient as well as dates of discharge to compute inpatient days at the hospital. Patients receiving chemotherapy were identified from the archived one days admissions at the medical informatics department. The outpatient visits for radiotherapy were also identified from the Oncology Department register for radiotherapy. The WHO estimate of cost of hospital inpatient bed/day and outpatient visit including drugs and investigations was used to estimate the cost of services in Assiut University Hospital. The estimated total cost of services for 2004 was 572,568 LE, for approximately 201 patients according to number of patients visiting the oncology outpatient for chemotherapy. The average cost /patient was 2848 LE. At each service point different numbers of breast cancer patients were receiving care. Some indirect measures point to the extremely poor stage of the disease for these women; notably more than 50% of the women receiving the radiotherapy are receiving it for palliative care, as they were meastatic patients. Effectiveness in term of survival was not possible to compute as medical records for inpatients are archived only for three years with the current expenditure levels, and lack of an information system can easily link elements and details of care provided with patient outcome, improvements in quality of care are not possible.

**genetics**

**Penetrance of BRCA1/BRCA2 specific gene mutations in Iranian women with breast cancer.**
Hashemian, Amir H.; Hajizadeh, Ebrahim; Kazemnejad, Anoshirvan; Atri, Morteza; Mehdipour, Parvin
Tarbiat Modares University - Department of Biostatistics

**Saudi Medical Journal** 2009; 30 (1): 41-44 (38 ref.)

**Keywords:** Mutation; Genes, BRCA1; Genes, BRCA2; Genetic Counseling; Penetrance

**Abstract:** To estimate the penetrance of breast cancer genes 1 and 2 BRCA1/BRCA2 specific gene mutations in Iranian women with breast cancer. We conducted this study in the Department of Biostatistics, Tarbiat Modares University, Tehran, Iran between January and May 2008. The information was collected from the referral database of the Cancer Clinics, Day General Hospital, Tehran, Iran. We estimated the penetrance of breast cancer in carriers of BRCA1/2 specific gene mutations based on the modified kin-cohort method. Three hundred and forty-five probands were examined for specific mutations of BRCA1/2 genes. The estimated penetrance for the age groups among BRCA1/2 carriers was 31.9% < 50 years and 46.2% >/= 50 years. The reliable information of penetrance is considered important in genetic counseling. The low value of the estimated penetrance in this study might be attributed to the rare mutation in Iranian patients. Establishment and use of a kin-cohort gene databank is proposed as a solution for the preparation of the screening programs and the estimation of the penetrance to help reduce the risk of cancer.

**mortality**

**Survival of breast cancer in Southern Iran.**
Heydari, S.T.; Mehrabani, D.; Tabei, S.Z.; Azarpira, N.; Vakili, M.A.
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**Iranian Journal of Cancer Prevention** 2009; 2 (1): 51-59 (34 ref.)

**Keywords:** Breast Neoplasms-epidemiology; Survival Rate; Breast Self-Examination; Early Detection of Cancer

**Abstract:** Breast cancer is the most frequent cancer in women in the western world. With breast cancer now affecting one in ten women, it is important to know how this disease burden is shared among women. This study was undertaken to determine the survival rate of breast cancer in southern Iran. From December 2001 to December 2006, among 8000 hospital-based registered cancer cases in southern Iran, 863 individuals with breast cancer entered our study. One, 5, 10 and 15 year-survival rates were estimated by Kaplan Meier function. Mean age at the time of diagnosis of breast cancer was 46.3 years [SD=11.5]. About 25.4% had a previous family history of cancer in their first and 13.8% in their second degree relatives. About 92.5%, 71.3% and 41.4% of breast cancer cases underwent surgery, radiotherapy and chemotherapy, respectively. Nearly 11.7% of patients had a history of exposure to chemical materials. About 32.3% were passive and 19.2% were active smokers. Totally, one, 5, 10 and 15 year-survival rates
were 97%, 67%, 45% and 25%, respectively. The survival rate had a significant negative correlation with age at the
time of diagnosis. The survival rate of women with breast cancer in southern Iran seems to be identical to other parts of
the country and stands between western and eastern European countries.

Elastography and its role in breast cancer screening.
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King Saud Hospital
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 203-204 (5 ref.)
Keywords: Elasticity Imaging Techniques-methods; Ultrasonography; Mammary; Mammography; Early Detection of
Cancer

Budd-Chiari Syndrome

etiology

[Budd-chiari syndrome a rare complication of hepatic echinococcosis; about 3 cases]
Nouira, K.; Ben Safta, Z.; Ben Mami, N.
La Rabta Hospital - Radiology Department - Tunisia
Maghreb Medical 2009; 29 (391): 245-248 (10 ref.)
Keywords: Budd-Chiari Syndrome-diagnosis; Echinococcosis, Hepatic-complications
Abstract: Hydatid disease is a parasitic infestation due to the development of echinococcus granulosus in the
organism. This disease is particularly frequent in Tunisia where echinococcosis is endemic. Liver is the most common
organ to be involved by hydatidosis and several complications have been described. Vascular complications secondary
to hepatic echinococcosis such as Budd-Chiari syndrome have rarely been reported. We present herein, three rare
cases of hydatid cyst complicated by Budd-Chiari syndrome. The cyst occupied at least two segments of the hepatic
dome in all patients and his diameter was 12, 5 cm, 21 cm and 12, 5 cm respectively. According to the Gharbi
classification, the cysts were type III in one case and type IV in the two others. The Budd-Chiari syndrome was chronic
in one patient and asymptomatic in the two others. His diagnosis was established by abdominal US in two cases,
completed by US Doppler and CT angiogram in one patient and by CT angiogram in the other. The diagnosis was
established only by CT angiogram in the later case. The Budd-Chiari syndrome was due to compression of two hepatic
veins in one case, compression of inferior vena cava in one case and compression of one hepatic vein and inferior
vena cava in one case. Laparotomy was performed in all patients. The surgical procedure consisted in resection of the
protruding hepatic tissue after puncture aspiration of the cyst in the three cases. The postoperative period was
complicated by abscess formation in residual cavity, requiring drainage and by development of ascitis, in one case.
Hydatid cyst should be remembered among the causes of Budd-Chiari syndrome in countries where the disease is
endemic. Conversely, this vascular complication should be looked for routinely in patients with hydatid disease of the
liver.

Burns

epidemiology

Epidemiology of burn injuries in west Azerbaijan province, western Iran.
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IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 85-89 (26 ref.)
Keywords: Burns-prevention and control; Burns-complications; Burns-mortality; Burns-etiology; Delivery of Health
Care; Incidence; Retrospective Studies
Abstract: Burn injuries are in many respects the most of all tragedies an individual can experience. So there was an
attempt to quantify the frequency of burn injuries, identify the risk and predisposing factors, determine the health
outcomes at Imam Khomeini Hospital in Urmia, western Iran. From March 2005 to March 2006, all demographic and
epidemiological information of 639 patients [48.36% female and 51.64% male] about the burns and the complications were provided from the records of patients at Imam Khomeini Hospital in Urmia, Western Azarbaijan Province, western Iran. The incidence rate of burn hospitalization was 21.6 per 100,000. Almost 31.8% of admissions were in the 16-25 years age group. Pediatric [< 5 years] and geriatric (> 65 Years] burns were [21.6%] and [3.2%], respectively. Burning with flame, the most common cause of burning, accounted for 36.4% of admissions in males and for 43.6% in females. The mortality rate was 25.9%. The percentage of patients who had more than 40% body surface area [BSA] burn was 30.9%. Patients with > 40% BSA burn had a mortality of 76.7%. The mean BSA burn was 33.8% in males and 25.2% in females. Admissions from Urmia were the most among the cities of the province. The mean duration of hospitalization was 7.76 days. The most cases occurred from October 22 to November 22; 10.95% and from Jun 21 to July 21; 9.54%. The results of this study help to guide health care efforts towards the prevention of burn injuries and provide a valuable baseline for assessing future efforts directed toward the prevention of burn injuries.

Buxus

Evaluation of hair growth activity of Buxus wallichiana Baill extract in rats.
Nandeesh, Rudrappa; Kumar, Bagepalli Srinivasa Ashok; Lakshman, Kuruba; Khan, Saleemulla; Swamy, Vantoor Byrappa Narayana; Bharathi, Tathireddy; Ganapathy, Seru
Sree Siddhaganga College of Pharmacy - Department of Pharmacognosy
Iranian Journal of Basic Medical Sciences 2009; 11 (4): 236-241 (25 ref.)
Keywords: Plant Extracts-pharmacology; Hair-growth and development; Antioxidants; Rats, Wistar
Abstract: The aim of this study was to evaluate antioxidant and hair growth activities of Buxus wallichiana Baill [Buxaceae]. Petroleum ether, chloroform, methanol and aqueous extracts of Buxus wallichiana subjected to antioxidant activity by; 2, 2-diphenyl-1-picryl hydrazyl and nitric oxide methods. Methanol extract of Buxus wallichiana at 50, 100 mg/kg, ointment of methanol extract at 5 and 10% used for the evaluation of hair growth property. Methanol extract showed potential antioxidant activity. Methanol extract at 100 mg/kg showed consistent and significant increase in mean score of hair growth from day 3 to day 24. Whereas 50 mg/kg increased the mean score significantly, only from day 15 to day 24. When methanol extract at 10% applied topically, significant increase in mean hair score observed only from day 15, but at 5% showed considerable increase in mean hair score only from day 21 and 24, when compared to the control. Conclusion The result of this study suggests that Methanol extract of Buxus wallichiana possess good antioxidant and hair growth activity.

C-Reactive Protein

diagnostic use

C-reactive protein: a useful marker for guiding duration of antibiotic therapy in suspected neonatal septicaemia?
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Baghdad University - Al-Kindi Medical College - Department of Paediatrics
Keywords: Sepsis-drug therapy; Time; Anti-Bacterial Agents-administration and dosage; Predictive Value of Tests; Prospective Studies; Intensive Care Units, Neonatal
Abstract: The study aimed to determine whether serum C-reactive protein [CRP] levels can be used to identify when antibiotics can safely be discontinued in cases of suspected neonatal septicaemia. Neonates with suspected neonatal septicaemia treated at a hospital in Al Ramadi city, Iraq, in 2005 had serum CRP and blood cultures [the gold standard] done at admission and at 48 hours, 4 days and 6 days after starting treatment. Of the 55 neonates, CRP was </= 6 mg/L at 48 hours in 37 [67.3%] and antibiotics could be stopped in 32 [82.5%], i.e. when blood culture was negative. The moderate sensitivity [78%] and negative predictive value [86%] of serum CRP in this study suggest that this test alone cannot be used for guiding duration of antibiotic treatment for neonatal sepsis.

Caffeine

Combined effect of chemical enhancers and ultrasound on the skin permeation of caffeine.
Borg, Thanana M.E.
Mansoura University - Faculty of Pharmacy - Department of Pharmaceutics
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 281-292 (26 ref.)
Keywords: Skin Physiological Phenomena; Permeability; Risk Factors; Ultrasonography; Ethanol; Rabbits; Models, Animal

Abstract: The combined effect of 800 kHz ultrasound with 2W/cm² intensity and chemical enhancers on the skin permeation of caffeine was investigated using excised ear rabbit skin. Menthol, laurocapram [Azone], isopropyl myristate and ethanol were selected as enhancers. Caffeine permeation was increased upon incorporation of all enhancers. The steady state fluxes were 05.69, 10.13, 22.42 and 25.06 micro g/cm² per h with enhancement factor equals 1.38, 2.458, 5.44 and 6.083 for 40% EtOH, 10% IPM, 3% AZ and 5% M, respectively. Combined application of ultrasound and enhancers increased the skin permeation rate [flux] of caffeine compared with ultrasound or enhancers alone. The enhancement factor equals 1.485, 4.514, 7.8572, and 48.610 for 40% EOH 10% IPM, 3% AZ and 5% M respectively. Better effects were obtained by the combination with 5% M. The influence of detailed conditions of ultrasound and enhancer applications on the caffeine flux was further investigated using 5% M, Caffeine fluxes were, 95.254, 115.368 and 200.06 micro g/cm² per h upon application of ultrasound for 10, 30, and 60 min respectively. The enhancement effect by this combination was increased with an increase in ultrasonic application duration, suggesting that these conditions might be used to achieve the controlled drug delivery. A pretreatment experiment with ultrasound or 5% M was carried out, and the drug content was measured to understand the role of ultrasound in the combined effect. Pretreatment of the skin with ultrasound increased the caffeine flux, while the effect of pretreatment with 5% M on the skin was similar to that of untreated skin. The results obtained suggested that simultaneous application of ultrasound and enhancers is essential to obtain the pronounced effect for transdermal as well as for topical delivery of caffeine though the skin.

Carcinoma, Hepatocellular
drug therapy

Characterization and resistance mechanisms of cisplatin-resistant human hepatocellular carcinoma cell line.
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Chongqing Medical University - Department of Pharmacology
Keywords: Drug Resistance, Neoplasm; Cisplatin-therapeutic use; Cell Line, Tumor; Liver Neoplasms
Abstract: To study the biological characteristics and resistant mechanisms of the cisplatin-resistant human hepatocellular carcinoma HCC cell line. The study took place in the Department of Pharmacology, Chongqing Medical University, Chongqing, China, between April 2005 and November 2007. A resistant HCC cell line QGY/CDDP was established by stepwise increasing cisplatin CDDP concentration and intermittent administration. Drug-chemo sensitivity was detected by 3(4,5-dimethylthiazol-2yl-2,5- diphenyltetrazolium bromide MTT assay. Cell doubling time was determined by cell counting, and cell cycle analysis was performed by flow cytometric FCM assay. Intracellular platinum accumulation was detected by atomic absorption spectrometry and the expression of P-glycoprotein P-gp and glutathione S-transferase-pi GST-pi were analyzed by FCM assay. QGY/CDDP cell line was established after 3 months with stable resistance to CDDP and exhibited cross-resistance to many other chemotherapeutic agents. Compared with parental cell line, cell doubling time of QGY/CDDP prolonged; and the cell proportion decreased in S and G2/M-phase and increased in G0/G1-phase. In QGY/CDDP cells, intracellular platinum accumulation decreased and GST-pi expression increased, but P-gp expression kept stable. QGY/CDDP cell line shows the typical and stable resistant phenotype and characteristics of resistant cells. Its mechanisms of resistance to CDDP may be mediated by reduced accumulation of intracellular platinum and higher GST-pi expression, but it is not associated with P-gp expression.

Carpal Tunnel Syndrome
diagnosis

F-ratio, a surrogate marker of carpal tunnel syndrome.
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King Saud University - King Khalid University Hospital - Department of Physiology
Keywords: Electrodiagnosis; Retrospective Studies; Median Nerve
Abstract: To explore the correlation of F-ratio and F-wave minimal latency [FWML] in carpal tunnel syndrome [CTS]. This retrospective study was conducted from January 2006 to January 2007 at the clinical physiology lab, King Abdul-Aziz University Hospital, Riyadh, Saudi Arabia. Motor and sensory nerve conduction studies, FMW latencies of median and ulnar nerves, and F-ratio were carried out in 54 CTS patients and 30 controls. Out of 54 CTS patients, there were 14 were males [26%], and 40 females [74%], CTS was bilateral in 32 [59%], and unilateral in 22 [41%] patients. Fifty-one patients [94.4%] had involvement of the right hand, 28 patients [51.8%] had dyslipidemia and 20 patients [37%] had hypertension. The FWML [ms] in the right median nerve was 25.46 +/- 2.2, and 25.79 +/- 1.7 in the right ulnar nerve in the control group [p = 0.5224], while it was 29.1 +/- 3.35 in the right median nerve and 26.46 +/- 4.35 in the right ulnar nerve in patients with CTS [p = 0.0008]. A similar statistically significant increase in the median nerve latency was observed in the left hand. A statistically significant reduction in the F-ratio was found consistently in all patients with CTS in both the hands [p = 0.0001]. The present study reveals prolongation of FWML in the median nerve, and a statistically significant reduction of F-ratio in all CTS patients. A significant inverse correlation was found between FWML and F-ratio in CTS patients. Both FWML and F-ratio support the diagnosis of CTS.

Cerebral Cortex

drug effects

The effect of bioGlue on cerebral cortex in experimental rats.
Rakei, S.M.; Rahmanian, A.; Safarian, A.; Azarpira, N.; Mehrabani, D.
Shiraz University of Medical Sciences - Department of Neurosurgery
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 61-65 (18 ref.)
Keywords: Proteins-analogs and derivatives; Fibrin Tissue Adhesive-therapeutic use; Fibrin Tissue Adhesive-adverse effects; Meninges; Rats, Wistar; Gliosis-etiology; Gliosis-chemically induced
Abstract: BioGlue is a newly introduced sealant applied by several cardiovascular surgeons to seal graft anastomoses. This study was carried out to determine the effect of a synthetic BioGlue on the repair of meninges in comparison with contemporary bioadhesives. A synthetic BioGlue was provided by combining 45% human serum albumin and 10% glutaraldehyde. Forty Wistar female rats were randomly divided into 4 equal groups [Two case and two control groups]. After craniotomy, dural incision was performed and the motor cortex was exposed. In the case group, the motor cortex was exposed to BioGlue and in the control group, the incision was closed without application of BioGlue. The rats were studied histopathologically after 5 and 14 days postcraniotomy. Synthetic BioGlue caused an acute inflammatory response that resulted in a delayed gliosis in the superficial cerebral cortex, but the deep layers and adjacent areas of cortex were spared. Inflammatory changes and gliosis did not cause cell apoptosis or necrosis. Histopathological changes did not have any clinical significance as they were not accompanied by any neurological deficit or motor weaknesses and exposure to synthetic BioGlue could not cause any clinically significant neurological deficit either. The simplicity of producing this new synthetic BioGlue and its relative low cost, compared to other similar glues, opens a new horizon to the use of this synthetic BioGlue in the neurosurgical field.

Cesarean Section

statistics and numerical data

Hospital-based caesarean section in the Arab region: an overview.
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American University of Beirut - Faculty of Health Sciences - Center for Research on Population and Health
Keywords: Demography; Arabs; Socioeconomic Factors; Health Surveys; Risk Factors; Age Factors; Educational Status
Abstract: This article provides an overview of hospital-based rates of caesarean delivery in 18 Arab countries and the association between these rates and selected demographic and socioeconomic characteristics. Data on caesarean section were based on 2 of the most recent national hospital-based surveys in each country and on published studies based on hospital samples. High levels of caesarean delivery were found in Egypt [26% in 2003], followed by Sudan [20% in 1993]. Six countries and the West Bank area of Palestine had rates > 15% and 11 countries and Gaza had rates between 5% and 15%. The findings indicate an increasing trend of caesarean section delivery in the region. Policies aiming at reducing surgical deliveries should seek to identify and address these risk factors.
**Chediak-Higashi Syndrome**

**diagnosis**


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Al Sabah Hospital - Department of Pediatrics


**Keywords:** Fever; Pancytopenia; Lymphatic Diseases; Review Literature as Topic; Hepatomegaly; Splenomegaly; Methylprednisolone-therapeutic use; Bone Marrow Transplantation

**Abstract:** Chediak-Higashi syndrome (CHS) is a rare autosomal recessive disorder characterized by partial albinism, recurrent pyogenic infection and large granules in all granule-containing cells. We present a case of 1 1/2 year-old non-Kuwaiti boy who presented in the accelerated phase of CHS with fever, pancytopenia, lymphadenopathy and hepatosplenomegaly. High dose of methylprednisolone and sandoglobulin were given for treatment of the accelerated phase with clinical response to the therapy. Unfortunately, allogenic bone marrow transplantation for HLA-matched father was postponed as the procedure is not available in Kuwait and could not be done abroad because of financial reasons.

**Child Abuse**

Child maltreatment: behaviors of mothers in Jeddah, Saudi Arabia.

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King Abdul Aziz University - Faculty of Medicine - Family and Community Medicine Department


**Keywords:** Mothers; Health Knowledge, Attitudes, Practice; Questionnaires; Maternal Behavior; Cross-Sectional Studies

**Abstract:** Cross-cultural research has shown that children throughout the world experience various forms of violence. Important to tackling child maltreatment problem is an understanding of the mechanisms contributing to abusive parenting. The present study aims to investigate child disciplinary and maltreatment practices, and to determine the predictors of mothers' severe physical maltreatment practices against their children aged < 18 years. Twenty-five female primary schools in Jeddah were selected during the educational year 2007/2008, with invitation of students' mothers to participate in the study. A total of 537 mothers fulfilled confidentially, anonymous, self administered questionnaire. The Standardized Arabic Version of Child Abuse Screening Tool for Parents was used to inquire about the disciplinary and maltreatment practices, during the 12 months preceded the study. Results revealed that discussing / explaining [96.8%] was the commonest non-abusive mothers' disciplinary behavior. On the other hand, high proportions of mothers practiced child maltreatment; 96.3%, 89% and 56.8% employed at least one kind of emotional, moderate and severe physical maltreatment, respectively. While, 10.1% of mothers reported that their children were exposed to negligence. Shouting / yelling [91.4%], pinching [60.7%] and hitting the child, not on buttock, with objects [42.3%] were the most prevalent mothers' emotional, moderate and severe physical maltreatment, respectively. Results of regression analysis indicated that children aggressive behavior \( \text{aOR} = 2.32; \ 95\% \text{ CI: 1.55-3.46} \), mothers' age < 30 years, and non-university graduated mothers were the independent predictors of mothers' severe physical maltreatment practice. In conclusion, mothers practiced high percentages of child maltreatment Establishing parenting classes, institution of family education intervention for teens, and construction of television and web-based educational programs on sound parenting skills are recommended.

An intervention educational program on child maltreatment implemented for female teachers in Jeddah primary schools.

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King Abdul Aziz University - Faculty of Medicine - Family and Community Medicine Department


**Keywords:** Teaching; Schools; Health Knowledge, Attitudes, Practice; Child; Health Education; Awareness; Questionnaires

**Abstract:** Child maltreatment is a complex problem and its prevention requires action on many fronts. Teachers spend many hours a day with children and they are likely to be concerned about child maltreatment at some time during their career. This study was carried out to explore knowledge, attitudes, and practice [KAP], and to raise awareness of teachers with respect to child maltreatment. An intervention educational program was performed, 2008, for 498 female teachers selected through multistage stratified random sample technique from 25 primary Jeddah schools. Health education was conducted using audiovisual aids and pre-designed educational materials [folder, 5 colored brochures booklet, computer CD and gifts] were given to participants. Five educational posters with different themes were distributed in the visited schools. Results showed that 33.9% and 23.0% of teachers reported using...
emotional and physical punishment with own their children, respectively. Only, 8.2% reported the authorities when discovering a student exposed to maltreatment. The mean teachers’ knowledge score was low before the program and significantly improved after it [Paired t = 25.4, P < 0.000]. The highest percentage of knowledge gain score was noticed for indicators of sexual maltreatment, risk factors, and impact of maltreatment. Concerning attitude, considerable changes in most of teachers opinion regarding child maltreatment was found after program. It is concluded from the current study that there was lack of teachers’ awareness regarding child maltreatment before the program and educational program was successful in improving it. There is an urgent need for standardized education and training programs for teachers on child maltreatment.

Chitosan

In vitro binding of lipid [olive oil and ghee] with chitosan under the conditions mimicking the gastrointestinal tract.
Izani, N.J. Noor; Rafiquzzaman, Md.; Aidah, M.D. Nur; Rafi, M. Mohd
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University Sains Malaysia - School of Health Sciences
SPJ - Saudi Pharmaceutical Journal 2009; 17 (1): 78-84 (22 ref.)
Keywords: Plant Oils; Dietary Fats; Gastrointestinal Tract-physiology
Abstract: An in vitro binding study of chitosan with lipid was carried out under the conditions mimicking the gastrointestinal tract, with special reference to the pHs of stomach and duodenum. Olive oil and ghee were used to represent lipid components of diet, and chitosan [treated and untreated] was used to bind with the mentioned lipids. The results obtained from this study showed that the treated chitosan gave better binding to lipid [olive oil or ghee] compared with the untreated chitosan. Chitosan [treated or untreated] showed higher affinity towards olive oil than ghee. Incubation period accompanied with shaking also influenced the binding of lipid to chitosan and the maximum binding was attained after 2.5 hrs of incubation. The ratio of chitosan to lipid used was found to affect the amount of lipid bound per gram of chitosan. Olive oil bound per gram of chitosan was 4.6 +/- 0.28 -7.1 +/- 0.14 g while ghee was 3.6 +/- 0.28 - 6.2 +/- 0.28 g under 1:100 experimental ratio of chitosan to lipid, and shaking for 2.5 hrs at physiological temperature of 37°C. Consideration of pKa value suggests that the predominated form of chitosan at duodenal pH [-7.0] is uncharged chitosan, which is precipitated along with the lipid adsorbed onto it.

Chronic Disease

prevention and control

Rationale, methods and first results of the Iranian national programme for prevention of chronic diseases from childhood: CASPIAN Study.
Ministry of Health and Medical Education - Bureau of Family Health
Keywords: National Health Programs-utilization; National Health Programs-methods; Schools; Health Surveys; Students; Parents; Population Surveillance; Health Knowledge; Attitude; Blood Glucose; Anthropometry; Lipids-blood; Life Style; Questionnaires
Abstract: The CASPIAN Study aims to implement a school-based surveillance system for prevention of noncommunicable diseases from childhood in the Islamic Republic of Iran. The baseline survey was conducted from November 2003 to May 2004 in 23 provinces among 21 111 school students aged 6-18 years and their parents. The data collected included: birth weight and current anthropometric measurements; dietary and exercise habits; family history of chronic diseases; and knowledge about prevention. Fasting blood sugar and lipid profile were assessed in a subsample of 4811 students.

Cinchona

metabolism

In vitro hepatic metabolism of cinchona antimalarials by hamster enzymes.
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**Keywords:** Cinchona Alkaloids; Antimalarials; Cricetinae; Quinidine-metabolism; Aldehyde Oxidase; Liver; Mixed Function Oxygenases; Chromatography, High Pressure Liquid

**Abstract:** Cinchona alkaloids [quinidine and cinchonine] were incubated with aldehyde oxidase and microsomal monoxygenases from hamster liver. Reversed-phase HPLC method was used to separate quinidine and cichonine from their metabolites. Characterisation of the metabolites arising from aldehyde oxidase by infrared and mass spectral analysis, exhibited that quinidine and cinchonine were oxidised to the corresponding 2'-quinolones. In vitro microsomal metabolites of quinidine were identified as 2'-quinidinone and O-desmethylquinidine. Incubation of cinchonine with microsomal enzymes showed that no metabolites were generated.

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**Ciprofloxacin**

**pharmacokinetics**

**Comparative bioequivalence and pharmacokinetics of ciprofloxacin in healthy male subjects.**

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**Pakistan Journal of Pharmaceutical Sciences** 2009; 22 (1): 1-7 (29 ref.)

**Keywords:** Therapeutic Equivalency

**Abstract:** Pharmacokinetics and bioequivalence studies of two ciprofloxacin tablet brands [trial batch of ciprofloxacin [Test] and Reference] were conducted in 14 healthy male volunteers after oral administration. Each brand [test and reference] consisted of 500 mg of ciprofloxacin. The drug was analyzed in plasma samples with a microbiological assay using Streptococcus faecalis as test organism. The elimination half-life of 3.00 +/- 0.21 and 3.28 +/- 0.11 h was calculated for both brands. The peak plasma concentrations of [3.59 +/- 0.26 ug/mL] and [3.34 +/- 1.20 ug/mL] was attained in about 1.48 +/- 0.11 hour and 1.47 +/- 0.05 for both Test and Reference ciprofloxacin respectively. The mean +/- SE values for total area under the curve [AUC O-infinity] were 26.15 +/- 1.35, and 24.95 +/- 0.93 hmg/1 for both test and reference tablets respectively. The mean +/- SE values of clearance were 24.83 +/- 1.63 and 24.73 +/- 1.11 1/h for both formulations respectively. The ratio of elimination rate constant Kel [l/h] was 1.14 percent difference between the test and reference tablets and likewise, half-life [t1/2beta] expressed in hours showed the ratio of 0.91 percent. This study indicated that all the pharmacokinetic and bioequivalence parameters for both ciprofloxacin formulations are statistically non-significant, hence both formulations are bioequivalent.

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**Circumcision, Female**

**adverse effects**

**Impact of anti-female genital mutilation [FGM] intervention on attitude and self-efficacy of women and youth girls to abandon this practice.**

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**Assiut Medical Journal** 2008; 32 (3): 121-132 (17 ref.)

**Keywords:** Behavior; Attitude; Self Efficacy; Women

**Abstract:** The National Council for Childhood and Motherhood [NCCM] launched an Female Genital Mutilation [FGM] free village project in 2003 to eliminate FGM practice among girls in Egypt. An interim evaluation survey completed by Population Council WestAsia and North Africa office WANA followed in 2006. The complexity of FGM/C behavioural change and involvement of multiple players in decision making directs us to explore other dimensions of the decision-making process of individuals; namely perceived self-efficacy to abandon FGM. Perceived self-efficacy is concerned with people's beliefs in their capabilities to produce given attainments, it has rarely been documented in relation to anti-FGM activities. To identify a change in attitude, self-efficacy, intention among adult -women and youth girls following the project, Using actual practice as a gold standard, verifying these changes. Mid-term survey data of [Moslem villages] was included in this analysis. 305 woman having a daughter between 7-13 years in 9 randomly selected intervention villages were compared with 203 woman in 6 control villages. Also, 288 and 189 single girls 16-24 were successfully interviewed in the intervention and control sites respectively. Both adult women and young girls 16-24 in the intervention group showed significant differences in attitude, intention, and self-efficacy against FGM. These changes are complex in interpretation when compared to behavior towards daughters. The results will assist project managers in understanding [readiness to change] of women and girls towards slopping Female Genital Mutilation/Cutting [FGM/C].
Clausena

Effect of clausena dent at a [WILLD.] M. Roem. against paracetamol induced hepatotoxicity in rats.
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Keywords: Phytotherapy; Plant Extracts-therapeutic use; Acetaminophen-toxicity; Liver-drug effects; Rats, Wistar; Liver-pathology
Abstract: Ethanol extract of Clausena dentata [Willd.] M. Roem [Rutaceae] was evaluated for hepatoprotective activity in rats. The plant extract [250 mg/kg, p.o.] showed a remarkable hepatoprotective activity against acetaminophen-induced hepatotoxicity as judged from the serum markers for liver damage. Acetaminophen induced a significant rise in aspartate amino transferase [AST], alanine amino transferase [ALT], alkaline phosphatase [ALP], total bilirubin, gamma glutamate transpeptidase [GGTP] and decrease in total protein. Treatment of rats with ethanol extract [250 mg/kg] significantly [P < 0.001] altered serum marker enzymes levels to near normal against acetaminophen treated rats. The activity of the extract was comparable to the standard drug, silymarin [50 mg/kg, p.o.]. Histopathological changes of liver sample were compared with respective control. Results indicate that Clausena dentata possesses hepatoprotective effect on acetaminophen-induced hepatotoxicity in rats.

Cleome

Effect of the methanolic extract of Cleome chelidonii on drug metabolizing enzymes, antioxidant status and chemomodulatory efficacy in mice.
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Annamalai University - Department of Pharmacy
Keywords: Capparaceae; Plant Extracts; Methanol; Antioxidants; NADPH Dehydrogenase [Quinone]; Glutathione Transferase; L-Lactate Dehydrogenase; Mice; Liver
Abstract: The effect of the methanolic extract of Cleome chelidonii [CCME] was examined on the activities of Phase-I and Phase-II drug metabolizing enzymes, antioxidant enzymes, LDH and LPO in the liver of mice. Anticarcinogenic potential studied by using DMBA induced forestomach and TPA promoted skin papillomagenesis model. The study showed that the extract was able to induce the hepatic activity of Phase-II enzyme glutathione S-transferase [P < 0.005]. D'Tdiaphorase activity was also increased [P < 0.005]. CCME was augmented mainly the Phase II enzyme activity that is associated with detoxification of xenobiotics, while inhibiting the Phase I enzyme activity. There was an induction in antioxidant level that correlates with the significant reduction of LPO and LDH formation. However, the levels of the two enzymes were significantly reduced [P < 0.005] in the forestomach, kidney and lungs of treated animals. CCME have shown significant reduction on antioxidant enzyme response. Reduced glutathione was significantly elevated in liver [P < 0.05] and in extrahepatic organs [P < 0.05]. The CCME revealed a chemopreventive response as shown by the significant inhibition of tumor burden [P < 0.05].

Coffea

microbiology

Mycoflora, mycotoxins, bacteriological analysis and molecular assay of some bacterial species from coffee beans in Saudi Arabia.
Nasser, Laila A.
Riyadh University for Girls
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 345-373 (87 ref.)
Keywords: Coffee-micobiology; Mycotoxins; Aspergillus niger; Aspergillus flavus; Aspergillus fumigatus; Aflatoxin B1; Aflatoxin M1; Bacillus cereus; Polymerase Chain Reaction; Seeds
Abstract: The mycoflora analysis of some coffee beans in Saudi Arabia showed a wide range of fungal contamination in 31 samples collected from different markets in El-Riyadh. Thirty four species belonging to 16 genera and 28 species belonging to 18 genera were isolated from coffee beans on glucose and cellulose Czapek's agar medium at 25°C from seed-plate method. Aspergillus niger and A. flavus were the most prevalent species, but
Penicilliun oxalicum was isolated in moderate occurrence, while 12 genera comprised 16 species and 8 genera comprised 10 species were isolated on the same types of media at 25°C from seed suspension method. A. niger was the most common species, while A. flavus and P. funiculosum were isolated in moderate occurrence. A. niger, also, was the most prevalent on 20% sucrose-Czapek's agar medium at 25°C, but the genus Eurotium [3 spp] appeared in moderate occurrence. Five fungal species belonging to four genera were isolated on starch yeast extract agar medium at 20°C, but 6 samples were contaminate with aflatoxins B[1], B[2], G[1] and G[2] of concentrations ranged from 110-600 micro g/kg, but 6 samples were contaminate with sterigmatocystin ranged from 60-600 micro g/kg. Screening of the characteristic mycotoxins of 25 fungal isolates revealed that 17 of them produced, aflatoxin B[1] at 450 micro g/kg, ochratoxin A at 600 micro g/kg, ochratoxin B at 400 micro g/kg, and sterigmatocystin 280 micro g/kg from Aspergillus species, while three isolates of Penicillium produced penicillic acid [ranged from 720-240 micro g/kg] and one isolate of Trichoderma produced Trichodermine at 360 micro g/kg. The bacteriological analysis of the coffee bean samples indicated that Bacillus cereus was detected in six samples at levels [2x10 cfu/g], E. coli in two samples [14x10 and 89x10 cfu/g], Feacal coliform was detected in one sample only, while Staphylococcus appeared in 29 samples [55x103 cfu/g]. All samples were free from Salmonella. PCR assay for detection of some bacterial species revealed that all samples were negative for Yersinia enterocolitica, Campylobacter and Listeria monocytogenes, while the results of B. cereus and Salmonella were similar to the results obtained using cultural method.

Colon

abnormalities

Congenital pouch colon from Al Ahsa region of Saudi Arabia - A changing demography?
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Keywords: Colonic Diseases-congenital; Demography; Congenital Abnormalities; Disease Management; Retrospective Studies; Colonic Diseases-surgery
Abstract: To study the demography, anatomy and management of congenital pouch colon [CPC] in the Al -Ahsa region of the Kingdom of Saudi Arabia [KSA]. Retrospective descriptive analysis of CPCs was made with regard to patient demography, pre- and intra-operative diagnostic features and initial neonatal management. Maternity and Children Hospital, Al-Ahsa region, KSA. Records of all children with anorectal malformations [ARM] treated between August 2004 and August 2007 were reviewed. Out of the 37 cases of ARMs, seven were diagnosed as CPCs. Records were analysed for perineal findings, X-ray abdomen and invertogram [when indicated], abdominal ultrasound, type of pouch, division of any urinary fistula, and surgical management. Six out of seven CPCs were among Saudi nationals belonging to Al-Ahsa region. The male to female ratio was 4:3. Six were type IV and one was type III pouch. Preoperative diagnoses were made in two cases by radiology and all cases showed classic anatomical features of CPC intra-operatively. 71% had associated anomalies. Excision of pouch and end colostomy was done in three, loop stoma was done in two and excision of pouch with neonatal pull-through was done in two cases. CPCs are recently being increasingly reported in Saudi nationals. Adequate awareness about radiological, anatomical and histological features would lead to correct diagnosis and reporting. Appropriate neonatal management would prevent pouch related morbidity. Collective data from multiple centers across the Arab peninsula will help define the demographic pattern of this entity in the region.

Colorectal Neoplasms

epidemiology

Colorectal cancer prevalence according to survival data in Iran 2007.
Shahid Beheshti University [MC] - Cancer Research Center
Keywords: Prevalence; Survival Rate
Abstract: Colorectal cancer is a common [5000 new cases per year in Iran] and lethal disease. Regarding the high incidence [7 cases per 100000] and survival rate of colorectal cancer and the priority of prevalence index in cancer management, in this study, 1, 2-3 and 4-5 year point prevalence were determined according to survival data. In this
study, survival and incidence data were used for the determination of cancer prevalence. Incidence data were extracted from cancer registry in Iran and survival data were determined during a descriptive study through the follow up of 2342 colorectal cancer patients. 1, 2-3 and 4-5 year point prevalence were estimated from incidence rates in different years and the proportion of patients surviving 0.5, 1.5, 2.5, 3.5 and 4.5 year[s] from diagnosis. Proportion of cases surviving 0.5, 1.5, 2.5, 3.5 and 4.5 year[s] from diagnosis were 79.2%, 65.08%, 57.36%, 51.76% and 48.87%, respectively. Estimates of 1, 2-3 and 4-5 year prevalence were 4156, 5715 and 4283, respectively. The cumulative 5 year prevalence was 13954 cases. These estimates of 1, 2-3 and 4-5 year prevalence are applicable to the evaluation of initial treatment, clinical follow-up and point of cure, respectively. Therefore, 1, 2-3 and 4-5 year point prevalence estimates are necessary in health service planning for cancer management.

surgery

Role of systemic inflammatory response in prognosis and survival after curative resection of colorectal cancer.
Eweis, Mohamed Korany; Mostafa, Tarek A.
Assiut University - Faculty of Medicine - Department of Surgery
Assiut Medical Journal 2008; 32 (3): 39-42 (9 ref.)

Abstract: Some studies have shown that the presence of a systemic inflammatory response, as evidenced by raised circulating concentrations of C. reactive protein [CRP] predicted recurrence and overall survival in patients with colorectal cancer. The aim of this study was to examine the relationship between the inflammatory response and prognosis and survival in patients undergoing potentially curative resection for colorectal cancer. 90 patients considered to have undergone curative resection were studied. Circulating CRP concentration was measured before and after operation. The majority of patients were aged 65 years or more, had colonic tumours and Dukes stage B lesions. 23 patients had raised preoperative value, 11 [47.8%] of them, had raised concentration after operation. 67 patients with a normal preoperative value, 60 [89.5%] of them had normal postoperative value. During follow up, 17 [18.8%] patients developed recurrence and 25 [27.7%] died. In patients who have undergone potentially curative resection for colorectal cancer the presence of a systemic inflammatory response predicts a poor outcome.

Congenital Abnormalities

microbiology

Possible role of TORCH agents in congenital malformations in Gorgan, northern Islamic Republic of Iran.
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Gorgan University of Medical Sciences - Gorgan Congenital Malformations Research Centre

Abstract: This descriptive, cross-sectional study was carried out to explore the frequency of contamination with TORCH agents in neonates with congenital malformations in a referral centre in Gorgan city, Islamic Republic of Iran. Blood samples were taken from 64 neonates and their mothers over a 20-month period in 2003-04. Serologic tests showed that 4/64 infants born with congenital malformations [6%] had positive IgM antibody titres for Toxoplasma gondii [2 cases], rubella virus [1 case] and cytomegalovirus [1 case]. IgM was positive in 9/63 mothers [14%], also for T. gondii [3 cases], rubella virus [3 cases] and cytomegalovirus [3 cases]. No cases of herpes simplex virus type II or Treponema pallidum were found.

Contraception

Knowledge and practice of university students in Lebanon regarding contraception.
Barbour, B.; Salameh, P.
Lebanese University - Faculty of Public Health Section II
**Keywords**: Knowledge; Students; Universities; Cross-Sectional Studies; Questionnaires; Condoms-utilization; Health Knowledge, Attitudes, Practice; Sexually Transmitted Diseases

**Abstract**: We evaluated knowledge and practice of Lebanese university students regarding contraception in a cross-sectional, comparative study on students in public and private universities using an Arabic language self-administered questionnaire. We found low levels of knowledge of contraception. The majority of males [73.3%] and a few females [21.8%] declared previous sexual relations: the majority of males had used a condom [86.1%], but females had generally not used contraceptives [75.6%].

**Copper Sulfate poisoning**

Acute renal failure due to copper sulfate poisoning; a case report.
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**Keywords**: Copper Sulfate-adverse effects; Copper Sulfate-blood; Copper Sulfate-therapeutic use; Copper Sulfate-toxicity; Kidney Failure, Acute-etiologic; Kidney Failure, Acute-therapy; Dimercaprol-therapeutic use; Peritoneal Dialysis-utilization; Penicillamine-therapeutic use; Blood Component Transfusion-utilization; Carea-etiologic; Shock-etiologic

**Abstract**: Copper sulfate is a blue and odorless salt with various industrial, chemical, agricultural and medicinal applications. Copper sulfate poisoning is rare in children. A 23-month old boy accidentally ingested a solution of copper sulfate, used as a disinfectant agent in animal husbandry. He was referred to Children's Hospital of Tabriz because of frequent vomiting and lethargy. The major systemic complications were intravascular hemolysis, anemia and acute renal failure. The patient was successfully treated with multiple packed cell transfusions, dimercaprol, penicillamine and peritoneal dialysis. Plasma copper level 15 days after ingestion was 216 micro g/dl. Copper sulfate is a highly toxic agent that, when ingested, can cause local and systemic damage including coma, shock, severe intravascular hemolysis, hepatotoxicity and acute renal failure with high mortality.

**Corchorus**

Effects of intrapopulation competition on morphological and agronomic characters of jute plant [Corchorus olitorius. L.].
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**Keywords**: Plants

**Abstract**: The effects of population density on some agronomic traits of Corchorus olitorius were investigated by growing the seedlings in a field experiment at densities of 1, 2, 5, 10, 25, 50 and 100 plants per m\(^2\) during the raining season of 2006, at the Ojo campus of Lagos State University [LASU]. The Randomized Block Design [RBD] was the experimental design used, with three replicates. The direct effect of competition was investigated on the following agronomic attributes; final height/plant, number of branches/plant, stem girth/plant, number of leaves/plant, total fresh weight, total dry weight, moisture content, total leaf length, leaf petiole length, leaf area, blade length and blade width. A highly significant effect [p< 0.01] of competition was observed for final plant height and total moisture content/ plant, while significant effect [p< 0.05] was observed for other attributes investigated, except for all leaf parameters where insignificant effect of competition was observed. There was a gradual decline in all attributes except height/ plant as population density increased. These observations confirmed the occurrence of intraspecific competition in population of jute plant.

**Coronary Artery Bypass**

One-month survival after coronary artery bypass graft [CABG].
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Payesh - Health Monitor 2009; 8 (1): 5-10, 106 (15 ref.)

**Keywords:** Survival Analysis; Risk Factors; Coronary Vessels; Sex Factors

**Abstract:** To determine One-month survival after CABG in Shariati Hospital. We followed 340 patients who underwent Isolated-CABG in Shariati Hospital and used survival analysis to compare common coronary risk factors and to assess surgical factors related to survival after CABG. Smoking was more prevalent in males than in females but prevalence of hypertension, diabetes and hyperlipidemia was greater in women. Female subjects were older, had greater Body Mass Index [BMI] and left ventricular ejection fraction [LVEF] and had undergone more non-elective surgery compared to males. Most patients had received 3 or 4 grafts [range 1-6 grafts]. There was no difference in aortic cross clamp and anesthesia time between the two genders. Females were hospitalized for longer periods after surgery and their mortality rates were greater. One-month survival ratio estimated by the Kaplan Meier method was 97.1% and 88.4% in males and females respectively. The overall survival rate was 95.3%. The factors related to poor survival were: female gender, non-elective surgery, lengthy aortic cross clamp and anesthesia time and the history of: hypertension, hyperlipidemia, previous CABG and CCU hospitalization.

## Cosmetics

### therapeutic use

**Kohl [SURMA]: retrospect and prospect.**

Mahmood, Zafar Alam; Zoha, S.M.S.; Usmanghani, Khan; Hasan, Muhammad mohtasheemul; Ali, Obaid; Jahan, Sarwat; Saeed, Aftab; Zaihd, Rabail; Zubair, Misbah

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**Keywords:** Sulfides; Lead; Medicine, Traditional; Cosmetics-adverse effects; Lead Poisoning

**Abstract:** Kohl, since antiquity has always been given a prime importance in ophthalmology for the protection and treatment of various eye ailments. However, for decades various conflicting reports in the literature have been published relating to Kohl application to eyes being responsible for causing higher blood lead concentration, which may cause lead poisoning. While at the same time, a number of research studies and reports have also been published negating any such links with increased blood lead level upon Kohl [surma] application. In view of the above mentioned facts, this review article is written with the objective to highlight various data from past and present research studies and reports about Kohl, so as to provide valuable information to both the users and the research workers about it's scientific background and effects when applied into eyes. A large number of items and topics [such as Kohl, surma, eye cosmetic, traditional eye preparations, environmental lead pollution, galena, lead sulphide etc.] have been taken into consideration while compiling this review article. In conclusion, the authors of this review article feel that the relation between Kohl and toxicity or increased blood lead concentration upon it-s application to eyes as reported elsewhere is likely to be more of theoretical nature rather than a practical health hazard.

## Cyclooxygenase 2 Inhibitors

### chemical synthesis

**Formulation and evaluation of rofecoxib capsules.**

Abou Taleb, A.E.; Abdel Rahman, A.A.; Samy, E.M.; Tawfeek, Hesham M.

Assiut University - Faculty of Pharmacy - Department of Industrial Pharmacy

**SPJ - Saudi Pharmaceutical Journal** 2009; 17 (1): 40-50 (33 ref.)

**Keywords:** Lactones-chemical synthesis; Chemistry, Pharmaceutical; Anti-Inflammatory Agents

**Abstract:** Rofecoxib [ROF] is an analgesic, antipyretic and anti-inflammatory drug. It is a selective inhibitor of cyclooxygenase enzyme [Cox-2 inhibitor]. The aim of this work was to formulate and evaluate ROF capsules and compare them with a commercial ROF product. The ROF capsules were prepared using different excipients namely: Sta-Rx starch 1500, cellactose, anhydrous lactose and tablettose. Compatibility of the drug with the used excipients was studied by differential scanning calorimetry. The effect of cogrinding of ROF with either PVP 40000 or Avicel PH 101 in the ratio of 1:5 w/w on the drug release from the prepared capsules was also studied. Differential scanning calorimetry and x-ray diffraction studies showed reduction in crystallinity or conversion of the drug to an amorphous form upon grinding with either PVP 40000 or Avicel PH 101 respectively. All formulae of ROF capsules complied with the USP XXV requirements for uniformity of dosage units. Formulae No. 6 and 7 containing ground mixture of the drug with either PVP 4000 or Avicel PH 101 in a ratio of 1:5 drug to carrier and Sta-Rx starch 1500 as diluent gave a higher dissolution rate of ROF [(t50%) = 5 and 9 min., respectively] in comparison with the commercial ROF product Rhumacure [(t50%) = 25 min.] Moreover; the anti-inflammatory activity was studied in rats using paw-edema method.
and the results obtained were analyzed using ANOVA test at the level of significance \[ P \leq 0.05 \]. It was found that the prepared ROF capsules show superior anti-inflammatory activity in comparison with the commercial ROF product.

**Cystadenoma, Mucinous**

diagnosis

Primary retroperitoneal mucinous cystadenoma.

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**Saudi Medical Journal** 2009; 30 (1): 146-149 (14 ref.)

**Keywords:** Retroperitoneal Neoplasms-pathology; Cystadenoma, Mucinous-surgery; Immunohistochemistry

**Abstract:** Primary mucinous neoplasms of the retroperitoneum, including mucinous cystadenocarcinomas, mucinous borderline tumors, and mucinous cystadenomas are uncommon tumors found exclusively in women. Since the retroperitoneum does not contain mucinous epithelium, the origin, and histogenesis of these tumors remain unclear. It is speculated that these tumors can arise from teratomas, supernumerary ovaries, or mucinous metaplasia of the retroperitoneal mesothelium. We describe a case of a primary mucinous cystadenoma of the retroperitoneum in a 44 year-old female that presented as a palpable abdominal mass. There was no evidence of recurrence 16 months after complete laparoscopic excision of the tumor. The morphology and immunohistochemical analysis in this case support the hypothesis that mucinous metaplasia of the retroperitoneal mesothelium overlying a preceding inclusion cyst can give rise to retroperitoneal mucinous tumors.

**Cytomegalovirus Infections**

diagnosis

The role of clinical, therapeutic and laboratory findings in monitoring of HCMV infection in bone marrow transplant recipients.

Ramzi, M.; Yaghobi, R.; Etminan, H.
Haematology Research Center - Bone Marrow Transplant Unit

**IRCMJ - Iranian Red Crescent Medical Journal** 2009; 11 (1): 46-51 (31 ref.)

**Keywords:** Cytomegalovirus-pathogenicity; Cytomegalovirus-analysis; Cytomegalovirus-immunology; Bone Marrow Transplantation-adverse effects; Bone Marrow Transplantation-mortality; Molecular Diagnostic Techniques-utilization; Risk Factors; Polymerase Chain Reaction-utilization; Cytomegalovirus-chemistry; Retrospective Studies

**Abstract:** Human cytomegalovirus [HCMV] has been an enormous threat for bone marrow transplant [BMT] recipients. For active and/or latent HCMV infection, diagnosis of the risk factors which increase the risk of posttransplant morbidity and mortality seems necessary. In this research, some of the HCMV risk factors were monitored and compared with HCMV molecular diagnostic methods for better detection of HCMV infection in BMT patients. HCMV risk factors including clinical, biological, biochemical, haematological indexes, and also anti-HCMV and transplant prophylactic and therapeutic conditioning regimens were monitored from March 2002 to March 2006, in 104 BMT patients referred to BMT Unit of Nemazee Hospital in Shiraz University of Medical Sciences and was compared with HCMV molecular methods for BMT donors and recipients' pre- and posttransplantation. Anti-HCMV-IgM was detected in 9.6% and 6.7% of BMT recipients and donors, respectively. Anti-HCMV-IgG was also detected in 8.7% and 9.1% of recipients and donors, pre-transplant, respectively. HCMV-PCR results were positive in 20% of recipients and 33.3% of donors. Significant correlations were observed between HCMV positive results and the use of a therapeutic dose, but not the prophylactic dose of glucocorticoids and cyclosporine, pre and post-transplantation. Fasting blood sugar, creatinine, globulin, and liver enzymes levels such as alkaline phosphates and asparagine transpherase significantly correlated with detection of HCMV-DNA in transplant patients. Also, negative results of HCMV-PCR significantly correlated with the use of prophylactic dose of acyclovir in BMT patients. Significant correlations of positive and negative HCMV-PCR results with HCMV disease risk factors suggest the possible role of these factors on prognosis and monitoring of HCMV disease in BMT recipients preand post-transplantation.
**Dental Caries**

**epidemiology**

Caries prevalence and treatment needs of healthy and medically compromised children at a tertiary care institution in Saudi Arabia.

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**Keywords:** Needs Assessment; Prevalence; Dental Caries Susceptibility; Risk Assessment; Patients; Health Education; Dental; Dental Care

**Abstract:** We examined the caries prevalence and treatment needs of medically compromised and healthy paediatric patients attending the dental clinic of a tertiary care institution in Saudi Arabia. The medical records of 175 healthy and 211 medically compromised 5-year-old Saudi children were reviewed. Data was extracted on clinical status and number of decayed, extracted and filled teeth [deft score]. A total of 91.9% of medically compromised and 84.0% of healthy children had evidence of caries. Mean deft score was 9.91 for medically compromised and 6.25 for healthy children. A high proportion of carious teeth [79%] were untreated, with no significant difference between the 2 groups.

**Depression**

**therapy**

Effect of a PRECEDE-based educational intervention on depression and quality of life in patients with coronary artery bypass grafting.

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**Payesh - Health Monitor** 2009; 8 (1): 75-84, 97 (27 ref.)

**Keywords:** Coronary Artery Bypass; Quality of Life; Education; Questionnaires

**Abstract:** To examine effect of an educational intervention on depression and quality of life in patients with coronary artery bypass grafting surgery. This was a quasi-experimental study of 54 patients after bypass surgery in the Isfahan Cardiovascular Research Center. The patients randomly assigned to intervention and control groups. Primarily Cardiac Depression Scale was used to measure depression. In addition, a PRCEDE-based educational questionnaire and the end SF-36 questionnaire were used. The intervention group received a PRCEDE Model educational package up four months. After education the mean score of Predisposing factors, Enabling factors, Reinforcing factors and self-helping behaviors increased significantly in the intervention group as compared to the control group \( P < 0.001 \). The mean score of depression in control group \( M = 104/5, SD = 30/4 \) and intervention group \( M = 112/8, SD = 21/9 \) decreased significantly, but this effect was more pronounced in intervention group \( M = 66/2, SD = 22 \) vs \( M = 89/2, SD = 27/8 \). Also the significant differences in quality of life between two groups were seen in physical functioning \( P < 0.04 \), role emotional \( P < 0.01 \) and mental component summary \( P < 0.04 \). The findings of this study indicated that the PRCEDE Model was effective educational intervention in reducing depression and enhancing quality of life in patients with coronary artery bypass surgery.

**Dexmedetomidine**

**therapeutic use**

Dexmedetomidine as a substitute for remifentanil in ambulatory gynecologic laparoscopic surgery.

Salman, Nevriye; Uzun, Sennur; Coskun, Fahri; Salman, Mehmet A.; Salman, Akgun E.; Aypar, Ulku
Hacettepe University - Faculty of Medicine, Ankara - Anaesthesia logy and Reanimation Department

**Saudi Medical Journal** 2009; 30 (1): 77-81 (31 ref.)
**Keywords:** Piperidines-therapeutic use; Analgesics, Opioid; Laparoscopy; Gynecologic Surgical Procedures; Ambulatory Surgical Procedures

**Abstract:** To compare dexmedetomidine with remifentanil in desflurane based ambulatory gynecologic laparoscopic surgery, in respect to its effects on orientation, discharge time, nausea-vomiting, and postoperative analgesic need. Sixty 20-40 year old ASA I-II patients undergoing gynecologic laparoscopic surgery were randomized into 2 groups. This study was performed in the operating theaters of the Hacettepe University Faculty of Medicine, Hacettepe, Turkey in 2004 as a prospective, randomized, and double blinded study. The remifentanil group group R, and dexmedetomidine group group D received a bolus of 1 ug/kg over 10 minutes, followed by 0.2 ug/kg/minute peroperative infusion of remifentanil, and 0.4 ug/kg/hour of dexmedetomidine. Hemodynamic parameters, time to extubation, and to orientation to person, place, and date, postoperative nausea, vomiting, pain, analgesic requirement at home, and satisfaction with anesthesia were recorded. Demographic, hemodynamic data, postoperative pain scores, and discharge time were similar in both groups. Time to extubation, to orientation to person, to place and date were shorter in group R. Postoperative nausea, vomiting, and analgesic requirements at home were less in group D. This study demonstrated that dexmedetomidine infusion causes a relatively slow recovery with reduced postoperative nausea, vomiting, and analgesic requirements, and similar hemodynamics compared to remifentanil in ambulatory laparoscopic surgeries. It may be an alternative to remifentanil in ambulatory anesthesia.

**Diabetes Mellitus**

**blood**

Leptin and insulin levels in umbilical cord blood of infants of diabetic mothers—relation to fetal birth weight.

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Cairo University - Department of Biochemistry


**Keywords:** Fetal Blood; Leptin-blood; Insulin-blood; Birth Weight; Hemoglobin A, Glycosylated; Infant, Newborn

**Abstract:** Diabetes mellitus is a common medical condition complicating pregnancy. The present study is planned to estimate the level of insulin and leptin in cord blood of infants of diabetic mothers to find if there is a relation between circulating levels of leptin as well as insulin in umbilical cord of these infants and their birth weight and length. Twenty four controlled and 32 uncontrolled diabetic women, beside 20 healthy nondiabetic women and their full term infants constituted the subjects of the present work. Patients and controls were selected from attendants of the Obstetric and Gynecology Outpatient Clinic of El-Galaa Hospital, Ministry of Health, Cairo. Assessment of the glycemic state [controlled or uncontrolled] was performed by estimation of glycosylated hemoglobin [HbA1c]. Thorough clinical examination of the infants including birth weight, BMI and height was done. Cord blood was collected from the neonates delivered to those mothers immediately after clamping the cord and serum levels of insulin and leptin were measured. Results demonstrated that cord blood insulin and leptin levels are increased in infants of uncontrolled diabetics more than infants of controlled diabetics and infants of nondiabetic controls. Also, significant increase in body weight and body mass index in infants of uncontrolled diabetics more than infants of controlled diabetic and infants of nondiabetic controls was found. A significant positive correlation was found between umbilical cord plasma insulin and leptin levels and body weight, length, body mass index and maternal HbA1c in all groups. No significant difference of umbilical cord plasma leptin and insulin levels was found between male and female infants of all groups.

**Diabetic Neuropathies**

**diagnosis**

The role of different neurophysiological tests in the differential diagnosis of diabetic axonal neuropathy and lumbosacral radiculopathy.

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*Neurosciences* 2009; 14 (1): 25-30 (33 ref.)

**Keywords:** Radiculopathy-diagnosis; Diagnostic Techniques and Procedures; Neurophysiology; Neural Conduction; Diagnosis, Differential; Lumbosacral Plexus-pathology

**Abstract:** To evaluate the role of different neurophysiological tests in the differential diagnosis of diabetic axonal neuropathy [DAN] and lumbosacral radiculopathy [LSR]. This study was conducted at Al-Kadhimiya Teaching Hospital, Baghdad, Iraq, from July 2006 to February 2007. Twenty-seven healthy subjects, 44 type 2 diabetics, and 36 LSR patients were studied. The HbA1c level, plain x-ray, and MRI of the lumbosacral region and different
electrophysiological tests were assessed. The sural sensory nerve action potential [SNAP] amplitude values were reduced in 56.3%, and the sural/radial amplitude ratio [SRAR] values were reduced in 71.8% in the diabetic patients, but not in the LSR group. The peroneal compound muscle action potential [CMAP] amplitude was low in 70.45% DAN patients versus 35.5% LSR patients. Peroneal F-minimum [Fmin] values were prolonged in 56.8% DAN versus 32.25% LSR patients. The F persistence [Fp] values were low in 72.7% of DAN, versus 45.2% of LSR patients. However, the F chronodispersion [Fc] was abnormal in 71% of LSR versus 11.4% of DAN patients. The SRAR was found to be more significant than the sural SNAP amplitude alone in the differential diagnosis of the 2 groups. Abnormal peroneal Fc and Fp seems to be valuable tests in the detection of LSR and DAN patients.

Diarrhea

microbiology

Isolation of Yersinia spp. from cases of diarrhoea in Iraqi infants and children.
Kanan, T.A.; Abdulla, Z.A.
College of Medicine - Department of Microbiology
Keywords: Yersinia-isolation and purification; Feces-microbiology; Yersinia-pathogenicity; Microbial Sensitivity Tests
Abstract: All 250 children presenting with diarrhoea at 2 teaching hospitals in Mosul, Iraq over a 9-month period were studied for the presence of Yersinia spp. in stools by cold-enrichment culture at 4°C for 21 days. Pathogenicity of the isolated Yersinia was determined. Antibodies to Y. enterocolitica were raised for rapid Yersinia detection in the stool. Yersinia spp. were isolated from the stools of only 4 patients; 3 isolates were identified as Y. enterocolitica and 1 was Y. pseudotuberculosis. The blood culture was also positive for Y. enterocolitica in 1 case. The antibiogram test for the isolated Yersinia was determined. Cross-reaction between Y. enterocolitica and Salmonella typhi or S. paratyphi B, and between Y. enterocolitica and Brucella was detected serologically.

Diclofenac

chemical synthesis

Topical emulsions stabilized by silica nanoparticles: in vitro release and anti-inflammatory studies of flurbiprofen and diclofenac sodium.
Sarhan, Hatem; Ibrahim, Mohamed A.; Amin, Mohamed A.; Dyab, Amro K.F.
Minia University - Faculty of Pharmacy - Department of Pharmaceutics
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 155-167 (34 ref.)
Keywords: Chemistry, Pharmaceutical; Drug Design; Emulsions; Silicone Gels; Drug Evaluation; Anti-Inflammatory Agents; Nanoparticles; Flurbiprofen
Abstract: Simple and multiple emulsions have a wide range of pharmaceutical applications. Therefore, the stabilization of such emulsions is a challenge to ensure a stable formulation along the period of storage, usage and at the same time to conserve the efficacy of the incorporated medicament. Simple o/w and multiple w/o/w emulsions were prepared using castor and paraffin oils as oil phases and stabilized solely by silica nanoparticles of well-controlled surface properties. Two non-steroidal anti-inflammatory drugs, namely flurbiprofen and diclofenac sodium were incorporated in the stabilized simple and multiple emulsions, respectively. The stability of emulsions and the in vitro release of the drugs from the prepared emulsions were studied. In addition, the anti-inflammatory activity of the drugs from these liquid formulations was assessed using carrageenan-induced hindpaw edema in rats. The results indicated that the prepared liquid emulsions, which stabilized with silica nanoparticles, were highly stable. The in vitro release of flurbiprofen and diclofenac sodium from these simple and multiple emulsions showed higher rates compared with those preapred from paraffin oil due to their lower viscosities. The results revealed also that the percentage of oil has a pronounced effect on the in vitro release rates of the drugs from the emulsions. Furthermore, topical flurbiprofen and diclofenac sodium emulsions exhibited a potent local anti-inflammatory activity compared with the orally administered drugs in the suspension form and this activity reached its peak [57-84%] 3 hrs after carrageenan injection and persisted for 5 hrs, the period of study.
**toxicity**

Formulation of site-specific mucoadhesive liquid suppositories as a method to decrease hepatotoxicity in rabbits.
Ramadan, E.M.; Borg, Th.M.; Elkayal, M.O.
Mansoura University - Faculty of Pharmacy - Department of Pharmaceutics
**Bulletin of Pharmaceutical Sciences - Assiut University** 2008; 31: 331-344 (31 ref.)

**Keywords:** Chemistry, Pharmaceutical; Drug Design; Suppositories; Poloxamer; Rabbits; Models, Animal; Liver-drug effects; Histology

**Abstract:** Mucoadhesive liquid suppositories containing diclofenac sodium [DS] as a NSAID were prepared using poloxamers as a liquid suppository base. Various formulations composed of different ratios of P407 and P188 [10/20, 15/15, 21/9, 24/6 and 27/3% w/w of P 407/P188] were prepared. The physicochemical characters; the gelation temperature, gel strength and mucoadhesive properties of the prepared suppositories were evaluated and compared with conventional suppositories. The dissolution and pharmacokinetic parameters of DS from such suppositories were also estimated. It was also important to study the histopathological changes in rabbit rectum and liver after administration of liquid and conventional suppositories. The gelation temperatures were 49.5, 45.5, 32.5, 22.5 and 20.5°Cfor 10/20, 15/15, 21/9, 24/6 and 27/3% w/w of P407/P188, respectively. P407/P188 mixture in the concentration of 21/9%, w/w was selected as the system of choice since it exhibited adequate physicochemical properties. The addition of DS increased the gelation temperature [from 18 to 32.5°C] for 21/9 poloxamer mixture and reduced the gel strength [from 4.03 sec to 3.4 sec] and the mucoadhesive force [from 3.5 to 1.72 x 102 dyne/cm^2[2]]. It was found that the dissolution of DS-loaded poloxamer-based suppositories was significantly higher than that from the conventional suppositories [51.3 versus 26.7%, respectively] . Furthermore, the pharmacokinetic study showed that DS-loaded poloxamer-based suppositories gave significantly higher initial plasma concentrations, AUC [70.313 micro g. hr/ml] and C[max] [29.417 micro g/ml] of DS than did conventional suppositories [55. 023 micro g. hr/ml and 22 micro g/ml], respectively. Histopathological study of rectal tissues indicated no pathological damage after 6h of rectal administration. The histopathological study of liver tissues revealed that no hepato-cellular damage occurred after 30 days of administration of DS-loaded poloxamer-based suppository; however hepatotoxicity could not be totally avoided by rectal administration of conventional suppositories. DS-loaded poloxamer-based suppository was an effective rectal dosage form with alleviated adverse effects.

**Diet**

Comparison of a semi-quantitative food frequency questionnaire with 24-hour dietary recalls to assess dietary intake of adult Kuwaitis.
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**Saudi Medical Journal** 2009; 30 (1): 159-161 (5 ref.)

**Keywords:** Food Habits; Diet Surveys; Eating; Questionnaires

**Diphtheria-Tetanus Vaccine**

Efficacy of diphtheria and tetanus vaccination in Gaza, Palestine.
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The Islamic University - Faculty of Science - Department of Medical Technology

**Keywords:** Enzyme-Linked Immunosorbent Assay; Antibodies-blood; Immunization, Secondary

**Abstract:** This study evaluated the effectiveness and usefulness of vaccination against diphtheria and tetanus in different age groups in Gaza, Palestine. Blood samples were collected from 180 children aged < 12 years, 90 males and 90 females. Using ELISA methods, the efficacy of vaccination was estimated at 87.8% for diphtheria and 98.3% for tetanus. Mean serum titres varied significantly by age group: for diphtheria 0.24 IU/mL at age 2-4 years, 0.63 IU/mL at 7-8 years and 0.46 IU/mL at 11-12 years, and for tetanus 1.01 IU/mL, 2.63 IU/mL and 1.20 IU/mL respectively. The relatively low antibody titres, especially for diphtheria, suggest the need for a booster dose.
Disasters

A comparative study on community-based disaster management [CBDM] in selected countries and proposing a model for Iran.

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Iranian Institute for Health Sciences Research [IHSR] - Health Services Management
Payesh - Health Monitor 2009; 8 (1): 49-57, 100 (14 ref.)
Keywords: Disaster Planning-organization and administration; Community Networks; Models, Organizational
Abstract: To compare CBDM in various selected countries in order to design a model for Iran. A descriptive-comparative study was conducted in six steps in which few countries have been chosen based on their contribution to issues such as policy making, planning, coordination, and control. The related information then was assessed. The results show that in order to achieve a successful disaster management, there is a need for the participation of the community in various disaster management cycle, although the type of this contribution may differ according to the characteristics of each specific country. This paper proposes a model emphasizing on contribution of community in the local level in the villages and neighborhood areas.

Doxorubicin

adverse effects

Suppression of doxorubicin apoptotic, histopathologic, mutagenic and oxidative stress effects in male mice bone marrow and testis tissues by aqueous rosemary leaves extract.

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Iranian Journal of Cancer Prevention 2009; 2 (1): 35-49 (65 ref.)
Keywords: Doxorubicin-administration and dosage; Rosmarinus-chemistry; Apoptosis-drug effects; Mutagenesis-drug effects; Oxidative Stress-drug effects; Bone Marrow Cells-drug effects; Testis-drug effects; Mice; Plant Leaves; Plant Extracts; Bone Marrow-drug effects
Abstract: In the present set of investigations, the anti-mutagenic and anti-cytotoxic effects of aqueous rosemary leaves extract [RE] beside the dose dependency of these effects on male mice bone marrow and germ cells have been evaluated using in vivo cytogenetic, histopathologic and apoptotic assays, as well as biochemical analysis. Doxorubicin [DXR], a well-known mutagen and cytotoxic agent, was given at a single dose of 25 mg/kg b. wt. intraperitoneally at the fifteenth day. 25, 125, 250 and 375 mg/kg b. wt. of RE were given through oral intubation once a day/three days for 15 days prior to DXR administration. The animals of the positive control group [DXR alone] showed significant increase in the mutagenic effect in bone marrow cells, histological damage, incidence of apoptotic cells [TUNEL-positive cells], level of lipid peroxidation and activity of superoxide dismutase in testis. Though, the activities of the other antioxidant enzymes such as glutathione peroxidase, catalase and glutathione reduced form beside the serum level of testosterone and the rate of primary spermatocytes' transformation to spermatids were significantly declined [P< 0.001]. The ratio of dismutase to glutathione peroxidase and/or catalase was significantly elevated. Pretreatment with each dose of RE showed significant reduction in these frequency of chromosomal aberrations and mitotic index of bone marrow cells and the level of peroxidation, the ratio of SOD/ GPX or CAT, the histological damage and the incidence of apoptotic cells in testes. Also, it caused increase in the levels of some antioxidant enzymes [GSH, CAT and GPX], the level of testosterone and returned the seminiferous tubular cell populations’ ratio to the control distribution. The protective efficacy of the RE was much pronounced following pretreatment with 125 mg/kg b. wt.

Drug Prescriptions

Prescribing pattern of acid suppressive medications for medical inpatients in a teaching hospital in Qatar.

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Hamad General Hospital - Hamad Medical Corporation - Department of Pharmacy
Keywords: Histamine H2 Antagonists; Proton Pump Inhibitors; Anti-Ulcer Agents; Hospitals, Teaching; Inpatients
Abstract: To assess the prescribing pattern of acid suppressive medications ASMs in medical inpatients in a teaching hospital in Qatar, and compare this with the American Food and Drug Administration approved indications, and published data. This study is based on a review of the patient’s medical records for the usage of ASMs, namely, histamine-2 receptor antagonists H2RAs, and proton pump inhibitors PPIs in patients admitted consecutively to the medical wards of Hamad General Hospital, Doha, Qatar from May through June 2007. The review included the type of ASM used, timing of prescription before, or during admission, risk factors for ulcer development, and indication for use. Records for patients using ASMs after discharge without justified indication were assessed 2 months later. A total of 389 patients were admitted, 206 53% received ASMs during their hospital stay, 48 12% of them were taking ASMs before admission. One hundred and eighty-four patients 89% received PPI, and 22 11% received H2RA. During admission, the usage of ASMs was justified in 70 34% patients. One hundred and twenty-nine 63% received ASMs after discharge, the usage of which was justified in only 59 46% patients. From the 70 patients receiving ASMs after discharge for unjustified indications, 30 43% patients were re-prescribed with ASMs, 2 months or more after discharge. Acid suppressive medications are prescribed in the majority of these patients without justified indication. Moreover, many of them continued their ASMs for at least 2 months after discharge.

Drug Resistance, Multiple, Bacterial

Multidrug resistant gram-negative bacteria in clinical isolates from Karachi.
Saeed, Asma; Khatoon, Hajra; Ansari, Fasihuddin Ahmed
University of Karachi - Department of Microbiology
Keywords: Gram-Negative Bacteria; R Factors
Abstract: A total of 54 gram-negative bacteria obtained from various pathological labs and hospitals of Karachi were screened for their resistance to ampicillin, chloramphenicol, gentamycin, kanamycin, neomycin, streptomycin and tetracycline antibiotics. Of the 54 bacteria, 50 were resistant to one or more antibiotics. Among the resistant bacteria, 13 out of 28 were found to transfer their resistances by conjugation. This indicates that at least 46% of clinical gram-negative bacteria in Karachi possess various types of transferable R plasmids, such as pAK5, pAK9, pAK10, pAK11, pAK12, pAK13, pAK14, pAK15, pAK16, pAK17, pAK18, pAK19, pAK20 and pAK21. The non-conjugative R plasmids included pMT14 and pZ26. Only pAK15 showed 26% segregation even after 20 consecutive transfers in plain broth [spontaneous segregation] whereas only pAK15 and pAK16 showed any significant loss of their markers in curing by acridine orange. The stability of R plasmids is more dangerous from clinical point of view.

Echinococcosis
diagnosis

Primary spinal epidural hydatid cyst with intrathoracic extension.
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University Hospital Hassan II - Department of Neurosurgery
Neurosciences 2009; 14 (1): 81-83 (19 ref.)
Keywords: Epidural Space-parasitology; Epidural Space-pathology; Thoracotomy; Echinococcosis, Pulmonary; Echinococcus granulosus; Echinococcosis-surgery
Abstract: Spinal epidural localization of hydatid cyst is quite rare. We report a case of a 33-year-old patient who experienced paraparesis over 2 years, with an umbilical sensitive level. A CT scan and MRI showed an intrathoracic multilobar lesion, probably of intra-spinal origin. An anterolateral transpleural surgical approach confirmed the hydatid character of the observed lesion and enabled total spinal cord decompression. No osseous involvement was noted. We report a case of spinal epidural hydatid cyst successfully managed by an anterior approach, and we discuss epidemiological, diagnosis, and therapeutical features of this rare localization of hydatid cyst.

[A rare pelvic hydatid cyst]
Salah Azaiz Institute - Department of Carcinology Surgery - Tunisia
Maghreb Medical 2009; 29 (391): 248-249 (9 ref.)
Keywords: Pelvis-pathology; Echinococcosis-surgery
Abstract: Pelvic localization of hydatid cyst is uncommon even in endemic countries such as Tunisia. Localization in the broad ligament represents only 0.3% of cases. A 22 year's old woman had consulted for a pelvic pain operating for a month. An abdominal ultrasound had found a compartmentalized cystic formation of 145mm lateralized to the left. The surgical exploration had found a hydatid cyst of the left broad ligament, which was resected. Hydatid cyst of the broad ligament remains extremely rare, treatment is surgical and is the only guarantee of a disease free survival.
Echocardiography

[Echocardiography: Why not the gold standard of left ventricular systolic function assessment?]
Hospital of Principal Military and Instruction of Tunis - Cardiology Department

Maghreb Medical 2009; 29 (391): 216-221 (44 ref.)

Keywords: Ventricular Function, Left; Ventricular Dysfunction, Left-ultrasonography; Stroke Volume; Coronary Angiography; Prospective Studies; Ventricular Dysfunction, Left-diagnosis

Abstract: Left ventricle [LV] systolic function is a corner stone in diagnostic and therapeutic decision makings and is a potent predictor of patient's outcome. A lot of investigational techniques help to assess the systolic performance of LV but in practice echocardiography and LV angiography are still the most used methods. Because, in the last decade echocardiographic techniques have tremendously evolved, accuracy and limitations of LV systolic function assessment by echo has to be revisited. 100 successive patients scheduled for LV angiography, got estimations of LV stroke volume [SV] and ejection fraction [LVEF] echographically by Simpson's methods and by pulsed Doppler at the level of aortic annulus in the second harmonic mode and invasively by a 30° RAO LV angiography. Echocardiography has been performed by two operators prior to the angiography. Statistics were done using linear regression methods with determination of the correlation coefficient [r] and the standard error estimation [SEE] when the variables are normally distributed or the spearman's coefficient [rs] when not. Echocardiographic assessment was technically feasible in all patients by both operators. Echocardiographic methods had excellent correlation to angiography and correlation coefficients of biplane Simpson and pulsed Doppler at the level of the aortic annulus were respectively r = 0.9 and r = 0.85. These coefficients were r = 0.85 and r = 0.69 in the subset of patients with LV wall motion dyssynergia. The intra and inter observer variabilities were below 7% for all methods. Echocardiographic LV systolic function assessment is nowadays technically possible in almost all patients with an excellent correlation to LV angiography and a good inter observer reproducibility whether there is or not LV remodeling or wall motion abnormities.

Ectodermal Dysplasia

diagnosis

Hypodontia and microdontia associated with hereditary ectodermal dysplasia.
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Keywords: Ectodermal Dysplasia-genetics; Ectodermal Dysplasia-therapy; Anodontia-diagnosis; Anodontia-genetics; Genetic Screening; Prosthodontics

Abstract: Hypodontia and associated conditions like Hereditary Ectodermal Dysplasia [HED] and microdontia markedly influence on physical, functional and psychosocial maturation of the affected individuals. Thorough evaluation, proper counseling and careful treatment planning employing a multidisciplinary approach are keys to a successful, long-term management. This case report describes the prosthodontic management of a young man with hypodontia and microdontia.

Education

Educational ranking of a two-year degree courses in health sciences in Iranian medical universities: a strategy to identify the strengths and weaknesses.
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Payesh - Health Monitor 2009; 8 (1): 17-23, 104 (15 ref.)

Keywords: Health Education; Benchmarking; Educational Measurement-methods

Abstract: After two decades of expansion of medical universities and increasing the number of students as one of the most attainable solutions for the problem of substandard status of Iranian community health, recently, quality-based policies in medical education have taken priority over most of the national health plans. In this study, we stratified educational services of schools providing a two-year degree course in health sciences in Iran to determine their differences. To measure the educational performance of the course nationwide, a benchmarking tool, consisting of 47
Determinants, 

were devised. Their weights were defined through consensus developing methods. Each school was asked to introduce a representative who would complete a questionnaire, which was designed to collect schools' information. In the next step, all the divisions were visited by one of the project's members and the school's representative. Then, data retrieval was performed and verified at the project's office. Schools providing the course were stratified based on their individual scores. Furthermore, all schools were also ranked in each indicator. Among schools providing the course School of Health Sciences of Iran University of Medical Sciences gained the first rank, with the score of 86.53 out of 100. This study defines the educational strengths and weaknesses of health sciences programs in Iran that could be used as a measure for authorities to devise practical strategies for qualitative and quantitative improvement.

**Electrocardiography**

**P wave duration changes and dispersion. A risk factor or autonomic dysfunction in stroke?**

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Neurosciences 2009; 14 (1): 14-18 (29 ref.)

**Keywords:** Stroke; Risk Factors; Autonomic Nervous System Diseases

**Abstract:** To investigate the P wave duration and P wave dispersion in stroke patients, and to compare those with healthy subjects. We measured maximum and minimum P wave durations, and dispersion on the 12-lead surface ECG in 67 consecutive patients with first ever-acute ischemic stroke and 58 controls at the neurology wards of the Medical School, Düzce, Turkey, between May 2005 and October 2006. The subjects were not included if there were a history of atrial fibrillation, cardiac problem, and using drugs related to cardiovascular diseases or psychiatric problems. P wave durations and dispersion were similar in stroke patients and controls. The correlation analysis revealed a positive relation between age and Pmin duration \(p = 0.03\). The mean Pmin values were 63.85 +/- 22.55 for male and 76.43 +/- 26.84 for female patients, and this difference was statistically significant \(p = 0.04\). The correlations between P wave durations, and the presence of risk factors, the stroke outcome scales, and death of patient within 6 months were not statistically significant. Although there were some previous reports on ECG changes including P waves in acute stroke, we found that P wave durations and dispersion were similar in acute stroke patients and controls. This may be related to the patient selection criteria of this study, as we did not include patients with any previous cardiac abnormality. We concluded that the autonomic nervous system dysfunctions causing cardiac abnormalities in stroke need more investigation.

**Emergency Service, Hospital**

**Which patients wait longer to be seen and when? A waiting time study in the emergency department.**

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King Faisal Specialist Hospital and Research Centre - Department of Biostatistics, Epidemiology and Scientific Computing


**Keywords:** Patients; Time; Time Factors; Patient Satisfaction; Retrospective Studies; Triage

**Abstract:** We investigated the waiting time for patients before seeing a physician in the emergency department of a tertiary care hospital in Riyadh, Saudi Arabia. Bi- and multivariate analyses of routine data for 2187 patients determined the association between selected patient characteristics and waiting time. The median waiting time between triage and being seen by a physician was 35.0 min [range 1.0-325.0 min]. Age, day of arrival, time of arrival and triage category were significantly associated with waiting time. Older patients and those arriving on Sundays and Wednesdays waited longer. Variability in waiting times could be addressed by more standardized triage policies, but may also be influenced by other clinical or non-clinical factors that require further investigation.
Endocrine System Diseases

epidemiology

Neonatal screening of the common endocrine and metabolic disorders in Menoufiya governorate.
Abou El Ella, Soheir S.; Tawfitt, Maha A.M.; El Gend, Fady M.; El Nemr, Fathia M.; El Sebae, Hatem M.; Ramadan, Mohammed A.
Menoufiya university - Department of Pediatrics
Keywords: Metabolic Diseases-epidemiology; Mass Screening; Neonatal Screening; Congenital Hypothyroidism; Phenylketonuria; Galactosamine
Abstract: Hereditary diseases and congenital malformations have been reported to affect 2-5% of all live births; they account for up to 30% of pediatric hospital admissions, and cause about half of childhood deaths in developed countries. Available evidence suggests that genetic are important also in countries of the Eastern Mediterranean Region. The following factors may contribute to the prevalence of genetically determined disorders: the high consanguinity rates; the trend of continuing to bear children up to menopause; the general lack of public awareness about genetic diseases and the dearth of genetic services in the region. Neonatal screening tests early detect disorders in newborns for which interventions shortly after birth have obvious benefits. We aimed at screening of congenital hypothyroidism [CH], phenylketonuria [PKU], and galactosemia which are common causes of preventable mental retardation and starting their early intervention. Our study included 15,000 dried blood specimens [DBSs] from the newborns of all the ten centers of the Menoufiya governorate, as a representative random sample of the year 2007. all specimens were analysed in neonatal screening laboratory in our genetics and endocrinology unit, pediatric department; Menoufiya University in collaboration with the central laboratories of ministry of health and population; using ELISA for TSH analysis and fluorometric assay [WALLAC system, Perkin Elmer] for PKU and galactosemia screening. Preservation and transfer of DBSs were according to the recommendations of the International Society for Neonatal Screening. Because of the high costs, we randomly selected two thousands DBSs for PKU screening and another two thousands for screening of galactosemia. Out of the /5,000 DBSs, 99.84% were negative for CH [TSH < 20 ulU/ml]. Twenty five cases were borderline for CH, while 9 cases only were confirmed as CH after clinical examination and revaluation using serum samples [serum TSH > 20 ulU/ml and T4 < 0.8 ng/dl], the confirmed cases were treated according to the management schedule. So the incidence of CH in our study was 0.06%. As regards PKU screening; 93.95% of studied samples were negative [phenyl alanine < 2.1 mg/dl]. Only 21 cases were initially borderline for PKU [phenyl alanine = 2.1-3.0 mg/dl, while clinically normal] but no PKU cases were detected after revaluation. On the other side; the 2000 DBSs screened for galactosemia were negative [Galactose uridyl -1 transferase enzyme [GALT] > 3.5 u/gHb]. On conclusion, because of the high costs of mass screening for PKU and galactosemia, only screening of high risk families and neonates is recommended. On the other hand screening programs should include our more common problems as congenital deafness and hemoglobinopathies.

Epilepsy

blood

Serum ghrelin level in epileptic children.
Afify, Mohamed Farouk; Kamel, Magdy Moustafa; Mohamed, Moustafa Mourad; Awad, Peter Ibrahim
El Minia University - Faculty of Medicine - Department of Pediatrics
Keywords: Child; Ghrelin-blood; Enzyme-Linked Immunosorbent Assay; Epilepsy, Generalized; Epilepsies, Partial
Abstract: The relation between epilepsy and endocrine system is very important as neuroendocrinological studies on epileptic seizures elucidate part of the mechanisms of the brain function underlying epilepsy. Ghrelin is a growth hormone secretagogue secreted primarily by stomach cells with lesser amounts secreted by other cells. The aim of this study is to compare serum ghrelin level in epileptic children with control group. The study included 40 children with epilepsy and 12 healthy children as controls. They were selected from Neurologic Clinic and inpatient ward of Pediatric Department, Suzan Moubarak Hospital for Pediatrics, Faculty of Medicine, El-Riffinia University. Epileptic children were divided into partial or generalized epilepsy and both of them divided according receiving valproate therapy or not started antiepileptic drugs [AED] therapy. Serum level of ghrelin was estimated by ELIZA technique. The study showed that all epileptic children had significantly higher serum ghrelin level than that of the control group [p < 0.001]. All children with partial epilepsy had significantly higher level of ghrelin than those with generalized epilepsy [p < 0.01]. There were insignificant difference between the level of serum ghrelin in all epileptic children under valproate therapy and those don't started any AED therapy. Also no significant differences among both generalized and partial epilepsy under valproate therapy than the levels in epileptic children of both groups not under AED therapy [p > 0.05]. We
conclude that ghrelin level increase in all epileptic children and in both generalized and partial epileptic groups when compared with control. Also there was significant higher level in partial epileptic children than the level in generalized epileptic children. There was no effect of valproate therapy on the levels of serum ghrelin in both partial and generalized epileptic children.

epidemiology

Epilepsy in patients 60 years and above.
Mousali, Yahya M.; Obeid, Tahir H.; Al Gahtani, Hussein A.; Al Janadi, Mansour A.; Attar, Ahmed A.; Dammas, Hassnah O.
E-mail: ymousali@hotmail.com
King Khalid National Guard Hospital - Department of Medicine
Neurosciences 2009; 14 (1): 53-55 (14 ref.)
Keywords: Aged; Epilepsy-epidemiology; Retrospective Studies; Risk Factors; Incidence
Abstract: To evaluate the clinical characteristics and etiology of epilepsy at age 60 years and above in the Western Region of Saudi Arabia [KSA], as epilepsy is now considered to be the third most frequent neurological problem in the elderly population. We retrospectively reviewed the medical records of patients 60 years and above at King Khalid National Guard Hospital, Jeddah, KSA between 1999 and 2007 with new onset of seizures and diagnosed as suffering from epilepsy. We excluded patients 60 and above with provoked seizures. Seventy-five patients of late onset epilepsy were studied. Partial seizure [focal] was found in 40 patients [53.3%]; generalized tonic clonic seizures in 18 patients [24%]; unclassified seizure in 13 patients [17.5%]; and status epilepticus in 4 patients [5.3%). Stroke was the underlying etiology in 52 patients [69.3%]; brain tumor was found in 8 patients [10.7%], trauma in 3 patients [4%], and infection in 3 patients [4%]. None of the patients had a family history of epilepsy. No cause [idiopathic] was found in 9 [12%] patients. The most common type of epilepsy at age 60 and above in our study is symptomatic epilepsy with stroke as the leading cause. Modifying risk factors for stroke such as: hypertension, diabetes mellitus, and high cholesterol may reduce the incidence of epilepsy in this age group.

Ethanol

adverse effects

Effect of ethanol vapour exposure on survival of chick embryos.
Kamran, Kiran; Khan, M. Yunus; Minhas, Liaqat Ali
E-mail: drkirankamran@gmail.com
Foundation University - Medical College - Department of Anatomy
Keywords: Chick Embryo-drug effects; Breath Tests; Survival Rate; Fetal Alcohol Syndrome
Abstract: To determine the survival of chick embryos after ethanol vapour exposure by noting the number of dead and alive embryos and comparing with age-matched controls. Study Design: Experimental study. Place and Duration of Study: Department of Anatomy at the regional centre of College of Physicians and Surgeons, Islamabad, from February 2006 to February 2007. Chicken eggs, placed in an incubator, were exposed to ethanol vapours produced through a specially designed vapour chamber. The experimental group was disected on day 7, day 10 and day 22 or hatching whichever was earlier and compared with age-matched controls. The proportion of ethanol vapours in the incubator was monitored with a breathalyzer. No statistical difference was seen in the survival of day 7 alcohol-exposed embryos and their age-matched controls. The survival of day 10-control embryos was significantly higher than alcohol exposed group of same age. The embryos exposed to ethanol vapours from day 1 to day 10 and then followed till hatching or day 22, whichever was earlier, had significantly lower survival than age-matched controls. In this study, ethanol vapour exposure decreased embryo survival with increasing embryonic age and increased duration of exposure.
Exercise

physiology

The effects of regular exercise on pregnancy outcome.
Forouhari, S.; Yazdanpanahi, Z.; Parsanezhad, M.E.; Raigan Shiraz, M.
Shiraz University of Medical Sciences - Hazrat Fatemeh College of Midwifery and Nursing
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 57-60 (20 ref.)
Keywords: Exercise-adverse effects; Pregnancy-complications; Pregnancy Outcome; Premature Birth-etiolog; Fetal Growth Retardation-etiolog; Case-Control Studies; Labor Stage, Second; Delivery, Obstetric-instrumentation; Prospective Studies
Abstract: Most women who report increased levels of physical activity are not at an increased risk of preterm delivery or reduced intrauterine growth. This study was conducted to look into the safety and effects of regularly timed aerobic exercises during pregnancy on both the mother and the neonate. A prospective, case-control study was done on 120 healthy pregnant women in their first trimester. The data were collected in the prenatal outpatient care, labor and delivery rooms of a university-based Obstetrics Department. After completing basic information forms, the pregnant women were educated on the specific exercises in 8 stages throughout the pregnancy. Sixty-three patients presenting for delivery without any history of physical exercise were selected as the control group. There was no significant difference between the two groups regarding their occupation. The exercising group experienced significantly decreased durations of labor. There was no significant difference in neonatal birth weight or apgar scores. There were a significant decreased number of assisted deliveries in the exercising group. Exercise during pregnancy shortens the duration of the second stage of labor and reduces the risk of assisted delivery while is safe for the neonate too.

Extremities

injuries

Extremity vascular trauma. A 7-year experience in Lahore, Pakistan.
Hussain, Muhammad I.; Zahid, Muhammad; Khan, Abdul Waheed; Askri, Hasan; Khan, Abul Fazal A.
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King Khalid University Hospital - Division of General Surgery
Keywords: Extremities-blood supply; Blood Vessels-injuries; Extremities-surgery; Retrospective Studies
Abstract: To determine the outcome of various techniques of vascular repair in terms of repair related complications and limb salavagibility. From January 1999 to December 2005, this retrospective study was conducted in the Department of General Surgery, Lahore General Hospital, Lahore, Pakistan. The patients, who underwent various surgical interventions for extremity vascular trauma, were included in this study. Those, who underwent primary amputation due to non-salvageable injuries or who presented with late complications of vascular injuries were excluded. Ninety-three patients underwent different surgical procedures for extremity vascular trauma. Majority of the patients were young, mean, 29.4 years male 91.3%. Penetrating trauma was the most common mode of injury 77.4%. Superficial femoral artery was the most frequently injured artery 26.8%. Graft repair was carried out in 41 patients 46.6%, while 34.1% of the patients had end-to-end anastomosis. Wound infection was the most common complication 18.2%. Seven patients 7.5% had secondary amputations and 3 3.2% died from other injuries. Vascular reconstruction was successful in 89.3% of the patients. Early revascularization by employing simple repair or interposition autogenous vein graft repair results in successful limb salvage with acceptable complication rate.
Ferula

chemistry

Cytotoxicity study of ferula hermonis boiss.
Elouzi, Abdurrahim A.; Auzi, Abdurazag A.; El Hammadi, Mazen; Gray, Alexander I.
El fateh University - Faculty of Pharmacy - Department of Pharmaceutical Sciences
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 313-317 (8 ref.)
Keywords: Ferula-toxicity; Cytotoxicity Tests, Immunologic; Plant Extracts
Abstract: Ferula hermonis Boiss [Apiaceae] is known in the Midleast as [zallouh ] In the last decade, scientists paid attention to study chemistry and biological activity of the plant. In this study Ferula hermonis were collected and evaluated for cytotoxic activity. The plant was extracted using different polarity solvents: petroleum ether, ethyl acetate and methanol. The cytotoxic effect of the extracts was examined in-vitro on human cell line [stomach cancer cell line, SCL-40]. The assay was based on incubation of tetrazolium dye [MTT] a yellow water-soluble tetrazolium dye that is reduced by live, but not dead cells[ with the cells that pre-incubated with a tested substance. A purple formazan product that produced can be determined spectrophotometrically. The result confirmed that the SCL-40 cells were much more sensitive to the petroleum extract than other extracts, which showed the prominent cytotoxicity. The plant showed pronounced cytotoxic activity will be further evaluated for the possible isolation of active antitumour compounds.

Fibroma

diagnosis

Elastofibroma dorsi: an under-diagnosed entity -clinical, imaging and pathological features.
Pandey, Tarun; Al Shammer, Noufa; Alexander, Susan; Vattoth, Surjith
University of Arkansas for Medical Sciences [Current affiliation] - Department of Radiology
Keywords: Fibroma-pathology; Fibroma-radiography; Fibroma-Ultrasonography; Radiography, Thoracic; Thorax-pathology; Tomography, X-Ray Computed; Magnetic Resonance Imaging; Retrospective Studies
Abstract: To report clinical, radiological and histopathological findings of elastofibroma dorsi. The purpose is to increase awareness among radiologists and clinicians of this under-diagnosed and interesting benign lesion. Retrospective review of 624 consecutive thoracic Computed Tomography [CT], 92 ultrasounds and 130 Magnetic Resonance Image [MRI] scans for detection of elastofibroma dorsi along with review of the clinical and histopathological findings. Three radiologists evaluated the imaging features using previously defined criteria. A histopathologist reviewed the pathological findings. A tertiary level hospital and a specialized orthopedic center. Patients who were subjected to CT, Ultrasound and MRI scans of the thorax Interventions: CT, MRI, Ultrasound scans of the thorax and surgical excision. Detection of elastofibromas and their clinical, radiological and histopathologic findings. Only 50% of patients with elastofibrom a dorsi could be detected by all modalities though, on review, all lesions showed characteristic location, morphology, imaging as well as typical clinical and pathological features. Significant contrast enhancement of all lesions on MRI was an unusual finding in our study. An awareness of the radiological findings and enhancement patterns on CT and MRI can help in the proper diagnosis of elastofibroma dorsi an entity often misdiagnosed in a high percentage of patients.

Fibromatosis, Aggressive

diagnosis

[What is your diagnosis? Fibromatosis, Aggressive unusual breast tumor].
Rekik Bouraoui, W.; Dami, M.; Goucha, A.; Ben Hassoua, J.; Bouzaïene, H.; Boussen, H.; Benna, F.; Rahal, K.; Gamoudi, A.
Salah-Azaïz Institute - Immuno-histo-cytology Department - Tunisia
Maghreb Medical 2009; 29 (391): 221-258 (6 ref.)
Keywords: Fibromatosis, Aggressive-pathology; Fibromatosis, Aggressive-surgery; Breast Neoplasms
Flavonoids

A novel RP-HPLC method for the determination of bharangin in Ghantu Bharangni crude extracts.
Sathish, Thadikamalla; Brahmaiah, pendyala; Sathy, Kancherla; Bhojaraju, pullasi; Naik, Nenavath Gopal; Kezia, Devarapalli; Prakasam, Reddy Shetty
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Indian Institute of Chemical Technology - Bioengineering and Environmental Center
Keywords: Plant Extracts; Chromatography, High Pressure Liquid
Abstract: An accurate, simple, reproducible and sensitive RP-HPLC method for the determination of bharangin has been developed and validated. The separation of bharangin and 2-nitroaniline [internal standard] was achieved on Supelcosil LC-18 [3 micro, 150- 4.6 mm i.d.] column using UV detection at 388 nm. The mobile phase was consisting of methanol and 0.01M KH2PO4 buffer [pH 3.0, adjusted with ortho-phosphoric acid] [75:25% v/v]. The linear range of detection for bharangin was found to be 10-50 ng/ml. Intra-and inter-days assay relative standard deviations were less than 3.21. The method has been successfully applied to the determination of bharangin in various crude extracts. The method has been shown to be linear, reproducible, specific, and rugged.

Fluconazole

chemical synthesis

Liposomes as an ocular delivery system for fluconazole: in-vivo study.
Habib, F.S.; Fouad, E.A.; Abdel Rahman, M.S.; Fathalla, Dina
Assiut University - Faculty of Pharmacy - Department of Pharmaceutics
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 249-263 (28 ref.)
Keywords: Liposomes; Corneal Diseases; Antifungal Agents; Rabbits; Cornea; Models, Animal; Ophthalmic Solutions; Keratitis; Candida
Abstract: The purpose of this study was to formulate topically effective controlled release ophthalmic fluconazole liposomal formulations using the reverse-phase evaporation technique. Soya bean phosphatidycholine [PC] and cholesterol [Ch] in specific weight ratios were used. Selected formulations were tested for their in-vivo ocular antifungal effect. These included the neutral, the positively [using stearyl amine] and the negatively [using dicetyl phosphate] charged liposomes. A reproducible model of Candida keratitis in rabbits was performed and the effects of the prepared liposomes were better than a solution of fluconazole. The order of fluconazole liposomal formulations according to the time to achieve complete healing is arranged in a descending order: negatively charged liposomes > positively charged liposomes > neutral liposomes [7:4] > neutral liposomes [5:5] > fluconazole solution. The frequency of instillation was decreased; also, the time of ulcer healing was decreased. It was concluded that the use of liposomes as a drug delivery system could contribute to the enhancement of the effect of fluconazole in the eye.

Liposomes as an ocular delivery system of fluconazole: in-vitro studies.
Habib, F.S.; Fouad, E.A.; Fathalla, Dina
Assiut University - Faculty of Pharmacy - Department of Pharmaceutics
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 293-311 (28 ref.)
Keywords: Liposomes; Corneal Diseases; Antifungal Agents; Ophthalmic Solutions; Rabbits; Models, Animal
Abstract: The purpose of this study was to formulate topically effective controlled release ophthalmic fluconazole liposomal formulations. Reverse-phase evaporation technique was used for the preparation of fluconazole liposomes consisting of phosphatidyicholine [PC] from soybean and cholesterol [Ch] in weight ratios of [9:1], [7:2], [7:3], [7:4], [6:4], [7:6] and [5:5] with or without stearylamine [SA] or dicetyl phosphate [DP] as positive and negative charge inducers, respectively. The prepared liposomes were evaluated for their in-vitro release. The release mechanism was found to follow Higuchi and first order kinetics. Increasing cholesterol weight ratio in the prepared liposomal formulations progressively decreased the release of fluconazole from the vesicles. The positively charged liposomes showed slower rate of drug release compared to neutral ones. Negatively charged liposomes showed slight increase in the release rate and extent of fluconazole from the liposomal formulations 6.5:0.25 and 5:5:0.5; in comparison with neutral ones. Further increase in the amount of dicetyl phosphate 5:5:1 resulted in a significant decrease in the release rate. Four fluconazole liposome eye drops were prepared. Physical stability study including, visual appearance, particle size and amount of drug leakage from liposome eye drops were studied. Approximately 82.82%, 76.55%, and 70.90% of fluconazole was retained in negative, positive and neutral liposomal ocular formulations up to a period of 24 weeks at 5°C.
Focus Groups

Effect of interactive group discussion among physicians to promote rational prescribing.
Garjani, A.; Salimnejad, M.; ShamsMohamadi, M.; Baghchevan, V.; Vahidi, R.G.; Maleki Dijazi, N.; Rezazadeh, H.
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Tabriz University of Medical Sciences - Faculty of Pharmacy - Department of Pharmacology and Toxicology
Keywords: Physicians; Prescriptions; Practice Guidelines as Topic
Abstract: This study assessed the effect of an educational intervention [interactive group discussion] on the prescribing behaviour of 51 general physicians from the north-west of Tabriz. Prescriptions were analysed pre-intervention and post-intervention [control and intervention groups] using a proforma with 8 indicators of correct prescribing. The mean number of drugs per prescription pre-intervention was 3.82. The percentage of prescriptions with antibiotics, corticosteroids and injections were 40.8%, 25.9% and 58.0%, respectively. Following the intervention there were slight but not significant changes in the indicators in both intervention and control groups compared with pre-intervention results.

Folic Acid

therapeutic use

Comparison study on the effect of prenatal administration of high dose and low dose folic acid.
Manizheh, Sayyah M.; Mandana, Shojaiee; Hassan, Argani; Amir, Gorbani H.; Mahlisha, Kazemi S.; Morteza, Ghojazadeh
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Tabriz University of Medical Sciences - Alzahra Teaching Hospital - Department of Obstetrics and Gynecology
Saudi Medical Journal 2009; 30 (1): 88-97 (70 ref.)
Keywords: Folic Acid-administration and dosage; Prenatal Care; Pregnancy; Randomized Controlled Trials as Topic; Single-Blind Method
Abstract: To evaluate the effect of high dose and low dose folic acid on the levels of hemocysteine Hcy concentration during the first trimester of pregnancy and at delivery, and to examine the association of Hcy serum levels and preeclampsia. In a single blinded randomized clinical trial, which was conducted in Tabriz, Iran, from 2005-2008, 246 nulliparous pregnant women in 2 similar groups, received folic acid daily from early pregnancy until delivery 5 mg/day in group one and 0.5 mg/ day in group 2. The incidence of hypertension and laboratory changes in the levels of serum Hcy, lactate dehydrogenase, and uric acid in addition to the levels of urine creatinine and protein were compared between the groups. There was no presence of any type of hypertension in each group. The systolic blood pressures BP mm Hg at the first trimester were 114.01 +/- 8.78 for group one, 114.16 +/- 9.05 for group 2, and at delivery, 117.24 +/- 6.91 for group one, and 117.23 +/- 11.48 for group 2 p = 0.32. The diastolic BP at the first trimester were 74.90 +/- 7.45 for group one, 73.30 +/- 8.90 for group 2, and at delivery 76.46 +/- 5.58 for group one, and 76.69 +/- 8.62 for group 2 p = 0.42. Although the level of Hcy umol/L decreased significantly at the delivery time in group one 11.81+/- 3.85 decreased to 6.44 +/- 1.88, and 2 9.08+/- 3.24, decreased to 7.44 +/- 2.99, this decrement was more significant in the first group p < 0.001. The results show that folic acid suplement throughout pregnancy, irrespective of the dosage, could eliminate hypertensive disorders, and decreases serum level of Hcy, although it is reduced more significant in the first group.

Food Industry

Screening for some intestinal parasites and malaria in food industry workers in Taiz province, Republic of Yemen.
Oshaish, Hussein; El Absii, Abdel Rahman
Taiz University - Faculty of Medicine - Internal Medicine
Assiut Medical Journal 2008; 32 (3): 59-64 (24 ref.)
Keywords: Healthy Worker Effect; Intestinal Diseases, Parasitic-parasitology; Mass Screening; Questionnaires; Feces; Urine; Risk Factors; Cross-Sectional Studies; Case-Control Studies
Abstract: Parasitic diseases are common health problem in developing countries. A case control study nested in survey was done to study rate of some infections and intestinal parasites in two hundred and twenty workers of the food industry [FIWs] in Taiz province, Yemen and to explore the impact of some demographic factors on them. Each worker was examined for malaria blood film, widal, urine, stool, and questionnaire was filled about socioeconomic
standards [SES]. In screening of FIWs, intestinal parasites prevalence were 36.2%; with Entamoeba histolytica 18.6%; Schistosoma mansoni 7.2%; Ascaris lumbricoides 6.8%; Giardia 1.8%, Ancylostomas 4%. Strongyloides stercorlis, Hymenolepis nana, Tricuris trichiura were less than 1% each. Malaria and typhoid were low [2.2%]. On studying role of education, water supply, SES, presence of latrine; the only significant risks for parasitic infection were SES and presence of latrine outside the houses.

Foreign Bodies

therapy

Endoscopic removal of accidentally swallowed toothbrush.
Al Osaimi, Sameer; AlEnezi, Bader; Abdul Aziz, Sameer
Al Sabah Hospital - Department of Surgery
KMJ - Kuwait Medical Journal 2009; 41 (1): 66-68 (14 ref.)
Keywords: Stomach; Dental Devices, Home Care; Toothbrushing; Endoscopy; Deglutition; Radiography, Abdominal
Abstract: Foreign body ingestion is a very well recognized problem that confronts surgeons. Toothbrush ingestion is rare, with only a few cases reported. We report a case of accidental swallowing of a long toothbrush and review the available literature on the complication and management of toothbrush swallowing. A 15-year-old female presented to the emergency room in Al-Sabah hospital, Kuwait, complaining of having swallowed her toothbrush. In addition to routine biochemical investigations, abdominal and chest X-ray were done. Abdominal X-ray revealed a foreign body [toothbrush] in the stomach. Endoscopy was used successfully to remove the toothbrush with no complication. The case is reported because of its rare nature.

Fournier Gangrene

diagnosis

Paraphimosis leading to fournier's gangrene.
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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 203 (3 ref.)
Keywords: Fournier Gangrene-microbiology; Fournier Gangrene-complications; Fournier Gangrene-drug therapy; Paraphimosis-complications; Penis-pathology; Penile Diseases

Fruit

Screening of antioxidant properties of seven umbelliferae fruits from Iran.
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Shahid Beheshti University [M.C.] - School of Pharmacy - Department of Pharmacognosy
Keywords: Apiaceae; Phytotherapy; Antioxidants; Free Radical Scavengers; Flavonoids
Abstract: Antioxidative activities [IC50] of ethanol extracts from seven Umbelliferae fruits [Bunium persicum, Coriandrum sativum, Cuminum cyminum, Foeniculum vulgare, Heracleum persicum, Pimpinella anisum and Trachyspermum copticum] have been studied by the DPPH [2,2'-diphenyl-1-picrylhydrazyl] radical scavenging test. All the studied extracts showed antioxidant capability and P. anisum extract exhibited the strongest activity. The scavenging activity of the extracts in decreasing order was: P. anisum > T. copticum > C. cyminum > F. vulgare $$\geq$$ B. persicum $$\geq$$ C. sativum $$\geq$$ H. persicum. The extracts were also investigated regarding their total flavonoid contents by the AlCl[3] technique. The decreasing order of the flavonoid content of the extracts was: C. cyminum $$\geq$$ T. copticum $$\geq$$ P. anisum $$\geq$$ H. persicum $$\geq$$ B. persicum $$\geq$$ F. vulgare $$\geq$$ C. sativum. However, a favorable correlation was not found between the antioxidant activity and the total flavonoid content of the extracts. As well, the most active extract [i.e. P. anisum] was partitioned with n-hexane, chloroform and ethyl acetate to yield three organic fractions together with the remaining aqueous fraction. The antioxidative activities [IP%] and flavonoid contents of the fractions were also determined. The ethyl acetate fraction exhibited the highest activity and content. A positive correlation was found between the antioxidant potency and flavonoid content of the fractions.
Fungi

isolation and purification

Survey of keratinophilic fungi in sewage sludge from wastewater treatment plants of Mazandaran, Islamic Republic of Iran.

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Mazandaran University of Medical Sciences - Department of Medical Mycology and Parasitology


Keywords: Sewage-microbiology; Water Purification; Microbial Sensitivity Tests; Prevalence

Abstract: To isolate keratinophilic fungi in sewage sludge from wastewater treatment plants in Sari city, Mazandaran province, Islamic Republic of Iran, samples were taken from 7 plants with different sewage treatment technologies. From 35 sludge samples cultured on Sabouraud’s agar with cycloheximide and chloramphenicol, 326 fungal colonies belonging to 7 species were isolated. G eotrichum [59.5%], Cladosporium [13.8%], Alternaria [11.3%] and Penicillium [10.7%] species were the most prevalent. No growth of keratinophilic fungi was observed on this medium. However, using the hairbaiting technique, Microsporum gypseum, Chrysosporium spp. and Geotrichum spp. were isolated.

Gait

Evaluating the child with unsteady gait.

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Neurosciences 2009; 14 (1): 3-9 (48 ref.)

Keywords: Child; Nervous System Diseases-diagnosis; Gait Ataxia; Gait Disorders, Neurologic; Diagnosis, Differential

Abstract: Unsteady gait is a relatively common presentation to the pediatric emergency and neurology services. Unsteadiness can be due to a wide variety of causes, however, the primary concern on initial assessment is to exclude serious disorders such as meningitis, encephalitis, or brain tumors. Recognizing benign and non-neurological causes of unsteady gait is essential to avoid unnecessary investigations and hospital admission. In this review, a clinical approach to the unsteady child is presented with discussion of diagnostic considerations, approach to investigation, treatment, and prognosis. Ataxia can be cerebellar or sensory. Cerebellar ataxia can be acute, chronic, progressive, or episodic. It may result from trauma, infections, metabolic, degenerative disease, space occupying lesions, or congenital anomalies. Sensory ataxia is due to peripheral neuropathy involving large myelinated fibers that carry vibration and position sense, or due to posterior spinal column dysfunction. Accurate assessment depends on detailed history, examination, and then formulation of a differential diagnosis list to guide laboratory investigations.

Gallbladder Emptying

Gall bladder contractility in children with beta-thalassaemia.

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Ahmed Maher Teaching Hospital - Department of Paediatrics


Keywords: beta-Thalassemia; Gallstones; Ferritins-blood; Time Factors; Bilirubin-blood; Ultrasonography

Abstract: We studied gall bladder contractility in 61 children with beta-thalassaemia who were asymptomatic for gall bladder disease and 51 sex- and age-matched controls in Cairo, Egypt, using real-time ultrasonography. Multiple gall bladder stones were present in 18.0% of thalassaemia patients and sludge in 6.6%. There were statistically significant differences between thalassaemia patients and controls in gall bladder fasting volume, residual volume, emptying time and contraction index. There was significant positive correlation between fasting and residual volumes and age, weight and height, and between fasting volume and body mass index and serum ferritin level. Contraction index was negatively correlated with serum total bilirubin. Impaired gall bladder motility was evident in patients with betathalassaemia and it may be related to disease duration, serum ferritin and total serum bilirubin level.
Garlic

Antiulcer activity of allium sativum bulb juice in rats.
Azamthulla, Mohammed; Asad, Mohammed; Prasad, V. Satya
College of Pharmacy - Department of Pharmacology
SPJ - Saudi Pharmaceutical Journal 2009; 17 (1): 70-77 (37 ref.)
Keywords: Anti-Ulcer Agents; Rats; Duodenal Ulcer; Stomach Ulcer; Gastric Juice
Abstract: The effect of raw Allium sativum Linn. bulb juice on gastric and duodenal ulcers was evaluated by using different gastric ulcer methods and cysteamine induced duodenal ulcer model in rats. Allium sativum Linn, bulb juice was administered orally at two different doses of 250 mg/kg and 500 mg/kg. Both the doses of garlic juice showed gastric ulcer healing effect in acetic acid induced chronic gastric ulcers, produced gastric antisecretory effect in pylorus-ligated rats and also showed gastric cytoprotective effect in ethanol-induced and indomethacin-induced gastric ulcer. The juice also produced a significant reduction in stress induced gastric ulcers and cysteamine-induced duodenal ulcers. The low dose of the juice [250 mg/kg, p.o.] was more effective compared to the high dose [500 mg/kg, p.o.). It was concluded that juice of Allium sativum Linn. bulb increases healing of gastric ulcers and prevents the development of experimentally induced gastric and duodenal ulcers in rats.

Genetic Diseases, Inborn

diagnosis

Restrictive dermopathy. Molecular diagnosis of restrictive dermopathy in a stillborn fetus from a consanguineous Iranian family.
Kariminejad, Ariana; Goodarzi, Peyman; Huong, Le Thi Thanh; Wehnert, Manfred S.
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Department of Kariminejad Najmabadi Pathology and Genetics Center
Keywords: Contracture-congenital; Fetal Growth Retardation; Lung-abnormalities; Hyperkeratosis, Epidermolytic; Stillbirth; Consanguinity
Abstract: Restrictive dermopathy RD, is an autosomal recessive lethal human genetic disorder. It is characterized by intrauterine growth retardation, tight and rigid skin with erosions, multiple joint contractures, lung hypoplasia, prominent superficial vasculature, and epidermal hyperkeratosis. In the present report, we describe the first case of restrictive dermopathy in a stillborn fetus of Iranian origin, confirmed by molecular genetic diagnosis. In the index case G-30159, a homozygous one base insertion in ZMPSTE24 exon 9 c.1085-1086insT was identified. We believe that by increasing awareness of this disease in clinicians, gynecologists, and pathologists, we may be able to help families who have had suspected cases of restrictive dermopathy be diagnosed, and offer molecular testing in carriers, and prenatal diagnosis to prevent the occurrence of further affected cases.

Giant Cell Tumor of Bone

complications

Soft-tissue recurrence of giant cell tumor of bone: A case report.
Abdel Mota'al, Magdy M.; Mohamad, Abdul Salam Othman; Katchy, Kenneth Chukwuka
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Al Razi Hospital - Department of Orthopedics
KMJ - Kuwait Medical Journal 2009; 41 (1): 54-58 (20 ref.)
Keywords: Bone Neoplasms; Recurrence; Soft Tissue Neoplasms; Tomography, X-Ray Computed; Magnetic Resonance Imaging
Abstract: We report a rare complication of giant cell tumor [GCT] of bone. A soft tissue recurrence without intra-osseous involvement developed in a 35-year-old lady treated for grade III GCT with intralesional excision, local adjuvant phenol and filling the cavity with bone cement. The different imaging modalities used for work-up and staging are discussed. This report emphasizes that a soft tissue recurrence may be not recognized if a thorough clinical examination is not performed and MRI is not done. Review of relevant literature addressed different factors that influence recurrence, as well as the role of osteoinductive growth factors in stimulating the osteoblastic differentiation and metaplastic bone formation in such lesions.
**Glioblastoma**

**diagnosis**

**Glioblastoma multiforme of the cerebellum.**
Al Barbarawi, Mohammad M.; Qudsieh, Suhair M.; Ghazzawi, Mohamed A.; Smith, Sarah F.
E-mail: dr.Barbarawi@yahoo.com
Jordan University of Science and Technology - Faculty of Medicine - Department of Neuroscience
Neurosciences 2009; 14 (1): 84-88 (20 ref.)

**Keywords:** Cerebellar Neoplasms-pathology; Cerebellum; Central Nervous System Neoplasms; Glioblastoma-surgery; Dacarbazine-analogs and derivatives; Dacarbazine-therapeutic use; Magnetic Resonance Imaging

**Abstract:** Glioblastoma multiforme (GBM) is a highly malignant glial tumor seen commonly in the cerebral hemispheres, but rarely encountered in the cerebellum. It may occur at any age, but is seen more often in adult age groups. Despite its rarity, GBM should be considered in patients with a ring-enhancing lesion in the cerebellum. No consensus regarding the best management has yet been established. However, multimodal treatment is currently available to deal with these lesions: wide excision with radiochemotherapy may improve and prolong the patient's life. Although the outcome remains dismal, we emphasize that timely multi modal treatment may provide the patient a better outcome and longer life. Herein, we report 2 new cases of cerebellar GBM and discuss their outcome and present a review of the relevant literature.

**Goiter**

**surgery**

**Total thyroidectomy in non malignant goitre.**
Ali, Many A.
Assuit University - General Surgery Department
Assiut Medical Journal 2008; 32 (3): 31-38 (18 ref.)

**Keywords:** Thyroid Nodule-surgery; Thyroidectomy-adverse effects; Hypoparathyroidism; Hypocalcemia; Recurrent Laryngeal Nerve-injuries; Postoperative Hemorrhage; Surgical Wound Infection; Vocal Cord Paralysis

**Abstract:** Total thyroidectomy is such a procedure where considerable controversy still exists with respect to use for benign thyroid disease. On other hand reoperation for recurrent disease carries a very significant risk of damage to both the recurrent laryngeal nerves and the parathyroid glands. This study aimed to evaluate the safety and efficacy of total thyroidectomy for non malignant thyroid disease. In the period between 2000 and 2006, 162 total thyroidectomy for non malignant goitre were done, 124 females and 38 males with a mean age of 41.5 years, 99. Patients had Bilateral multi nodular goiter, 48 patients were Toxic goitre and 15 patients were chronic thyroiditis. Permanent hypoparathyroidism occurred in 1.2%, temporary hypocalcaemia occurred in 8%. Hypocalcaemia was more common after surgery for toxic goitre than surgery for other diseases, permanent unilateral recurrent laryngeal nerve palsy occurred in 1.8%, the rate of post operative hemorrhage was 1.2% and wound infection 1.8%, there was no postoperative mortality. Total thyroidectomy remove the pathologic process completely, lowers local recurrence rates and avoids the risks of reoperation total thyroidectomy is safe and can be carried out with low complication rates.

**Granuloma, Plasma Cell**

**diagnosis**

**[Inflammatory pseudo tumors of the paratesticular tissue, a case report].**
Hidoussi, A.; Jaidane, M.; Hamida, W.; Ben Sorba, N.; Slama, A.; Youssef, A.; Mosbah, A.F.
Sahloul Central University Hospital - Urology Department - Sousse, Tunisia
Maghreb Medical 2009; 29 (391): 235-236 (13 ref.)

**Keywords:** Granuloma, Plasma Cell-surgery; Testis

**Abstract:** Inflammatory pseudo tumors of the paratesticular tissue are uncommon lesions. They are often reported in the literature by various terms. These lesions are clinically worry some evoking a malignant testicular tumor. We describe a 57-year-old man with a long time history of painless scrotal mass that encased the left testis. Once excised, histology showed fibrosis and inflammatory tissue with lymphoplasmacytic cells.
Growth and Development

The weight to age growth chart in 5 years old children and its risk factors in Tehran, Iran.
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Tehran University of Medical Sciences - Faculty of Medicine - Department of Social Medicine
Payesh - Health Monitor 2009; 8 (1): 67-73, 98 (9 ref.)
Keywords: Body Weight Changes; Risk Factors; Body Weights and Measures; Age Distribution; Child; Cross-Sectional Studies
Abstract: To determine the weight to age growth chart and some of its risk factors in 5 years old children in South Health Center in Tehran, Iran. This was a cross-sectional study. We collected data on sex, birth weight, the age of introducing food supplement, tube of milk which consumed during the first 6 months of life by child, the time of complete weaning, birth order, family size, maternal education, maternal job, interval between the child birth and the birth of the previous child at family, the regulation of child care at the health center and the condition of weight to age growth chart at 5 years old child. There were 27 health centers and from each center 45 children were chosen randomly. Data collection was performed from the family file of each child. 1150 children were studied. There were 567 [49.3%] male and 583 [50.7%] female. The mean birth weight of children was 3200 g with SD: 568.84g. The minimum and maximum age of food supplement introducing to child were 2mo and 14mo respectively [mean: 6mo, SD: 1.9mo]. 845 of children were fed only with breast milk during the first 6 months of life. The mean age of complete weaning was 19mo with SD: 7.93 mo. About 50% of children had first birth order. The family size of 79.42% of children was 3. 87% of mothers were educated and the remaining was illiterate. 96% of mothers were housewives and others were employed. Birth Interval of 41.37% and 9.9% of children with the previous siblings were less than 2 years or more than 2 years respectively and the other children was the first child of the family. 8.46%, 26.6% and 67% of children considered to be good, moderate or bad regarding to regularity of child care at the health center. In general 963 [49.3%] male and 583 [50.7%] female. The mean birth weight of children was 3200 g with SD: 568.84g. The minimum and maximum age of food supplement introducing to child were 2mo and 14mo respectively [mean: 6mo, SD: 1.9mo]. 845 of children were fed only with breast milk during the first 6 months of life. The mean age of complete weaning was 19mo with SD: 7.93 mo. About 50% of children had first birth order. The family size of 79.42% of children was 3. 87% of mothers were educated and the remaining was illiterate. 96% of mothers were housewives and others were employed. Birth Interval of 41.37% and 9.9% of children with the previous siblings were less than 2 years or more than 2 years respectively and the other children was the first child of the family. 8.46%, 26.6% and 67% of children considered to be good, moderate or bad regarding to regularity of child care at the health center. In general 963 children [83.74%], 19 children [1.65%] and 7 children [0.61%] had normal, under 3 percentile or over 97 percentile weight to age growth chart at the last visit to the health center respectively. There were 40 [3.48%], 82 [7.13%] and 39 [3.39%] slowness, flatness or descending of the weight to age growth chart. There was significant statistical relationship between the weight to age growth chart and birth order [p < 0.02]. Generally 187 cases [16.16%] showed abnormal weight to age growth chart. Moreover the higher birth order increased the probability of abnormal weight to age growth chart at 5 years of age. The findings were similar to existing reports. However, further prospective studies are recommended to confirm such findings.
**Guillain-Barre Syndrome**

**physiopathology**

Acute inflammatory demyelinating polyneuropathy in children; clinical and electrophysiologic findings.
Shamsabadi, Farhad Mahvelati; Karimzadeh, Parvaneh; Tonekaboni, Seyed Hasan; Ghorobi, Javad
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Shahid Beheshti University of Medical Sciences - Mofid Children Hospital - Department of Child Neurology

**Keywords:** Guillain-Barre Syndrome-complications; Neurologic Manifestations-etiology; Neurologic Manifestations-complications; Neurologic Manifestations-physiopathology; Electrophysiological Phenomena-physiology; Sural Nerve-abnormalities; Sural Nerve-analysis; Sensory Receptor Cells-abnormalities; Sensory Receptor Cells-analysis; Electrodiagnosis-methods; Electrodiagnosis-utilization

**Abstract:** The aim of this study was to evaluate the electrophysiologic findings of Guillain Barre Syndrome [GBS] in children and their relation with clinical progress of the disease. Twenty-three children with GBS were evaluated between 2005 and 2007. Electrophysiologic evaluations were performed at admission and one month later. Five patients needed respirator, 15 were bedridden, 1 developed recurrence 6 months later, and 2 experienced chronic GBS. The most common findings included: decreased amplitude of muscle action potential [CMAP] [96%], increased distal latency [74%], increased F wave latency [69%), and decreased nerve conduction velocity [NCV] [61%]. Sensory nerve conduction [evaluating sural nerve] was normal in 78% of the cases. These measures did not significantly change after 1 month. Electrodiagnostic evaluations are helpful at the primary stages of GBS for diagnosis. Fibrillation potentials and positive sharp waves showing denervation and axonal injury are presentative of longer duration of the disease and a worse prognosis.

**Hearing Loss, Sensorineural**

Cochlear and auditory brainstem functions in neonates with high risk factors for sensorineural hearing loss.
Marey, Ibrahim M.; Saleh, Ashraf Othman; El Badry, Mohamed M.; Refea, Nashwa M.
El Minia University - Faculty of Medicine - Department of Pediatrics

**Keywords:** Evoked Potentials, Auditory, Brain Stem; Otoacoustic Emissions, Spontaneous; Risk factors; Hyperbilirubinemia; Infant, Low Birth Weight; Infant, Newborn; Cochlea; Brain Stem

**Abstract:** This study was carried out at Susan Moubarak University Hospital, El Minia University and audiological evaluation was done at the audiological unit, El Minia university hospital. The aim of this study was 1- To determine hearing sensitivity among neonates having one or more factors for SNHL; allowing identification of hearing loss in them. 2- To study the cochlear and auditory brainstem functions in these neonates, which allows to locate site of lesion whether in the cochlea, or beyond the cochlea [i.e. auditory nerve or higher auditory pathways]; this would help to consider the appropriate management of hearing loss. Forty neonates were enrolled in this study, classified into 2 groups: 10 healthy term neonates [6 males and 4 females] free form any risk factors for sensorineural hearing loss as control group and 30 neonates [18 males and 12 females] with one or more risk factors for hearing loss as a study group. All cases in the study and control group were subjected to thorough history, full clinical examination including gestational age, birth weight, Apgar score at one minute and at five minutes, total and direct serum bilirubin in cases of hyperbilirubinemia, and ear examination including otoscopic examination. Audiological evaluation included: Auditory Brainstem Response [ABR] and Distortion Product Otoacoustic Emissions [DPOAEs]. The study showed that from 30 neonates of the study group and based on the ABR results, 13 cases [43.3%] had normal hearing sensitivity and 17 cases [56.7%] had hearing loss. Three cases had mild degree of hearing loss, 1 case had moderate degree of hearing loss, and 13 cases had severe to profound hearing loss. In 6 neonates with more than one risk factor for hearing loss only one had normal hearing, while the other 5 had bilateral hearing loss. Overall, cochlear hearing loss represented 47% of all neonates having hearing loss, while retrocochlear hearing loss represented 53% of neonates have hearing loss. From this study, we can conclude that the risk factors for SNHL had variable effects on the auditory pathway. The site of lesion was located in the cochlea in most of the subgroups with risk factors SNHL.
Heart Defects, Congenital

blood

Serum levels of ghrelin, tumor necrosis factor-A [TNF- A], and Interleukin-6 [IL-6] in infants and children with congenital heart disease.
Afify, Mohamed Farouk; Mohamed, Gamal B.; Abdel Maboud, Mohamed; Abdel Latif, Esmat A.
Al Minya University - Faculty of Medicine - Department of Pediatrics
Keywords: Ghrelin-blood; Tumor Necrosis Factor-alpha-blood; Interleukin-6-blood; Infant; child; Nutrition Disorders
Abstract: Ghrelin increases food intake, body weight, and growth hormone secretion. The cause of growth retardation in congenital heart disease [CHD] is multifactorial. The aim of this study was to estimate serum levels of ghrelin, tumor necrosis factor-a [TNF-alpha], and interleukin-6 [IL-6] ih infants and children with CHD, compared with levels in age-matched controls, and to correlate the levels ofghrelin with TNF- alpha, and IL-6. We measured serum ghrelin, TNF- alpha and IL 6 levels using ELISA in 60 patients with CHD [40 acyanotic and 20 cyanotic] and in 20 control subjects. Our results showed that patients with CHD, whether compiled in one group or classified into acyanotic and cyanotic, had significantly higher serum ghrelin TNF- alpha, and IL-6 than controls [p = 0.000]. Serum levels of ghrelin and TNF- alpha in the acyanotic patients were signific antly higher than in the cyanotic patients [p = 0.000]. On the other hand, there was no significant difference in serum levels of IL-6 between the acyanotic and the cyanotic patients [p = 0.126]. In acyanotic and cyanotic patients with CHD, there was a positive correlation between ghrelin and TNF- alpha [r = 0.424; p = 0.006 and r = 0.577; p = 0.008, resp.]. Gheatin levels were not correlated with IL-6 in the acyanotic and cyanotic patients with CHD [r = -0.211; p = 0.216 and r = -0.341; p = 0.08, resp.]. Serum ghrelin, TNF-alpha, and IL-6 levels are elevated in patients with CHD whether acyanotic or cyanotic. Increased ghrelin levels represent malnutrition and growth retardation in these patients. The relation of ghrelin with TNF- alpha may be explained by the possible effect of chronic congestive heart failure and chronic shunt hyoxemia.

genetics

Microdeletion study in children with selective congenital heart disease; an Iranian multicenter study.
Zeinaloo, Ali Akbar; Kiani, Abdorazaagh; Akbari Asbagh, Parvin; Noori Dalooll, M. R.; Ghadami Yazdi, Elham; Sabokbar, Tayebeh; Aghamohammadi, Asgar; Ale Mohammad, Mahmood Gholam; Rafeyan, Sina; Dastan, Jila; Ghaffari, Saeed Reza
Tehran University of Medical Sciences - Department of Pediatrics
Keywords: Heart Defects, Congenital-etiology; In Situ Hybridization, Fluorescence-utilization; DiGeorge Syndrome-congenital; DiGeorge Syndrome-genetics; Tetrology of Fallot-etiology; Tetrology of Fallot-genetics; Pulmonary Atresia-etiology; Pulmonary Atresia-genetics; Chromosome Deletion; Pulmonary Subvalvular Stenosis-etiology; Pulmonary Subvalvular Stenosis-genetics; Prenatal Diagnosis-standards; Truncus Arteriosus; Heart Septal Defects, Ventricular-etiology; Heart Septal Defects, Ventricular-genetics
Abstract: Determining the frequency of chromosome 22q11.2 microdeletion in children with congenital cardiac conotruncal abnormalities using Fluorescence in-situ Hybridization [FISH] technique and estimating relation between DiGeorge Syndrome and cardiac conotruncal abnormalities. One-hundred and eighty cases [106 Males, 74 Females] with selective congenital heart disease [conotruncal abnormalities] referred to the hospitals affiliated to Tehran University during 2004-2007 were evaluated by pediatric cardiologists. All patients were assessed for chromosome 22q11.2 microdeletion using FISH technique. Consequently, patients with 22q microdeletion were studied for T cell abnormalities. Median age of the patients at the time of study was 18 months [3d-16y]. The microdeletion of chromosome 22q11.2 was detected in 17 [9.5%] patients with conotruncal abnormalities, including 5 [29.4%] Tetralogy of Fallot plus Supravalvular Pulmonary Stenosis, 4 [23%] Truncus Arteriosus, 5 [29.4%] Pulmonary Arteria with Ventricular Septal Defect, 2 [11.8%] CO AO+Intrupted Aortic Arch and one case of Valvular Pulmonary Stenosis. Five of uncorrelated cases had craniofacial dysmorphism. Chromosome 22q11.2 microdeletion FISH study should be considered in patients with cardiac lesions particularly conotruncal abnormality with or without syndromic problems [craniofacial dysmorphism and developmental delay] to provide an appropriate genetic counseling with more accurate estimation of recurrence risk and ultimately prenatal diagnosis in affected families.
Heart Neoplasms

diagnosis

Primary atrial lymphoma in a patient with dyspnea.
Saedi, Saeidi H.; Golmohammadi, Zadeh S.H.; Hamedanchi, A.; Mohammadian, Roshan N.; Malek, Zadeh M.; Esmaeely, E.
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Mashad University of Medical Sciences - Omid hospitals - Radiation Oncology

Keywords: Heart Neoplasms-therapy; Lymphoma Large, B-Cell, Diffuse-therapy; Echocardiography, Transesophageal; Biopsy; Antineoplastic Combined Chemotherapy Protocols; Radiotherapy; Lymphoma-diagnosis; Heart Atria; Dyspnea

Abstract: Primary cardiac lymphoma is extremely rare. In this care report, we present the case of a 46-year-old man with primary cardiac lymphoma involving left atrium and interatrial septum, presenting as dyspnea palpitation and irregular heart beat. The diagnosis was obtained by transthoracic echocardiography and surgical biopsy with subxiphoid approach which revealed diffuse large B-cell non-Hodgkin's lymphoma, CD 20+. After 8 courses of chemotherapy, the patient achieved complete remission. After 4 months, however, he developed exertional dyspnea. Right atrial recurrent lymphoma extension was diagnosed. He is currently under external radiotherapy treatment. Patients with primary cardiac lymphoma have a very poor prognosis.

Heart Septal Defects, Ventricular

surgery

Temporary tricuspid valve detachment for perimembranous VSD closure in children [early and long-term results].
Ali, Nagwa; Ghoneim, Ahmed; Elminshawy, Ahmed
Assiut University - Faculty of Medicine - Department of Pediatrics

Keywords: Postoperative Period; Postoperative Complications; Follow-Up Studies; Tricuspid Valve; Echocardiography; Retrospective Studies

Abstract: VSDs can be successfully closed using a transatrial approach working across the tricuspid valve. Previous reports suggested tricuspid valve detachment technique [TVD] to improve exposure for closure of VSDs. However there has been concern that TVD might impair valve function, increase operative time and the incidence of postoperative heart block. Our Objective is to review the use of TVD technique for transatrial closure of perimembranous VSD in children and any resulting complications over 5 years postoperative follow up. This retrospective study reviewed the database from 2002 to 2007 and identified 158 children [91 males and 67 females] with mean age 3.16 +/- 2.6ys and weight 12.5 +/- 8.5 kg that underwent transatrial closure of pVSD in the Cardiotoracic Surgery department, Assiut University Hospitals. Patients with types other than pVSDs and who underwent VSD closure via pulmonary artery or ventriculotomy were excluded from the study. Out of 158 children, 22 [13.9%] were operated with TVD technique while 136 [ 86.1%] were non TVD. The diagnosis of VSD and the postoperative follow up [Immediately and over 5ys] were done clinically and by echocardiography in the Pediatric Cardiology unit, Children University Hospital. VSD patch closure was done in 79% and primary closure in 21%. Mean cardiopulmonary bypass time was 58 +/- 14 min, cross clamp time was 41 +/- 13 min and postoperative hospital duration was 6.4 +/- 2.8 days with no significant difference between TVD and non TVD group. No postoperative heart block or needs for pacemaker implantation were recorded in both groups on postoperative follow up there was a significant improvement in the cardiac size, chest infections and infective endocarditis and this become more pronounced over years and significantly better in TVD than non TVD group. Immediately postoperative and on follow up echocardiography determined grade I-IIITR significantly lower [16.5% and 12.2% respectively] than preoperative [35%] with no significant difference between TVD and non TVD group. Insignificant residual VSD shunting was detected in 8% of non TVD patients that spontaneously closed on follow up with only residual VSD in 2-4%. No residual VSD shunting was detected in TVD group. Improvement in almost all echocardiographic parameters with no significant difference in between groups was detected on follow up. The study concludes that pVSD can be closed with low complication rate using TVD technique TVD is a safe method to enhance the exposure of VSD with no residual VSD shunting, less postoperative TR and it does not result in tricuspid valve dysfunction on follow up. It could be freely used for difficult VSD exposure.
Heart Transplantation

adverse effects

Efficacy of lipid lowering drugs in pediatric cardiac transplantation.
Ali, Nagwa; O'Sullivan, John
Assiut University - Faculty of medicine - Department of Pediatrics

Keywords: Hyperlipidemias; Hypercholesterolemia; Antilipemic Agents; Cholesterol; Triglycerides; Pravastatin; Child; Treatment Outcome; Retrospective Studies; Pediatrics

Abstract: Abnormalities of lipid profile are common in children after heart transplantation. Hypercholesterolemia affects 60-80% of transplant recipients and has been associated with the development of coronary allograft vasculopathy. Data on the use of statins [lipid lowering drugs] in pediatric heart transplant recipients is limited. The objectives are to investigate the medium term [4ys] use of different in altering the lipid profile in a relatively large group of pediatric cardiac transplant recipients. A retrospective study [1991-2004] on 67 pediatric cardiac transplant recipients was done. Fifty patients were on statins and 17 were without any lipid lowering drugs and included as a control. Patients on statins [28 males and 22 females, mean age 6.3 +/- 0.2 ys at time of transplant] were divided into 3 groups; patients on pravastatin group 2.5-10 mg/day [n = 28], simvastatin group 10 mg/day [n = 17] and atorvastatin group 10 mg/day [n = 5]. All patients were under immunosuppressive drugs [cyclosporine, sirolimus, tacrolimus, azathioprin] and/or prednisone. Patients < 4ys duration after transplant or those with history of rejection were excluded from the study. Serial fasting serum levels of TC, TGs and HDL were reviewed over 4ys period. Patients on statins showed significant decrease in levels of TC and TGs after 4ys of therapy than before [p < 0.001 and < 0.01] and control [p < 0.01 and < 0.05] and continued to decrease over years P < 0.001 and < 0.05. The pravastatin group showed a significant decrease in the levels of TC and TGs more pronounced than simvastatin or atorvastatin groups in comparison to those before therapy [p < 0.001 vs 0.01 and 0.05 for TC and p < 0.01 vs NS and NS for TGs] and to controls [p < 0.05 vs 0.05 and NS for TC and p < 0.05 vs NS and NS for TGs] and continued to decrease over the years in pravastatin group more favorable than the other two groups [p < 0.001 vs 0.01 and 0.05 for TC and p < 0.05 vs 0.05 and NS for TGs]. There was no alteration in HDL level with the use of any of these drugs. There were significant positive correlations between the level of TC and the use of cyclosporin [p < 0.01, r = -0.346], sirolimus [p < 0.001, r = 0.571], prednisone [p < 0.01, r = 0.356], and negative with tacrolimus [p < 0.01, r = -0.346]. There were positive correlations between the level of TGs and age at time of transplant [p < 0.01, r = 0.370], the use of sirolimus [p < 0.001, r = 0.652] and prednisone [p < 0.05, r = 0.310]. There is a positive correlation between the level of HDL and the use of cyclosporin [p < 0.05, r = 0.292] and negative with tacrolimus [p < 0.05, r = -0.292] and azathioprine [p < 0.05, r = -0.28]. Statins therapy is very essential for post cardiac transplant hyperlipidemia, as they have variable lowering effects on the lipid levels. This study recorded medium term results [4ys] and described experience with more than one lipid lowering drugs [pravastatin, simvastatin and atrovastatin]. Pravastatin appeared to be effective in lowering TC and TGs levels more so than simvastatin or atorvastatin without altering HDL level. Factors as the age on time of transplant, the use of cyclosporine, sirolimus, tacrolimus, azathioprine and prednisone can affect the lipid profile in these patients.

Hepatitis A

diagnosis

Co-infection of hepatitis A and E with Salmonella infection; a case report.
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Keywords: Hepatitis A-prevention and control; Hepatitis E-diagnosis; Hepatitis E-prevention and control; Salmonella typhi; Hepatitis, Viral; Human-classification; Hepatitis, Viral, Human-diagnosis; Hepatitis, Viral, Human-prevention and control; Biological Markers-diagnostic use; Typhoid Fever-diagnosis; Typhoid Fever-prevention and control; Vaccination-standards; Vaccination-legislation and jurisprudence

Abstract: Ours is a developing country so infectious diseases contribute maximum to the morbidity and mortality. Among these, water borne diseases like diarrhea, typhoid, infectious hepatitis etc. are on rise. Sometimes more than one type of infection coexists which makes the diagnosis and management a challenging task. We report a case of Coinfection of Salmonella typhi with Hepatitis A and E. A 5 year old male child came to us with complaints of fever and jaundice for last 8 days. Blood culture of patient was positive for Salmonella typhi. Viral markers turned out to be positive for Hepatitis A and E. To the best of our knowledge coinfection of Hepatitis A and E with Salmonella has rarely been reported earlier. In view of the restricted finances in our country vaccines against typhoid and Hepatitis A can not be incorporated in the national immunization schedule at present but these vaccines can be offered on an individual basis.
Hepatitis B
diagnosis

Antenatal screening practice for Hepatitis B and C.
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Ziauddin Medical University - Department of Biochemistry
Keywords: Hepatitis B-transmission; Hepatitis C-diagnosis; Hepatitis C-transmission; Communicable Diseases-diagnosis; Mass Screening; Education, Medical, Continuing; Prenatal Diagnosis

Hepatitis B and C: value of universal antenatal screening.
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PECHS Trauma and General Hospital - Department of Obstetrics and Gynaecology
Keywords: Hepatitis C-diagnosis; Hepatitis B-epidemiology; Hepatitis B-transmission; Hepatitis C-epidemiology; Hepatitis C-transmission; Hepatitis B Surface Antigens-diagnostic use; Hepatitis C Antibodies-diagnostic use; Mass Screening; Questionnaires; Risk Factors; Pregnancy Complications, Infectious-diagnosis; Cross-Sectional Studies; Pregnancy; Peritoneal Dialysis
Abstract: To determine the positive yield of universal antenatal screening of hepatitis B and C and its association with known risk factors. Cross-sectional, analytical study. The study was conducted from January to December 2006 at Zainab Panjwani Memorial Hospital, Karachi. All pregnant women were screened for hepatitis B surface antigen [HBsAg] and hepatitis C virus [HCV] antibodies during antenatal period irrespective of the presence of known risk factors. Carriers i.e. women whose HBV or HCV infection positive status was already laboratory confirmed on first antenatal visit were excluded. Screening was performed by Acu-check one strip test [chromatographic immunoassay] in serum. Women screened positive were interviewed, a questionnaire was filled inquiring about the history of any risk factors predisposing to these infections. Frequency of positive cases was determined in those with risk factors and those without. The proportion was compared using Chi-square test. Of the 2592 pregnant women screened during the study period, 09 [0.34%] were HBsAg positive and 18 [0.69%] were HCV antibodies positive. None was found to be a carrier of both viruses. There were 1004 primigravidas, who had no recallable risk factor, and of those, 02 [0.19%] and 09 [0.89%] were HBV and HCV carriers respectively. No significant association of risk factors was seen in both HBV [p=0.310] and HCV [p=0.328]. There was no significant association of risk factors with HBV and HCV infection, thus necessitating the need of universal antenatal screening. However, large scale epidemiological/multicentric studies are required to determine the cost-effectiveness of the screening and prevention of vertical transmission.

Hepatitis B virus
diagnosis

Occult hepatitis B virus infection among anti-HBc only positive individuals in the southeast of Iran in high prevalence of HBV infection region.
Sharifi Mood, B.; Sanei Moghaddam, E.; Ghasem Zadeh, I.; Khorsavi, S.
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Zahedan University of Medical Sciences - Boo Ali Hospital
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 90-92 (17 ref.)
Keywords: Hepatitis B virus-pathogenicity; Hepatitis B virus-genetics; Hepatitis B virus-immunology; Hepatitis B Antibodies-diagnostic use; Polymerase Chain Reaction-utilization; Cross-Sectional Studies; Enzyme-Linked Immunosorbent Assay
Abstract: The persistence of HBV-DNA in the serum of hepatitis B surface antigen negative individuals with or without the presence of HBV antibodies is termed occult HBV infection. From April 2005 to November 2006, we evaluated 110 patients who had only a positive test for anti-HBc. Out of 110 anti-HBc positive samples, HBV-DNA was detected in three cases. Positive samples for HBV-DNA had a level normal of ALT. HBV-DNA can be detected among anti-HBc only positive samples. Therefore, further testing for detection of HBV-DNA is recommended on each anti-HBc only positive individual.
**Hepatitis B, Chronic**

Depression and health related quality of life in non-cirrhotic chronic hepatitis B patients and hepatitis B carriers.

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Neurosciences 2009; 14 (1): 56-59 (17 ref.)

**Keywords:** Carrier State; Hepatitis B virus; Depression; Quality of Life; Hepatitis B Surface Antigens; Case-Control Studies

**Abstract:** To measure health related quality of life and level of depression among patients with noncirrhotic chronic hepatitis B patients and hepatitis B surface antigen [HBsAg] carriers. The study was conducted at Psychiatry, Gastroenterology, and Infectious Disease Outpatients Clinics of the Harran University, Sanliurfa, Southeastern Turkey, between April and June 2005. A case control study design was used to determine the effect of hepatitis B infection on depressive symptoms and quality of life. The Beck Depression Inventory [BDI] for depressive symptoms, the Short Form-36 for measuring health related quality of life [HRQOL], and semi-structured interviews for assessing psychosocial variables were used. Thirty patients who met the criteria for being diagnosed with chronic hepatitis B, 30 inactive HBsAg carriers, and 30 healthy subjects were included in the study. It was found that hepatitis B had a significantly negative impact on quality of life, both in terms of physical function, and mental health. Our results showed that HRQOL in asymptomatic carriers is comparable to those of non-cirrhotic chronic hepatitis B patients and worse than healthy controls. Our findings suggest that not only chronic hepatitis B patients, but also HBsAg carriers need emotional support. Therefore, on-going collaboration between hepatology and infection clinics and psychiatric liaison is needed.

**Hip Fractures**

**complications**

Valgus intertrochanteric osteotomy and dynamic hip screw fixation for trochanteric nonunion.

Farouk, Osama

Assiut University - Faculty of Medicine - Orthopaedic Department

Assiut Medical Journal 2008; 32 (3): 1-8 (18 ref.)

**Keywords:** Fractures, Malunited; Reoperation; Osteotomy; Bone Plates; Follow-Up Studies; Treatment Outcome; Fractures, Ununited

**Abstract:** Nonunion of intertrochanteric fractures is uncommon, but gives rise to severe disability. Nonunion is usually preceded by drifting of the fracture into a varus position and external rotation leading to mal-non-union, which presents the difficulty of mal-position, shortening and non-union. Twelve patients with trochanteric nonunion were treated at the authors' institution. They were 7 men and 5 women. Age ranged between 26 to 72 years [average 53 years]. Six patients were not treated before and six presented after failed internal fixation. All patients underwent the same treatment protocol consisting of the following surgical steps: [1] Direct fracture exposure and excision of the fibrous non-union between the fracture fragments, [2] Intertrochanteric valgus osteotomy, and [3] The use of dynamic hip screw [DHS] for internal fixation. Duration of nonunion varied from 16 weeks to 17 months [mean 28 weeks]. The average limb shortening before surgery was 3.4 cm [range 2-5 cm]. Intertrochanteric osteotomy was healed in less than 12 weeks and fracture union was achieved in all patients. Time to fracture union ranged between 12 to 20 weeks [average 14 weeks]. The average valgisation angle was 34° [range 20°-45°], and the average surgical lengthening was 2.6 cm [range 1-4 cm]. An external rotational deformity of the limb of less than 20° persisted in three patients. Avascular necrosis of the femoral head was reported only in one patient. Follow up ranged from 10 to 48 months [average 22 months]. Valgus intertrochanteric osteotomy and DHS fixation provide a good solution for nonunion of trochanteric fractures.
HIV Infections

epidemiology

Seroprevalence of HIV infection among psychiatric patients in Benin City, Nigeria.
Omoriegie, Richard; Efam, Monday O.; Ihongbe, John C.; Ogefere, Helen O.; Omokaro, Evelyn U.
E-mail: richyomos@yahoo.com
University of Benin Teaching Hospital - School of Medical Laboratory Sciences
Neurosciences 2009; 14 (1): 100-101 (5 ref.)
Keywords: Psychiatry; Mental Disorders; Seroepidemiologic Studies

HSP27 Heat-Shock Proteins

immunology

Effect of a high dairy diet on serum antibody titers to heat shock protein 27 in overweight and obese children.
Safarian, Mohammad; Vakili, Rahim; Sahebkar, Amirhossein; Nematy, Mohsen; Dahri, Monireh; Tavallaie, Shima; Lotfian, Elham; Khorashadizadeh, Mona; Forns, Gordon; Ghazbani, Majid
Mashhad University of Medical Sciences - Faculty of Medicine - Department of Nutrition and Biochemistry
Keywords: Body Mass Index; Overweight-diet therapy; Overweight-immunology; Antibodies-blood; Antibodies-analysis; Antibodies-immunology; Dairy Products; Atherosclerosis-diet therapy; Atherosclerosis-immunology; Obesity-diet therapy; Obesity-immunology; Calcium-immunology; Calcium-therapeutic use
Abstract: An immune response to heat shock proteins appears to be involved in atherogenesis. To date, there has been no report on the impact of dairy in overweight and obese children on serum antibody titers to heat shock protein 27 [anti-HSP27]. We have investigated whether an increase in dairy food consumption is capable of affecting serum antibody titers to heat shock protein 27 [anti-HSP27] level in children. Overweight and obese children [n=99, age: 12-18 y, body mass index: 27-40 kg/m2] were randomized to receive a calorie restricted diet providing a 500 kcal/d deficit from total energy expenditure and two [n=38], three [n=26] or four [n=35] servings of dairy products/day. Serum anti-HSP27 level in addition to the serum hs-CRP and lipid profile were measured at baseline and after 12 weeks. Serum anti-HSP27 concentrations did not change significantly in any of the mentioned groups. Serum hs-CRP and lipid profile did not change significantly either, apart from a significant increase in HDL-cholesterol in the low-dairy group. An increased intake of dairy products does not lead to a significant change in serum anti-HSP27 level in overweight and obese children.

Hypericum

metabolism

St. John’s Wort modulates brain regional serotonin metabolism in swim stressed rats.
Ara, Iffat; Bano, Samina
University of Karachi - Clinical Biochemistry and Psychopharmacology Research Unit - Department of Biochemistry
Keywords: Brain; Swimming; Rats, Wistar; Behavior; Corticosterone
Abstract: Present study has investigated acute effects of Saint Johns Wort [SJW, 500 mg/kg] administration on behavioral, neuroendocrine responses and serotonergic activity following swim test [FST] exposure in rats. The results show that SJW increased swimming and climbing behaviour of rats during FST exposure. Swim stress produced significant reduction in serotonin total tryptophan [P < 0.01], increase in corticosterone [P < 0.01] and 5-hydroxytryptamine [serotonin, 5-HT] turnover in hypothalamus by 100% [P < 0.01], amygdala by 148% [P < 0.01], and hippocampus by 41% [P < 0.05] when compared with unstressed saline injected group. SJW in swim stressed rats when compared with saline injected stressed rats altered neither lowered serum tryptophan nor enhanced HPA axis response, however SHT was found to be increased by 110% [P < 0.01], 163% [P < 0.01] and 172% [P < 0.01], in hypothalamus, amygdala and hippocampus respectively. 5-hydroxyindoleacetic acid [5HIAA] was also found to be increased in hypothalamus by 74% [P < 0.01], amygdala by 45% [P < 0.01] and hippocampus by 143.5% [P < 0.01]. Further SJW administration in unstressed rats showed decrease in tryptophan [P < 0.01], increase in...
corticosterone [P < 0.01]. 5HT was found to be decreased in hypothalamus [47%, P < 0.01] and in amygdala [13%, P < 0.05] with no change in hippocampus, while 5HIAA was found increased in hypothalamus by 58% [P < 0.01], amygdale by 203% [P < 0.01] and hippocampus by 17% [P < 0.01]. The data shows that SJW affects circulating tryptophan and corticosterone in absence of conditioned stress but not in its presence. In conclusion, SJW increases intraneuronal 5HT metabolism but inhibits its release under adverse conditions proving its anxiolytic property. Thus, these effects produced by the SJW add to our understanding of the interactions between SJW and stress induced behavioral, neuroendocrine and serotonergic alterations.

Hyperostosis, Cortical, Congenital

Sanjad-Sakati syndrome/Kenny-Caffey syndrome type 1: a study of 21 cases in Kuwait.
Naguib, K.K.; Gouda, S.A.; Elshafey, A.; Mohammed, F.; Bastaki, L.; Azab, A.S.; Alawadi, S.A.
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Ministry of Health - Adan Hospital - Kuwait Medical Genetic Centre
Keywords: Hyperostosis, Cortical, Congenital-diagnosis; Polymerase Chain Reaction; Mutation-genetics; Parents; Consanguinity; Syndrome; Hypoparathyroidism-congenital; Mental Retardation-congenital
Abstract: We studied 21 patients with Sanjad-Sakati syndrome [SSS] from 16 families. Parental consanguinity was recorded in 2 families [12.5%]. All patients had severe intrauterine growth retardation, short stature, small hands and feet, blue sclera, deep-set eyes, microcephaly, persistent hypocalcaemia and hypoparathyroidism. Medullary stenosis was detected in 2 patients. Cytogenetic and fluorescent in situ hybridization studies were normal. All affected persons had homozygous deletion of 12 bp [155-166del] in exon 3 of the TBCE gene. All of the parents were heterozygous carriers of this mutation. The high frequency of SSS and low frequency of consanguineous marriages in this study may reflect a high rate of heterozygous carriers.

Hypertension

Prevalence and predictors of white-coat hypertension in a large database of ambulatory blood pressure monitoring.
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Avicenne Hospital - Moroccan League for the Control of Cardiovascular Diseases - Department of Cardiology
Keywords: Hypertension-etiology; Prevalence; Blood Pressure Monitoring, Ambulatory; Hypotension; Physicians' Offices
Abstract: The objective of this study was to determine both the prevalence of white-coat effect and white-coat hypertension [WCH] and which selected clinical variables were predictors of WCH. A total of 2462 patients underwent ambulatory blood pressure monitoring either in borderline hypertension [group 1] or for assessment of antihypertensive treatment [group 2] or for hypotension [group 3]. In the overall population 33.0% of patients showed WCH, 32.8% in group 1 and 37.0% in group 2. In multivariate analysis, sex and grade of hypertension were independent predictors of WCH in groups 1 and 2.

Significant measurement of mean carotid intima-media thickness in sustained essential hypertension.
Hussein, Ismail I.; Al Nimer, Marwan S.
Al Mustansiriyia University - College of Medicine - Department of Physiology
Neurosciences 2009; 14 (1): 31-36 (23 ref.)
Keywords: Hypertension-ultrasonography; Carotid Artery, Internal-ultrasonography; Carotid Artery, Common-ultrasonography; Tunica Intima; Ultrasonography, Doppler
Abstract: To assess the significant association of atherosclerosis quantified by screening intima media thickness of bilateral common and internal carotid arteries in patients with asymptomatic and persistent hypertension with and without ischemic stroke. To assess the significant association of atherosclerosis quantified by screening intima media thickness of bilateral common and internal carotid arteries in patients with asymptomatic and persistent hypertension with and without ischemic stroke. The mean diameter as well as intima media thickness of common and internal carotid arteries was significantly higher in group IV than group II, II, and group I. These changes were associated with significant increased fasting serum cholesterol, low-density lipoprotein, and decreased high-density lipoprotein. Intima media thickness above one mm was significantly observed in hypertension with ischemic stroke (odd ratio 1.37). The results support the importance of screening asymptomatic as well as sustained treated hypertension by carotid ultrasound Doppler.

Hypertension, Pulmonary

drug therapy

Sildenafil in treatment of pulmonary hypertension in the pediatric age group: an Egyptian experience.
El Said, Howaida G.; Tomerak, Rania H.; Makar, Samuel H.; Hasanean, Ashraf Sayed
Cairo University - Department of Pediatrics
Keywords: Piperazines-Administration and dosage; Child; Echocardiography; Follow-Up Studies; Sulfones; Purines; 3',5'-Cyclic-GMP Phosphodiesterase-antagonists and inhibitors; Pediatrics
Abstract: Pulmonary hypertension [PH] in children is defined as a mean pulmonary artery pressure >/= 25mmHg at rest or >/= 30 mmHg during exercise. Until last decade the diagnosis of primary PH [PPH] was a sentence of death. Sildenafil which is originally FDA approved for erectile dysfunction, has the ability to lower the pulmonary vascular pressure by inhibiting phosphodiesterase enzyme found richly in pulmonary vasculature and is tried nowadays in treating PH. Although Sildenafil use for PH in adults was recently approved by FDA, the data in pediatric population are scarce .This study aims at evaluating the use of Sildenafil in treating pediatric patients with PH. Twelve pediatric patients between January 2006 and January 2007 were included in this study. Inclusion criteria were the presence of pulmonary hypertension diagnosed by transthoracic echo. Patients were treated with oral Sildenafil [dose started at 0.1 mg/kg/dose every 6 to 8 hours and increased to 0.5 mg/kg/dose in children and up to 50 mg every 8 hours in adolescents]. Assessments of efficacy in terms of clinical improvement and/or decrease in pulmonary artery pressure by echocardiography were used as end points. Follow up was between 2 weeks and 7 months. Twelve patients presented with pulmonary hypertension with a mean age 7.7 years [range 0.3-15]. Five with primary pulmonary hypertension 1 with unoperated total anomalous pulmonary venous return [TAPVR], 5 postoperative complex cyanotic CHD and 1 with PH secondary to rheumatoid arthritis and lung fibrosis. After oral Sildenafil administration, there was an improvement in symptoms in 11/12 patients. Right ventricular pressure [RVP] decreased from a mean of 75 mmHg [range 61-118 mmHg] to a mean of 52.7 mmHg [range 35-90 mmHg] [p < 0.005]. Mean RVP to mean Systolic Systemic Pressure [SSP] improved from 0.8:1 [range 0.5 to 0.1] to a mean of 0.5:1 [range 0.3-0.8], [p 0.004].Percentage of oxygen saturation increased from a mean of 77% [range 58-97%] to a mean of 88% [range 70-98%] [p 0.009]. Sildenafil is well tolerated in its oral form and appears to improve both pulmonary hemodynamics and the clinical status of pediatric patients with pulmonary hypertension as early as 2 weeks of therapy.

Hypertrophy, Left Ventricular

diagnosis

[Differentiation between physiological left ventricular hypertrophy and hypertrophic cardiomyopathy of athletes, usefulness Doppler tissue imaging].
Lakhdhar, R.; Drissa, M.A.; Cheour, M.; Ben Mansour, N.; Drissa, H.
"Adult" Hospital - Cardiology Department - Rabta, Tunisia
Maghreb Medical 2009; 29 (391): 222-224 (19 ref.)
Keywords: Cardiomyopathy, Hypertrophic-diagnosis; Ultrasonography, Doppler; Hypertrophy, Left Ventricular; Cardiomyopathy, Hypertrophic; Sports
Abstract: Athlete's heart is a cardiac adaptation to long-term, intensive training, which includes physiological changes as increased ventricular cavity, wall thickness and mass. Maron highlighted a "gray zone" of wall thickness with difficult distinction between physiological left ventricular hypertrophy of athletes from hypertrophic cardiomyopathy [HCM]. The aim of the study is to analyse the data published about the diagnostic tools which differentiate between physiological athlete's left ventricular hypertrophy and HCM. Even if the standard two-dimensional echocardiography represents an
irreplaceable method in the evaluation of cardiac adaptations to physical exercise, the data currently available suggests the usefulness of Doppler tissue imaging (DTI) in the distinction between HCM and athlete's heart. The authors, will report the best DTI parameters recommended in this setting. The best DTI parameter to differentiate pathological hypertrophy of HCM from physiological hypertrophy of athletes was the gradient of diastolic velocity between the endocardium and the epicardium. On this ground, DTI may be taken into account in the Maron's diagnosis cascade.

Injections

Injection safety at primary health care level in south-western Saudi Arabia.
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King Khalid University - College of Medicine - Department of Family and Community Medicine
Keywords: Safety; Primary Health Care-manpower; Questionnaires; Needlestick Injuries; Risk Factors; Physicians; Nurses
Abstract: In a study of injection safety in Abha health district, Saudi Arabia, data were collected from 47 physicians and 85 nurses at 24 primary health care centres, using an observation checklist and an interview questionnaire. All centres used individually packed disposable syringes and puncture-proof containers to collect used needles. Needlestick injury in the previous year was reported by 14.9% of physicians and 16.5% of nurses [0.21 and 0.38 injuries/person/year respectively]. Logistic regression analysis identified recapping the needle after use [physicians and nurses] and bending the needle before disposal [physicians] as significant risk factors for injury.

Insulin Resistance

The effectiveness of beta adrenoceptor antagonists on progression of insulin resistance and type 2 diabetes in high fat diet-fed rats.
Khalifa, Mohamed Montaser A.; Mangoura, Safwat A.; El Moselhy, Mohamed A.; El Daly, Mahmoud E.
Minia University - Faculty of Pharmacy - Department of Pharmacology and Toxicology
SPJ - Saudi Pharmaceutical Journal 2009; 17 (1): 19-28 (63 ref.)
Keywords: Diabetes Mellitus, Type 2; Adrenergic beta-Antagonists; Dietary Fats; Rats; Enzyme-Linked Immunosorbent Assay
Abstract: The effects of carvedilol a third generation beta-blocker on progression of insulin resistance and type 2 diabetes mellitus were compared to the prototypic non-selective beta-blocker, propranolol. Male albino rats were fed a high fat diet [HFD] for 3 months to induce insulin resistance and mild type 2 diabetes [T2DM] Oral administration of carvedilol [2 or 20 mg/kg], propranolol [30 mg/kg], or vehicle was started along with HFD in different groups. Indices of body composition and insulin resistance, oral glucose tolerance, fasting serum insulin levels, lipid profile, serum levels of lipid peroxidation markers as well as levels of advanced glycosylation end products were determined. In high fat-fed animals, an increase in body composition index, area under the oral glucose tolerance curve, fasting serum insulin, and insulin resistance were observed in comparison to normal diet controls. In addition, significant dyslipidemic changes were also observed in these animals. Moreover, in concordance with these hyperglycemic and dyslipidemic changes, HFD significantly increased serum levels of markers of lipid peroxidation and advanced glycosylation end products [AGEs]. On the other hand, beta-adrenergic blockers treatment showed better effects on glucose disposal, insulin levels, and insulin resistance. However, carvedilol treatments showed enhanced lipid profiles and lower AGEs when compared to propranolol treatment in HFD animals. These preferential metabolic effects of carvedilol can be attributed to its antioxidant effects and negative regulation of lipolysis. We concluded that carvedilol have protective effects against the development of insulin resistance and T2DM, in addition to amelioration of the consequent cardiovascular complications.

Internal-External Control

Effect of locus of control on job stress and intent to leave for nurses at Assiut University Hospital.
Ragab, Sabuh S.; Ghallab, Soad A.; Youssef, Hala R.; Abdulla, Samah M.
Assiut University - Faculty of Nursing - Nursing Administration Depertmant
Assiut Medical Journal 2008; 32 (3): 133-148 (61 ref.)
Keywords: Job Satisfaction; Stress, Psychological; Nurses; Hospitals, University; Nursing Staff
Abstract: This study aimed to assess the effect of locus of control on Job Stress and intent to leave for nurses working at Assiut Main University Hospital. The study sample consists of staff nurses [306], from all units. Data were collected through assistance of the head nurses by using the demographic data sheet, locus of control sheet, Job stress sheet and intent to leave sheet. The majority of nurses in Assiut Main University Hospital were women with internal locus of control, and complained from high job stress and about one third of them intend to leave the work. There was a highly significant difference between job stress and intent to leave. The most influential items lead to high stress among nurses were related to feeling of responsibility, role conflict and work overload. While items lead to leave work were related to social and personal factors, hospital factors and job content factors. Also only 9.8% from the total subjects connected for further education. Finally the difficult scheduling system is the first factor to change career in nursing while fixed career ladder is considered the last factor. So the study revealed that the relation between job stress and intent to leave is positive. This research recommends that, increase number of nurses, fixable scheduling system, give nurses opportunity to grow, provide a childcare services for staff nurses children, and identify hospital policies to new staff nurses will help in solving the problems.

Jaundice, Neonatal

Comparative study of visual assessment of neonatal jaundice and laboratory estimation of total serum bilirubin in full-term newborn infants.

Abdou, Magdy O.; Ghazal, Hesham A.; Gouda, Mohammed H.; Abdul Al, Doaa M.
Alexandria University - Faculty of Medicine - Department of Pediatrics

Keywords: Biological Markers; Bilirubin-blood; Vision, Ocular; Infant, Newborn

Abstract: Neonatal hyperbilirubinemia is the most common condition that requires medical attention in newborns. The assessment of jaundice can be carried out using several methods. The aim of this work is to compare visual assessment and laboratory estimation of TSB in full term newborn infants and to evaluate the accuracy of visual assessment of neonatal jaundice in guiding management decisions in the out-patient settings. The study was conducted in the out-patient clinic of Alexandria University Children's Hospital for a period of eight months. 57.2% of babies were male infants while 42.8% were females with a mean gestational age of 38.5 +/- 1.58 weeks and mean weight of 2.98 +/- 0.62 kg. The total agreement between the lab-based management decision and the clinically based decision was 84.2% out of 500 cases involved in the study. Sensitivity of visual assessment was 95.8% while specificity was 80.5%. The false positive rate was 39.2% and positive predictive value was 60.8%. False negative rate and negative predictive value were 1.6% and 94.8% respectively. Also, the Spearman correlation of dermal zones determined by visual assessment and lab TSB in the whole sample was 0.76 [p = 0.000]. It was highest in Infants < 3 days [0.94] and lowest in infants > 14 days [0.69]. In conclusion, visual assessment of neonatal hyperbilirubinemia is a useful clinical tool, if used correctly and by trained medical personnel in resource-poor countries, where there is little or no access to reliable laboratory-based diagnostic services.

A comparison of transcutaneous and total serum bilirubin in Egyptian neonates.

Seoud, Iman; Tomerak, Rania H.; Kamel, Nermin R.M.; Said, Hala M.; Mohamed, Mohamed F.
Cairo University - Faculty of Medicine - Department of Pediatrics

Keywords: Neonatal Screening; Bilirubin-blood; Diagnostic Techniques and Procedures

Abstract: Previous studies have suggested that transcutaneous bilirubinometry [TcB] may provide a useful method for screening for significant jaundice, thereby reducing unnecessary blood tests. The present study aimed to evaluate the validity of TcB versus serum bilirubin [TSB] measurements in Egyptian full term babies. Babies born at more than 34 weeks gestation who had not previously been exposed to phototherapy and were requiring blood sampling in the first week of life were inducted in the study. TcB measurements were made at the same time as. SB for 150 neonates [57% males and 43% females]. There was a significant positive correlation between SB and TcB measurements [n = 150, p < 0.0001] and TcB was more accurate in serum bilirubin level more than18mg/dl. Bilirubin can be measured accurately by TcB, but before hospital admission or exchange transfusion, SB should be done. Further studies should be done on neonates with different skin color and preterm babies.
Juniperus

toxicity

In vitro cytotoxicity of two subspecies of juniperus excelsa on cancer cells.
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Isfahan University of Medical Sciences - School of Pharmacy and Pharmaceutical Sciences and Isfahan Pharmaceutical Sciences Research Center - Department of Pharmaceutical Chemistry
Iranian Journal of Basic Medical Sciences 2009; 11 (4): 250-253 (15 ref.)
Keywords: Hela Cells; Neoplasms; Plant Extracts-toxicity; Enzyme-Linked Immunosorbent Assay
Abstract: The cytotoxic effects of crude ethanol extracts of some previously tested Iranian conifers on tumor cell lines have motivated us to screen different parts of two subspecies in this genus. Terminal branchlets and berries of Juniperus excelsa subsp. excelsa and J. excelsa subsp. polycarpos were collected, dried and extracted with ethanol/H2O [80/20 v/v] via percolation procedure. Extracts were dried, reconstituted in ethanol and cytotoxic effects of different concentrations were determined on cancer cells by ELISA, using MTT assay. MDA-MB-468, Hela and KB cells were used in this study. The extracts of the branchlets of male and female of J. excelsa subsp. polycarpos as well as berries extract of J. excelsa subsp. excelsa showed inhibitory activities against KB cells. Extracts of female branchlets and berries of J. excelsa subsp. polycarpos were cytotoxic against all 3 cell lines. In conclusion, obtained extracts from J. excelsa subsp. polycarpos showed cytotoxic effects against most tested cell lines which was comparable to doxorubicin; whereas, berries extracts of J. excelsa subsp. Excels showed inhibitory effects only against KB cells.

Ketorolac Tromethamine

chemistry

Physicomechanical properties and release characteristics of ketorolac trometh-amine from chitosan films: effect of inclusion of different polyols plasticizers.
Zen aldeen, E.A.; Hussein, A.K.; Ibrahim, M.A.; Amin, M.A.
Tanta University - Faculty of Pharmacy - Department of Pharmaceutical Technology
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 229-247 (20 ref.)
Keywords: Plasticizers; X-Ray Diffraction; Microscopy, Electron, Scanning; Polysness; Chitosan
Abstract: The film-forming ability of chitosan polymer loaded with ketorolac tromethamine [KT] was evaluated. Films were prepared by a casting/solvent evaporation technique from plasticizer - free and plasticizer containing aqueous solutions. Glycerol, sorbitol, and 1-erythritol were used as plasticizers. Solid state of the films was studied by powder X-ray diffractometry [PXRD], and differential scanning calorimetry [DSC]. The plasticizing efficiency was evaluated by measuring the physicomechanical properties as modulus of elasticity, tensile strength, percent of elongation and swelling ratio. The medicated films - plasticized or free - were clear and colorless. A plasticizer concentration of 20% [w/w of polymer weight] was sufficient to obtain flexible films with all tested samples. X-ray diffraction patterns and DSC thermograms indicated an amorphous state of the films independent on the type of the plasticizer used. The results have showed that, incorporation of different polyols as plasticizer s improves the consistency and the physicomechanical properties of the films. The plasticizers effect was dependant on the hydrophilicity and chemical structure of both plasticizer and polymer. The release profile of the drug was also significantly increased by addition of polyols as plasticizers. Moreover, the drug release pattern was found to follow Higuchi-diffusion model.

Kidney Failure, Chronic

metabolism

The relation between dual energy x-ray absorptiometry measurement of body fat composition and plasma ghrelin in patients with end-stage renal disease.
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Keywords: Adipose Tissue; Absorptiometry, Photon; Ghrelin-blood; Renal Dialysis; Cohort Studies

Abstract: To clarify the role of ghrelin in malnutrition in uremia and its relationship to fat composition using dual x-ray absorptiometry DXA. This is a cohort study including Group I: 60 patients with end stage renal disease 30 on hemodialysis [group IA] and 30 pre-dialysis [group IB] and Group II: 20 controls. This study was carried out in Cairo University Hospital, Kasr Al-Aini, Cairo, Egypt in 2007. Body fat composition total, differential, and lean body mass was assessed using DXA, and plasma ghrelin was measured. Ghrelin was significantly higher in hemodialysis and pre-dialysis groups compared to the control group, and higher in hemodialysis group compared to the pre-dialysis group. In hemodialysis, ghrelin was negatively correlated with weight, body mass index BMI, and truncal fat mass, and positively correlated with serum creatinine. In pre-dialysis, ghrelin inversely correlated with weight, BMI, and truncal fat mass, and positively correlated with serum creatinine, lean body mass. In control, plasma ghrelin showed negative correlation with weight, BMI, truncal fat mass, and body fat mass, and positive correlation with lean body mass. Ghrelin was markedly elevated in renal failure due to its decrease in excretion. Negative correlation between ghrelin and fat composition was detected in dialysis patients. Serial evaluation of body fat composition using DXA is recommended for assessment of nutritional status of those patients.

Laryngeal Neoplasms

diagnosis

Role of apoptosis proteins survivin, BAX and BCL-XL in laryngeal squamous cell carcinoma progression.

Abdelhamid, Waleed A.M.; Muhammad, Eman M.S.; El Refaiy, Abeer
Sohag University - Faculty of Medicine - Departments of E.N.T. and Pathology

Assiut Medical Journal 2008; 32 (3): 93-100 (20 ref.)

Keywords: Carcinoma, Squamous Cell; Apoptosis; Neoplasm Metastasis; Immunohistochemistry; Neoplasm Staging; Microtubule-Associated Proteins; bcl-2-Associated X Protein; bcl-X Protein

Abstract: We used immunohistochemistry to investigate a potential role of SVV as an early predictor of malignant transformation in precancerous and cancerous lesions of the larynx, we also sought to examine the expression of Bcl-X[L] and Bax in laryngeal SCC analyze the relationships between their expression and prognostic factors including site, histological grade, clinical staging and lymph node metastasis. This study included 6 normal laryngeal mucosae, 7 dysplastic laryngeal epithelia, 5 in situ laryngeal carcinomas, and 32 biopsied laryngeal SCC. Clinical evaluation was done. Specimens were forma l in fixed, paraffin-embedded, stained with H and E, classified and graded according to WHO classification, [2005] and immunostained to detect Survivin and Bcl-X[L]. and Bax proteins using the avidinbiotin peroxidase method. Survivin expression gradually increased significantly with advance of laryngeal carcinoma through the sequence of dysplasia, in situ carcinoma and infiltrating carcinoma [P < 0.04]. There is a statistically significant increase in Survivin expression with increasing tumor grade [P < 0.03] and with advance in clinical staging [P < 0.01]. Regarding lymph node metastasis SVV was more expressed in laryngeal SCC exhibiting lymph node metastasis [P < 0.02]. Bax expression was decreased significantly in infiltrating laryngeal carcinoma [P < 0.04] compared with premalignant lesions of the larynx. In contrast, Bcl-X[L] was increased significantly with the advance of laryngeal carcinoma through dysplasia, carcinoma sequence [P < 0.02]. There was no statistically significant difference in either Bax or Bcl-X[L] expression considering tumor differentiation, advanced clinical staging or lymph node metastasis. Survivin plays cm important role in the initiation of laryngeal cancer and its progression towards higher grades, invasion and metastasis. Bax and Bcl-X[L] play their role early in cancer initiation but have nothing to do as the tumor progresses to higher grades, infiltrates deeply, or giving lymph node metastasis.

Laurus

Variation in the essential oil composition of Laurus nobilis L. of different growth stages cultivated in Iran.

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Keywords: Oils, Volatile; Lauraceae; Cyclohexanols; Monoterpenes; Eugenol

Abstract: The chemical variations of the essential oil from the aerial parts of Laurus nobilis L.[Lauraceae] have been studied. Plant material has been harvested at each phenological status [vegetative, before anthesis, full flowering and seed-bearing]. The oils were obtained by hydro distillation of the air-dried samples. Analysis by GC and GC/MS of the essential oils have allowed to identify 49 components. The main components were 1,8-cineole, trans-sabinene hydrate, alpha-terpinyl acetate, methyl eugenol, sabinene, eugenol and alpha-Pinene.
Leiomyosarcoma

diagnosis

Retroperitoneal leiomyosarcoma of the inferior vena cava: a case report.
Karami, A.; Azizi, S.; Payombarnia, A.; Rezaee, N.; Azarpira, N.
Shiraz University of Medical Sciences - Department of Surgery
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 96-99 (15 ref.)
Keywords: Leiomyosarcoma-epidemiology; Leiomyosarcoma-therapy; Vena Cava, Inferior-pathology; Prognosis; Sarcoma-classification; Radiotherapy; Chemotherapy, Adjuvant; Leiomyosarcoma-surgery
Abstract: Leiomyosarcoma of the inferior vena cava (IVC) is a rare sarcoma, but it is the most common primary malignancy of the IVC. It has an extremely gloomy prognosis. We describe a 40-year-old white female complaining of abdominal fullness for 7 weeks before she sought medical assistance. Initial work-up including sonography and computed tomography showed a huge tumoral mass in the abdominal cavity seemingly originating from the IVC with displacement of the right ureter and hydronephrosis. The patient underwent surgical resection of the tumor. Pathologic diagnosis was leiomyosarcoma. Postoperatively, she was placed on coumadin and adjuvant chemotherapy was started. Considering the aggressiveness of this tumor, early radical enblock resection with clear margins is still the only chance for long-term survival.

Leishmaniasis, Cutaneous

epidemiology

Clinical spectrum of nasal leishmaniasis in muzaffarabad.
Arfan ul Bari
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Combined Military Hospital - Department of Dermatology
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 146-149 (24 ref.)
Keywords: Leishmaniasis, Cutaneous-diagnosis; Acquired Immunodeficiency Syndrome; Leishmania; Nose; Leishmaniasis
Abstract: To determine the frequency of nasal leishmaniasis and the presentation of disease involving nose as well as nasal mucosa in patients reporting from the Muzaffarabad district of Azad Jammu and Kashmir [AJK]. Study Design: Case series. Place and Duration of Study: Combined Military Hospital, Muzaffarabad, from January 2006 to May 2008. Methodology: All patients belonging to Muzaffarabad district of AJK, clinically suggestive of Cutaneous Leishmaniasis [CL] and supported by laboratory diagnosis were registered. Diagnosis was made on the basis of clinical characteristics of the lesions, laboratory demonstration of leishmania trophozoite bodies on skin smears or skin biopsies and therapeutic trials. Those having lesions primarily on nose, irrespective of age and gender were included in the study. All those cases with primary lesion elsewhere over face and secondarily involving nose [by extension of primary lesion] were excluded. Various demographical features of the patients and clinical patterns of the lesions were recorded in all cases and subsequently categorized accordingly. Results: Seventy three out of 252 [29%] cases of nasal leishmaniasis were encountered. Male to female ratio was 43:30. Fifty five had solitary lesions which were restricted only to nose in 51 patients. Morphological patterns included psoriasiform [30], furunculoid [8], nodular [13], lupoid [8], mucocutaneous [4], rhinophymous [3], erysiploïd [1], basal cell carcinoma-like [1], discoid lupus erythematosis-like [1], mutilating [2], verruciform [1] and keloidal [1]. Conclusion: Nose was a common site of involvement in CL, where the disease can present in various forms. In endemic areas, CL should be included in the differential diagnosis of all nasal lesions.

Leukemia

microbiology

Surveillance of healthcare-associated infections in adult patients with leukemia in Kuwait cancer control center.
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Ministry of Health - Kuwait Cancer Control Center - Infection Control Office
Abstract: To study the incidence, types and microbial etiology of healthcare-associated infections affecting adult patients with leukemia and the antimicrobial susceptibility of Gram-negative bacteria to ciprofloxacin. Prospective study. Kuwait Cancer Control Center [KCCC]. Kuwait. All adult patients suffering from different types of leukemia, managed in the Hematology-Oncology unit over a period of 15 months [January 2006 - March 2007]. Prospective surveillance of healthcare-associated infections. Overall incidence density rate of healthcare-associated infections was 13.4/1000 patient days. Patients suffering from acute myeloid leukemia [AML] had the highest infection rate [16.2/1000 patient days]. The rates were significantly higher in acute types of leukemia than chronic ones [p = 0.001]. Infections develop significantly more in female patients [p < 0.001]. The most frequently reported infections were blood stream infections [BSI, 46.9%] followed by skin and soft tissue infections [SST, 25.7%]. Eighty-three percent of BSI was central line-associated. Gram-negative bacteria, Gram-positive bacteria and fungi were isolated from 69.9, 18.6 and 4.4% of all infections respectively. Escherichia coli [E. coli] were isolated from 35.2% of all microbiologically-documented infections followed by Pseudomonas aeruginosa [15.2%]. Majority of the isolated Gram-negative bacteria were ciprofloxacin resistant including E. coli, with 97.3% resistance to ciprofloxacin. Majority of the infections [80.5%] were associated with a neutrophil count of < 500 cell/mm³ in patients receiving ciprofloxacin prophylaxis. Infections remain a major complication in adults with acute leukemia. Continuous monitoring of the rate of Gram-negative bacteremia is recommended for timely detection of the loss of efficacy of fluoroquinolone prophylaxis.

Lidocaine

therapeutic use

Preemptive effects of Lidocain on postoperative pain in patients undergoing disc operation: a Randomized, double blind, placebo-controlled trial.
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Abstract: Postoperative pain is a major poorly managed problem in millions of operations performed all over the world each year. Since infiltration of the operative field with lidocain as a local anesthetic is very cheap, it is easily available, and there are few side effects, this study aimed to evaluate its efficacy on post-op-pain of patients undergoing open intervertebral disc surgery. In this double blind clinical trial on 188 patients undergoing elective open intervertebral disc operation, the surgical incision site was infiltrated with 2 ml of 1/500,000 epinephrine for each centimeter in the control group and the same solution with 20 mg lidocain for each centimeter of the incision in the case group. Post-oppain was measured with visual analog scale [VAS] in the 6[th], 12[th], 24[th], and 48[th] hours. The mean age was 41.8 +/- 12.4 for the study group, and 43.5 +/- 15.6 for the control one. Statistical analysis revealed no significant difference in pain severity in females, but for males it was significant at the 6th and 24th hours. Interestingly, it was more severe in those receiving lidocain. The amount of narcotics used postoperatively revealed no significant difference in the groups. Lidocain used locally before skin incision has no effect on reducing post-op-pain, post-op-narcotics demand, and duration of hospital stay.

Lymphoma, Non-Hodgkin

blood

TNF polymorphisms independently predict outcome in patients with B-cell non-hodgkin's lymphoma.
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Royal Infirmary - Section of Experimental Haematology - Department of Clinical and Laboratory Haematology


Keywords: Lymphoma, B-Cell-blood; Tumor Necrosis Factor-alpha-analysis; Tumor Necrosis Factor-alpha-blood; Polymerase Chain Reaction; Survival Rate; Treatment Outcome; Polymorphism, Genetic
Abstract: Tumour Necrosis Factor alpha [TNF alpha] and Lymphotoxin alpha [LT alpha] have been implicated in the pathogenesis of lymphoproliferative disorders. Patients with B-cell non-Hodgkin's lymphoma [NHL] often have high serum levels of TNF which may be associated with a poor outcome. TNF alpha and LT alpha polymorphisms are known to influence expression of these cytokines and may explain the variable response to therapy. In patients with NHL, serum levels of TNF alpha and LT alpha were measured. DNA was typed using allele specific PCR and restriction fragment length polymorphism for the -308 TNFalpha and +252 LT alpha polymorphisms and comparison was made with clinical outcome. The presence of high producing alleles was significantly associated with high serum levels of TNF alpha and LT alpha. The presence of 2 or more high producing alleles was significantly associated with more advanced disease at presentation [stage III and IV], p = 0.024, a higher International Prognostic Index [IPI] score, p = 0.038, failure to achieve a complete remission [CR] after 1st line therapy [88% vs 33%, p = 0.01] and shorter progression free survival [PFS] [median 24 months compared with 78 months, p = 0.001]. Multivariate analysis confirmed that TNF high-risk haplotype [HRH] was an independent prognostic factor for PFS. These results demonstrate that TNF polymorphisms are independent prognostic factors in NHL. Further study is required to further define the importance of TNF polymorphisms within different lymphoma subtypes and with different therapeutic approaches.

Mastitis

diagnosis

Spectrum of breast tuberculosis.

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Keywords: Breast diseases-diagnosis; Tuberculosis-diagnosis; Tuberculosis-ultrasonography; Tuberculosis-drug therapy; Tuberculosis-surgery; Mammography; Biopsy, Fine-Needle; Lymphatic Diseases; Mastitis-surgery

Abstract: To determine the presentation of breast tuberculosis, diagnostic methods and surgical treatments. A case series. This study was conducted at Dow University of Health Sciences and Tuberculosis Clinic at Bantwa Hospital, Kharadar, Karachi, from April 1999 to March 2007. Clinically diagnosed patients of breast tuberculosis, confirmed by laboratory work-up, were included in this study. Detailed history and examination of both breast and axillae were the primary diagnostic measures. Complete blood counts, ESR, Mantoux test, ultrasound, mammogram, fine needle aspiration cytology, staining for acid-fast bacilli both smear and culture were performed. Core biopsy for lumps more than 5 cm and wide excision biopsy for the lump less than 5 cm were the methods applied. Pre-designed research proforma was filled and descriptive statistics of age, site, side, clinical presentations, investigations were recorded and surgical treatment done. Anti-tuberculosis treatment was given to all patients. Thirty patients were studied with mean age of 28.4 years ranging from 16-48 years. Bilateral breast involvement was seen in 2 patients with 14 cases involving the right and left breast. Lymph node involvement was present in 7. Pulmonary tuberculosis was seen in 4 patients. Multifocal disease was present in 27 patients. The clinical presentation was with lump in 6, discharging sinuses in 14, cold abscess in 8, and non-healing ulcer in 2 patients. There were 5 lactating mothers. Mantoux test was positive in 5, AFB smear and culture were positive in 3. Only AFB culture was positive in 4. Five patients required core biopsy for diagnosis of confirmation of lump more than 5 cm and wide excision biopsy was required in 7 patients with lump less than 5 cm. Despite antituberculous treatment, surgical management was required in 21 [70%] cases. Tuberculosis of the breast, simulating the carcinoma breast and granulomatous mastitis very closely and are difficult to be differentiated without tissue diagnosis. Surgical management is more often required.

pathology

Idiopathic granulomatous mastitis.

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Saudi Medical Journal 2009; 30 (1): 45-49 (18 ref.)

Keywords: Granuloma; Mastitis-diagnosis

Abstract: To discuss the clinical and radiological features and treatment approaches in 14 patients diagnosed with idiopathic granulomatous mastitis [GM]. We retrospectively evaluated the clinical features, radiological findings, and treatment approaches in 14 patients with idiopathic GM in the General Surgery Department, Gulhane School of Medicine, Ankara, Turkey between April 2000 and June 2006. The mean age of the patients was 34.5 years [range 27-41 years]. The complaints at admission were a mass in the breast in 7 [50%] patients, an abscess and a mass in 6 [42.8%], and a skin fistula in one [7.2%]. Granulomatous mastitis was unilateral in all subjects [on the right in 5 patients and on the left in 9]. All of the patients underwent ultrasonographic evaluation. Mammography was performed in 8 and magnetic resonance imaging in 5 patients. Seven patients [50%] were suspected to have breast carcinoma according
to radiological findings. We performed large excision in 11, incisional biopsy plus abscess drainage in one, and incisional biopsy plus abscess drainage plus medical treatment [prednisolone, methotrexate] in 2 patients. Due to the development of abscess after 9 months, drainage and large excision were also performed in one patient who received medical treatment. Idiopathic GM is a disease that generally affects young women of reproductive age and may be mistaken for breast carcinoma in clinical and radiological evaluations. The gold standard for the diagnosis is histopathologic evaluation.

Mastoid

surgery

Comparison of preoperative computerized tomography scan imaging of temporal bone with the intra-operative findings in patients undergoing mastoidectomy.
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Guilan University of Medical Science - Amirralmomenin ENT Hospital - Department of Otolaryngology
Keywords: Mastoid-radiography; Tomography, X-Ray Computed; Temporal Bone-radiography; Intraoperative Care; Preoperative Care; Cross-Sectional Studies
Abstract: To compare the consistency rates of pre- and intra-operative radiological findings in patients with chronic suppurative otitis media CSOM. In a cross-sectional study, 80 patients with CSOM underwent pre-operative CT scanning and we compared the results with intra-operative clinical findings during mastoidectomy from 2000-2004 in the Otology Department, Amiralmomenin Hospital of Guilan Medical University, Rasht, Iran. Sensitivity, specificity, positive and negative predictive value of CT scan in tympanic and mastoid cholesteatoma, ossicular chain erosion, tegmen tympani erosion, dehiscence of facial canal, lateral semicircular canal LSCC fistula were assessed. Then, correlation between radiological findings and intra-operative findings were calculated. The mean age of the patients was 27.9 +/- 16.3 years. Mostly were males n = 57 [71.3%]. Correlation of preoperative radiological images with intra-operative clinical findings were moderate to good on tympanic cholesteatoma, mastoid cholesteatoma and ossicular chain erosion, but weak and insignificant in cases of tegmen tympani erosion, facial canal dehiscence and LSCC fistulae. Preoperative CT scan may be helpful in decision-making for surgery in cases of cholesteatoma and ossicular erosion. Despite of limitations radiological scanning is a useful adjunct to management of CSOM.

Mental Disorders

Five rare psychiatric syndromes co-occurring together.
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Neurosciences 2009; 14 (1): 91-93 (14 ref.)
Keywords: Syndrome; Delusions; Comorbidity

Metacarpus

surgery

[The distal pedicled dorsal metacarpal flap, about 30 cases]
Aziza Othmana Hospital - Orthopedics Department - Nabeul, Tunisia
Maghreb Medical 2009; 29 (391): 225-226 (9 ref.)
Keywords: Fingers-surgery; Surgical Flaps; Hand-surgery; Retrospective Studies
Abstract: The distal pedicled dorsal metacarpal flap based on a retrograde bloody supply harvested from the dorsum of the hand, its vascularisation is provided by proximal dorsal cutaneous branches of the digital collateral arteries through the rich anastomotic arterial network of the web space. This flap is useful in reconstructing defects on the dorsal and palmed aspect of the digits. The authors present 30 clinical cases to describe the anatomical basis, the operatory techniques, the advantages and inconveniences of this new flap.
**Migraine Disorders**

**epidemiology**

Prevalence of migraine and non-migraine headache among high school students at the National Guard Housing in Riyadh, Saudi Arabia.

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**Saudi Medical Journal** 2009; 30 (1): 120-124 (15 ref.)

**Keywords:** Headache-epidemiology; Headache Disorders-epidemiology; Prevalence; Schools; Students; Cross-Sectional Studies

**Abstract:** To determine the prevalence of headache and migraine, to identify symptoms that accompany headache attack, and to determine the possible effect of headache on school attendance, among high school students. A cross-sectional, questionnaire-based study of secondary school students of the National Guard Housing in Riyadh, Kingdom of Saudi Arabia, was executed during the academic year of 2002 and 2003. A sample of 1750 students was included from 4 schools by systemic random sampling for each school. The questionnaire included demographic data. The second part includes specific questions on headache, and whether there had been headache in the year preceding the survey, type of headache, and its diagnosis according to International Headache Society IHS criteria. Possible effect of headache on school attendance was recorded. Approximately one-third of the entire study sample had recurrent headache episodes not related to febrile illness in the year preceding the survey. Female students showed a significantly higher prevalence than males of migraine, as well as non-migraine headache, with the least prevalence among the younger students of ages 16-17 years. More than one-third of all students were absent from school due to headache. Recurrent headache is prevalent among the high school students, and more among female students. These prevalence rates are comparable with those reported elsewhere. Health education sessions at schools, primary care clinics, and the society in general are recommended to increase awareness for this common adolescent’s neurological problem.

**Miller Fisher Syndrome**

**diagnosis**

Pharyngeal-cervical-brachial variant of Guillain-Barre syndrome in a patient with Thalassemia intermedia.

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**Neurosciences** 2009; 14 (1): 71-74 (10 ref.)

**Keywords:** Guillain-Barre Syndrome-classification; Thalassemia; Guillain-Barre Syndrome-diagnosis

**Abstract:** Here, we present the first instance of Guillain-Barré syndrome variant in a patient with beta thalassemia and iron overload who had a history of transfusion before the onset of symptoms. Our patient was a 50-year-old Persian woman with history of intermediate thalassemia who had been treated with pack cells because of low hemoglobin level. Ten days after transfusion, she developed numbness of arms, left sided ptosis, and afterwards dysarthria, dysphagia, and bilateral ptosis. Electrodiagnosis on day 12 revealed reduced repetition of f-waves in the upper limbs and reduced recruitment with 1+ fibrillation in facial muscles. Electromyography and nerve conduction velocities in the limbs were normal. After excluding other causes and according to electrodiagnosis, the pharyngeal-cervical-brachial variant of Guillain-Barre syndrome was considered and plasma exchange began. Following exchanges, significant clinical improvement was attained. Iron overload and possible transmission of infections from blood products might have contributed in the development of syndrome.
**Millettia**

An insight into the possible anticonvulsant activity of ethanolic extract of pongamia pinnata leaves in mice.
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Govt. aided AIT Institute of Pharmacy

**Keywords:** Phytotherapy; Anticonvulsants; Plant Extracts-therapeutic use; Mice; Ethanol; Plant Leaves

**Abstract:** Ethanolic extract of Pongamia pinnata leaves was investigated for possible anticonvulsant activity against pentylenetetrazol [PTZ] and Maximum Electroshock [MES] - induced seizures in mice. Effect of the extract on spontaneous locomotor activity was assessed using Actophotometer. Any possible change in brain GABA content was also determined, in a trial, to correlate such change with the anticonvulsant activity. In PTZ-induced seizures, the extract delayed the onset of convulsions dose-dependently. The highest dose elicited complete protection against tonic hind leg extension together with remarkable reduction in mortality. In MES-induced convulsions, the extract produced significant increase in the current required to produce tonic hind leg extension. In Actophotometer the extract produced significant decrease in spontaneous locomotion compared with the control group. Brain GABA content was increased significantly by the extract in a dose-dependent manner. Thus, Investigation of ethanolic extract of P. pinnata leaves showed significant anticonvulsant activity comparable with the reference drug diazepam and such activity was accompanied with reduction in the locomotion and increase in brain GABA concentration.

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**Misoprostol**

therapeutic use

Comparison of oral and vaginal misoprostol for cervical ripening before evacuation of first trimester missed miscarriage.
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**Keywords:** Misoprostol-aministration and dosage; Cervical Ripening-drug effects; Abortion, Missed; Pregnancy; Pregnancy Trimester, First; Prospective Studies

**Abstract:** To assess the effectiveness of misoprostol in cervical ripening before evacuation of conception in the first trimester missed miscarriages, and to compare between oral and vaginal routes of administration. A randomized controlled study was carried out in Baghdad Teaching Hospital, Baghdad, Iraq in 2006. One hundred and twenty women with first trimester missed miscarriages were divided into 2 study groups, randomized for oral and vaginal 400 mcg misoprostol priming of cervix, and 2 control groups randomized for oral and vaginal placebo, before undergoing surgical evacuation after 3 hours. Measured outcomes were: post medication cervical dilatation, time needed to dilate the cervix surgically, blood loss, and development of the side effects of misoprostol. Post medication cervical dilatation was higher in the misoprostol group 7.07 +/- 1.36 mm for oral misoprostol, 7.77 +/- 1.22 mm for vaginal misoprostol, versus the control groups 2.43 +/- 0.5 mm. Post medication cervical dilatation was significantly higher in the vaginal misoprostol group, compared to the oral group p = 0.04. The time required to dilate the cervix in the misoprostol group was shorter, compared with placebo. There were no significant differences in the amount of blood loss between oral p = 0.74, and vaginal misoprostol groups p = 0.62, and gastrointestinal side effects were significantly more in the oral misoprostol group p = 0.014. Misoprostol is an effective cervical priming agent when administered either orally or vaginally before evacuation of conception in the termination of the first trimester missed miscarriage.

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**Moraceae**

Hepatoprotective effect of morus alba L. in carbon tetrachloride- induced hepatotoxicity in mice.
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**Keywords:** Carbon Tetrachloride-toxicity; Mice; Liver-pathology; Plant Proteins-pharmacology; Phytotherapy

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Abstract: Many studies have been performed to prevent liver toxicity in animal models. It is well known that herbal medicines play an important role in therapy. The crude hydroalcoholic extract of Morus alba L. leaves was evaluated for hepatoprotection against hepatotoxicity induced by carbon tetrachloride. The hydroalcoholic extract was prepared by maceration technique. Animals were weighed and divided into five groups of seven mice. Group one received carbon tetrachloride [positive group]. Group two received only olive oil [solvent of CCL[4] as negative group]. Groups three [A1], four [A2], and five [A3] received crude extract in doses of 200, 400, and 800mg/kg, respectively and one hour later carbon tetrachloride in doses of 0.2ml/kg for five consecutive days [test groups]. All administrations were made by p.o. in 0.2ml volume. Then on the day six animals received sodium hexabarbitral in doses of 25mg/kg i.p., to determine the sleeping time. After sleep time determination animals were sacrificed and from the jugular vein, blood was taken. Serum was obtained for determination of aspartate aminotransferase [AST] and alanine aminotransferase [ALT] enzymes levels. Livers were removed and kept in 10% formalin bufferd solution for histopathological examinations. The hydroalcoholic extract at dose of 800mg/kg exhibited a significant liver protective effect by lowering the serum levels of AST and ALT, decreasing the sleeping time and resulting in less pronounced destruction of the liver architecture, there was no fibrosis and inflammation, as compared with CCl[4] group [p<0.05].

Mortality

Estimation of crude death rate with application of capture-recapture methods.
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Shahid Beheshti University of Medical Sciences - Faculty of Medicine - Department of Health and Social Medicine
Payesh - Health Monitor 2009; 8 (1): 11-16, 105 (12 ref.)
Keywords: Linear Models
Abstract: To estimate accuracy of Crude Death Rate [CDR] for the country using mortality data from Gorgan, Iran. Three sources of mortality information in Gorgan were used for estimating the undercount in mortality data. There are some methods for estimating undercount in mortality data. In this study, we estimated it by three different ways of capture-recapture methods. We use Peterson-Chapman, log linear and coverage estimators. The rate of undercount in mortality data by estimate of Peterson and Loglinear was 16.3 and by estimate of coverage method was 18.3. According to these rates the CDR for country is estimated 5.57 and 5.7 in 1000 respectively. Estimated crude death rate for Iran in this study is not significantly different from International Organizations such as UNDP and UNICEF estimation. Their estimation is 5.5 and 5 respectively.

Mumps

epidemiology

Seroprevalence of mumps before inclusion of mumps vaccination in the Iranian Expanded Programme on Immunization.
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Keywords: Mumps Vaccine; Mumps-immunology; Immunization, Secondary; Seroepidemiologic Studies; Cross-Sectional Studies; Immunoglobulin G-blood; Age Factors; Enzyme-Linked Immunosorbent Assay
Abstract: The current target groups for measles, mumps and rubella vaccination in the Islamic Republic of Iran are children at 12 months and 4-6 years. A study of the age-specific seroprevalence of antibodies against mumps in children aged 3-18 years in Shahrekord aimed to establish the need for booster vaccinations to cover non-immune children. Of 338 children, 19.8% were seronegative. Age-specific seronegativity was 33.3%, 20.5% and 4.6% in age groups 7-11, 12-14 and 15-18 years respectively. To obtain herd immunity, we suggest that for the next 5 years children aged 7-11 years entering guidance school are selected as the main group for vaccination.
**Myelitis, Transverse**

**rehabilitation**

Urodynamic evaluation and rehabilitation outcomes in transverse myelitis.

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Neurosciences 2009; 14 (1): 37-40 (10 ref.)  
Keywords: Rehabilitation; Urodynamics  
Abstract: To evaluate micturition abnormalities in patients with transverse myelitis [TM] using urodynamic studies, and to record functional outcomes of these patients after the rehabilitation program. Forty-six patients with TM who attended the Ankara Physical Medicine and Rehabilitation Education and Research Hospital, Ankara, Turkey between January 2000 and June 2005 were included in the study. Demographic findings of patients were documented. A history and detailed neurological examination was performed on all patients. Urological symptoms and history of bowel and sexual involvement were recorded. Urodynamic investigations were carried out for each patient. All patients were enrolled in the rehabilitation program. Neurologic bladder types and treatments, and functional levels of the patients after the rehabilitation program were recorded. Twenty-two men and 24 women were evaluated. The mean age was 39.74±15.94 [15-75] years, mean illness duration was 800.24±885.49 [150-3600] days. Thirty-six patients had paraplegia and 10 had tetraplegia. Thirty patients had a history of urinary pathology, 32 had bowel pathology, and 6 had sexual pathology. Urodynamic studies showed hypocompliant bladder in 2 patients, detrusor sphincter dyssynergia in 22, detrusor hyperreflexia in 16, and only sphincter disorder in 6 patients. Functional outcomes on discharge were independent ambulation in 8, ambulation with crutches in 16, ambulation with knee-ankle-foot orthosis and crutches in 4, therapeutic ambulation in 2, wheelchair in 16. Rehabilitation is important in patients with TM to continue the urinary continence and to preserve renal function, to obtain functional independence and to prevent complications.

**Myocardial Infarction**

**drug therapy**

In-ambulance versus in-hospital abciximab administration prior to primary PCI in stemi patients: immediate, short and long term outcomes.

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Assiut University - Leiden University Medical Center - Cardiology Department  
Keywords: Ambulances; Hospitals; Electrocardiography; Coronary Angiography; Creatine Kinase; Troponin T; Treatment Outcome; Antibodies, Monoclonal; Immunoglobulin Fab Fragments; Angioplasty, Transluminal, Percutaneous Coronary; Prospective Studies  
Abstract: Early abciximab administration before primary percutaneous coronary intervention [PPCI] for ST-segment elevation myocardial infarction [STEMI] is recommended in practice guidelines. However, optimal timing of administration remains unclear. Our aim was to evaluate the effects of early abciximab administration in the ambulance on immediate, short and long term outcomes. Within a fixed protocol for PPCI [Leiden MISSION project], December 2006 was the cutoff point for this prospective study. One hundred seventy nine consecutive patients with STEMI were enrolled, 90 patients received abciximab bolus in the hospital [late group] and 89 patients received abciximab bolus in the ambulance [early group]. The two groups were comparable for baseline and angiographic characteristics. The early group received abciximab within the golden period [median 63 min]. The infarct related artery [IRA] patency at onset of the PCI was 4 times higher in the early group than in late group [odds ratio = 4.9, 95% CI 2.410.1]. Enzymatic infarct size was smaller in the early group [cumulative 48-h CK release 8011 vs. 11267 U/L, p = 0.004]. This was associated with higher left ventricular ejection fraction [LVEF] at 90 days post-PPCI measured by myocardial scintigraphy [59% vs. 54%, p = 0.01], and lower incidence of heart failure through a median of 210 days of clinical follow-up [3% vs. 11%, p = 0.04]. Early abciximab administration in the ambulance significantly improves early reperfusion in STEMI patients treated with PPCI. Moreover this is associated with a smaller infarct size, improved LV function at 3-months and a lower risk of heart failure through 7-months follow-up.
Myocarditis

drug therapy

Marked suppression of experimental autoimmune myocarditis by simvastatin therapy in adult male wistar rats.
El Shemi, Adel G.A.; Sayed, Manal M.; Abdel Sattar, Mohamed H.
Assiut University - Faculty of Medicine - Department of Pharmacology
Assiut Medical Journal 2008; 32 (3): 65-76 (35 ref.)

Keywords: Autoimmune Diseases; Rats, Wistar; Models, Animal; Protective Agents; Simvastatin-therapeutic Use; Immunohistochemistry; Cytokines; Tumor Necrosis Factor-alpha; Interferon-gamma; Cholesterol

Abstract: Experimental autoimmune myocarditis [EAM] is a well-established animal model for human autoimmune myocarditis and postmyocarditis dilated cardiomyopathv. Recently, independent of their anti-hyperlipidemic properties, statins have been categorized as new agents that ameliorate the course of several organspecific autoimmune inflammatory diseases. Thus, this study aimed to assess the possible immunoinflammatory suppressive potentiality of simvastatin therapy on EAM. Three groups of male Wistar rats were investigated in this study: Normal control group, untreated-EAM and simvastatin-treatd EAM. EAM was induced by subcutaneous immunization with porcine cardiac myosin at days, 0 and 7. Simvastatin [10 mg/kg per day] was administered orally for 20 days. On day 21, the hearts were dissected out, weighed, and prepared for histological and immunohistochemical examinations. To evaluate the effects of simvastatin therapy on production of T helper type-1 [Th1], proinflammatory cytokines: tumor necrosis factoralpha [TNF-alpha] and interferon- gamma [IFN-gamma], and the plasma cholesterol levels were measured at days 11 and 21 in all groups. Daily administration of simvastatin to rats with EAM efficiently suppressed myocarditis development, its histopathological severity, and macrophages infiltration [ED1+ Cells] and other mononuclear cells into hearts. The treated rats had significantly decreased heart weight and heart weight/body weight ratio [Hw/Bw] compared with untreated animals. The up-regulated serum levels of TNF-alpha and IFN gamma during the course of EAM were promptly down-regulated by simvastatin therapy. Plasma cholesterol levels did not differ between the groups. Our data reveal that chronic therapy with simvastatin potentially ameliorated EAM via inhibition of Th1 proinflammatory cytokine production and macrophage infiltration, and this activity is independent on cholesterol reduction. Furthermore, we anticipate that simvastatin could be a new immunotherapeutic tool for autoimmune myocarditis and other cardiac autoimmune impairments.

Nephrotic Syndrome

drug therapy

Evaluation of intravenous cyclophosphamide pulse therapy in steroid resistant nephrotic syndrome in children.
Sayed, Mohammad M.; Refaiy, Abeer A.M.
Assiut University - Faculty of Medicine - Department Pediatrics

Keywords: Steroids; Drug Resistance; Cyclophosphamide-Administration and dosage; Pulse Therapy, Drug; Child; Kidney Function Tests; Kidney; Biopsy; Histology

Abstract: Idiopathic nephrotic syndrome in children usually shows excellent response to steroid therapy but some children are steroid dependent or resistant. Although oral cyclophosphamide has been recommended in these patients, long term side effects such as gonadal toxicity, hemorrhagic cystitis, and alopecia are of important concern. Therefore intravenous cyclophosphamide [IVCP] pulse therapy can provide an option that maintains remission with less frequent side effects. This study included 21 children having steroid resistant nephrotic syndrome [SRNS] [12 males and 9 females, their ages ranged from 3-16 years] admitted to the Assiut University Children Hospital from October 2004 to April 2006. Beside full history and thorough clinical examination, all patients were subjected to standard baseline investigations [urine analysis, 24 hours protein in urine, total plasma proteins, albumin serum level, serum urea and creatinine] and kidney biopsy. These patients treated with IVCP 500 mg/m[2] per month for 6 months beside daily steroid therapy 60 mg/m[2] /day for 4 weeks followed by 40 mg/m[2] /day for another 4 weeks and gradually tapered off over the next 8 weeks, then the patients followed up till the first relapse after discontinuation of IVCP or for 2 years without relapse. Renal biopsy showed minimal change nephrotic syndrome [MCNS] in 19.04%, focal segmental glomerulosclerosis [FSGS] in 47.62% and mesangial proliferative glomerulonephritis [mes. PGN] in 33.33%. Twelve patients [57.14%] attained remission [4 had MCNS, 5 had FSGS and 3 had mes.PGN]. Nine patients do not attain remission [5 patients had FSGS and 4 had mes. PGN]. In the responding cases the mean serum albumin and total plasma protein levels at the end of IVCP course were significantly higher than before the therapy while the mean serum level of cholesterol and the 24 hour protein in urine were significantly lower than before the therapy. The mean duration of remission in these patients was 10.08 +/- 6.69 months following the last dose of IVCP. None of the patients...
[during and after the period of therapy] developed alopecia or hemorrhagic cystitis, 3 patients developed transient leucopenia and 8 patients developed vomiting during the day of cyclophosphamide infusion which resolved with anti-emetics. IVCP pulse therapy is relatively safe, effective and economical therapeutic option in children with SRNS.

**Neural Tube Defects**

**etiology**

Maternal serum zinc deficiency in cases of neural tube defect in Gorgan, north Islamic Republic of Iran.
Golalipour, M.J.; Vakili, M.A.; Mansourian, A.R.; Mobasheri, E.
E-mail: mjgolalipour@yahoo.com
Gorgan University of Medical Sciences - Gorgan Congenital Malformations Research Centre

**Keywords:** Zinc-deficiency; Mothers; Zinc-blood; Case-Control Studies; Dietary Supplements

**Abstract:** Previous studies have shown a high rate of neural tube defects [NTD] in Gorgan, northern Islamic Republic of Iran. This case-control study during 2003-04 compared serum zinc levels and other variables in 23 mothers of neonates affected with NTD and 36 mothers with normal healthy neonates in Deziani hospital in Gorgan. Mean serum zinc levels in the case and control groups were 13.43 micromol/L [SD 6.3] and 11.41 micromol/L [SD 6.3] respectively. Zinc deficiency was found in 13 [36.5%] of the cases and 7 [19.4%] of the controls. Logistic regression analysis showed an association between the presence of NTD and zinc deficiency [OR 5.06; 95% CI: 1.51-16.94.

**Neurilemmoma**

**diagnosis**

Sympathetic chain Schwannoma.
Al Mashat, Faisal M.
E-mail: falmashat@yahoo.com
King Abdulaziz University Hospital - Department of Surgery
Saudi Medical Journal 2009; 30 (1): 154-156 (9 ref.)

**Keywords:** Sympathetic Nervous System; Neurilemmoma-pathology

**Abstract:** Schwannomas are rare, benign, slowly growing tumors arising from Schwann cells that line nerve sheaths. Schwannomas arising from the cervical sympathetic chain are extremely rare. Here, we report a case of a 70-year-old man who presented with only an asymptomatic neck mass. Physical examination revealed a left sided Horner syndrome and a neck mass with transmitted pulsation and anterior displacement of the common carotid artery. Computed tomography CT showed a well-defined non-enhancing mass with vascular displacement. The nerve of origin of this encapsulated tumor was the sympathetic chain. The tumor was excised completely intact. The pathologic diagnosis was Schwannoma Antoni type A and Antoni type B. The patient has been well and free of tumor recurrence for 14 months with persistence of asymptomatic left sided Horner syndrome. The clinical, radiological and pathological evaluations, therapy and postoperative complications of this tumor are discussed.

**Neurocysticercosis**

**diagnosis**

Neurocysticercosis in two Kuwaiti children.
Al Osaimi, Suad; Al Ateeqi, Wafa'a
Al Amiri Hospital - Department of Pediatrics
KMJ - Kuwait Medical Journal 2009; 41 (1): 71-74 (20 ref.)

**Keywords:** Infant; Seizures; Disease Management; Tomography, X-Ray Computed; Magnetic Resonance Imaging; Carbamazepine-therapeutic use; Enzyme-Linked Immunosorbent Assay; Child, Preschool
Abstract: Neurocysticercosis (NCC) is the most common parasitic disease of the central nervous system (CNS). We report two cases of NCC presented with focal convulsion, where neuroimaging studies showed ring enhancing lesions with significant serological test results. Management was conservative in both cases with improvement of both symptoms and radiological lesions. Awareness of the disease is important especially in Islamic countries like Kuwait where pork or its products are prohibited.

NG-Nitroarginine Methyl Ester

therapeutic use

The protective effect of N(G)-nitro-L-arginine methyl ester and insulin on nitric oxide inhibition and pathology in experimental diabetic rat liver.
Ozden, Hilmi; Tekin, Neslihan; Akyuz, Fahrettin; Gurer, Firdevs; Ustuner, Mehmet C.; Kucuk, Fulya; Guven, Gul; Yaylak, Faik
Eskisehir Osmangazi University - Faculty of Medicine - Department of Anatomy
Saudi Medical Journal 2009; 30 (1): 30-34 (17 ref.)

Keywords: Insulin-therapeutic use; Nitric Oxide-antagonists and inhibitors; Rats, Wistar; Diabetes Mellitus, Experimental; Liver-drug effects; Liver-pathology

Abstract: To determine the protective role of NG-nitro-L-arginine methyl ester L-NAME, and insulin on the liver in streptozotocin (STZ) induced diabetic rats. This study was performed in the Department of Biochemistry, Faculty of Medicine, Eskisehir Osmangazi University, Eskisehir, Turkey in 2007. Forty male Wistar albino rats were divided into 5 groups. These were untreated, diabetic control, STZ+insulin, STZ+L-NAME and STZ+insulin+L-NAME induced groups. The STZ was intraperitoneally injected into 3 groups, and includes insulin, L-NAME, and their joint administrations as protective agents. The blood glucose and nitric oxide NO levels were determined. The tissue samples were obtained at the end of the fourth week. The liver tissue distortions were evaluated using hematoxylin and eosin staining. The serum glucose level was significantly higher in diabetic control (p = 0.000) than the untreated group. Nitric oxide level was significantly lower in STZ+L-NAME (p = 0.000) than the untreated group. The focal pseudo lobular structures without vena centralis increased portal fibrillary necrosis, and bile duct stenosis with coagulation necrosis of the peripheral hepatocytes were more observed in diabetic group than the protective agent groups. In addition, insulin, and L-NAME lead to hepatocyte regeneration; and minimal mononuclear cell infiltration was noted. NG-nitro-L-arginine methyl ester inhibits NO level in STZ+L-NAME induced group. NG-nitro-L-arginine methyl ester either alone, or with insulin combination significantly attenuates the liver morphological disarrangements in STZ induced diabetic rats.

Nitric Oxide

pharmacology

Nitric oxide functions: An emphasis on its diversity in infectious diseases.
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Iranian Journal of Basic Medical Sciences 2009; 11 (4): 197-204 (80 ref.)

Keywords: Communicable Diseases-metabolism; Nitric Oxide-metabolism; Nitric Oxide Synthase; Reactive Nitrogen Species; C-Reactive Protein

Abstract: Nitric oxide is a short-lived mediator, which can be induced in a variety of cell types and produces many physiologic and metabolic changes in target cells. It is important in many biological functions and generated from L-arginine by the enzyme nitric oxide synthase. Nitric oxide conveys a variety of messages between cells, including signals for vasorelaxation, neurotransmission and cytotoxicity. In macrophages, nitric oxide synthase activity appears slowly after exposure of the cells to cytokines and bacterial products, is sustained, and functions independently of calcium and calmodulin. The cytokine-inducible nitric oxide synthase (iNOS) is activated by several immunological stimuli, leading to the production of large quantities of nitric oxide which can be cytotoxic. To date, there have been conflicting reports concerning the clinical significance of nitric oxide in infections. Some authors have proposed that nitric oxide contributes to the development of severe and complicated cases, while others have argued that nitric oxide has a protective role. The aim of this review is to evaluate the functions of nitric oxide production toward oxidative stress induced by infections or inflammations. It is indicated that NO is an important, but possibly not essential contributor in the control of acute phase of infections and it is only part of an immunopathological chain against pathogens. The anti-microbial function does not relate only to nitric oxide action or its related molecules, a combination of nitric oxide and immune factors is required to resolve pathogenic microorganisms. Consequently, the NO theory in infectious diseases may lead to the novel ideas for therapy and prevention.
**Nocturnal Enuresis**

**drug therapy**

**Response of enuretic children with and without hypercalciuria to nasal desmopressin.**
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**Iranian Journal of Pediatrics** 2009; 19 (1): 5-10 (23 ref.)

**Keywords:** Nocturnal Enuresis-physiopathology; Hypercalcemia-diagnosis; Hypercalcemia-drug therapy; Deamino Arginine Vasopressin-administration and dosage; Deamino Arginine Vasopressin-therapeutic use; Creatinine-urine; Creatinine-diagnostic use; Chi-Square Distribution; Treatment Outcome

**Abstract:** Nocturnal enuresis is a common diagnosis in patients referred to pediatric and pediatric nephrology clinics. Nocturnal polyuria is an important pathophysiologic factor in enuresis. Hypercalciuria, with altering concentrating capacity of the kidneys, can affect children’s response to desmopressin. This is a double blind clinical trial starting September 2007 to March 2008. One hundred and twenty four enuretic children, 76 [61.3%] males, 48 [38.7%] females, mean age 7.7 [+- 1.7], were evaluated by measuring random morning urinary calcium to creatinine ratio. Patients were divided into group 1 with a calcium to creatinine ratio equal to or more than 0.2 mg/mg, and group 2 with a ratio less than 0.2 [Hypercalciuric and non hypercalciuric respectively]. All patients received 10 to 40 mcg of nasal desmopressin at bed time. The response was defined as reduction in wet nights, a “full response” [greater than 90 % reduction], “partial response” [50% to 90% reduction] and “no response” [less than 50% reduction]. Chi-square method was used to compare the responses and P < 0.05 was considered statistically significant. Nineteen patients in group 1 [Hypercalciuric] and 105 patients in group 2 [Non hypercalciuric] were studied. Response to desmopressin was “full” in 47.4% in group 1 and 64.8% in group 2. 42.1% and 26.7% had “Partial response” in group1 and 2 respectively [P < 0.04]. Hypercalciuria can affect negatively the responsiveness to desmopressin therapy.

**Nose**

**Effect of anterior nasal packing on middle ear pressure and hearing threshold.**
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Al Adan Hospital - Department of Otolaryngology

**KMJ - Kuwait Medical Journal** 2009; 41 (1): 37-38 (7 ref.)

**Keywords:** Auditory Threshold; Ear, Middle; Hearing; Pressure; Acoustic Impedance Tests; Audiometry, Pure-Tone; Prospective Studies; Nasal Septum-surgery

**Abstract:** To evaluate the effect of anterior nasal packing on middle ear pressure and hearing threshold. Prospective study conducted between June and December 2007. Department of Otolaryngology, Al-Adan Hospital, Ministry of Health, Kuwait. Twenty patients of either sex in the age group 18 - 45 years admitted for septoplasty. Pure Tone Audiometry [PTA] and impedance audiometry [IA] were done in all patients preoperatively. 48 hours after surgery with nasal packs in position and seven days after removal of packs. PTA and IA before and after nasal packing. Normal middle ear pressure was observed preoperatively in most of the ears. Forty eight hours after septal surgery with nasal packs in position, 14 ears had abnormal negative middle ear pressure of 100 to 300 mm H2O. Seven days after pack removal, there was marked improvement in middle ear pressure. Hearing threshold remained normal before and after surgery. Nasal packing following septal surgery is a frequent cause of short-term eustachian tube dysfunction but rarely severe enough to cause symptoms of middle ear effusion. Tubal dysfunction is most likely due to peritubal inflammationorstasisofperituballymphaticsand reduced swallowing in the post operative period due to pain. Changes in middle ear pressure following nasal packing associated with most nasal surgeries were transient and not severe. Pure Tone Audiometry [PTA].

**Nutrition Therapy**

**utilization**

**The effect of nutrition and supplements on ocular health.**
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**Nutritional Status**

Assessment of nutritional status of pre-school children in Assiut governorate, Egypt.

Hamza, Wafaa S.; Abdel Fattah, Mohamed; Hany, Ahmed M.; Abdel Hafez, Naglaa M.

Assiut University - Faculty of Medicine - Public Health and Community Medicine department

**Assiut Medical Journal** 2008; 32 (3): 19-30 (16 ref.)

**Keywords:** Child, Preschool; Cross-Sectional Studies; Questionnaires; Mass Screening; Social Class; Anthropometry; Malnutrition

**Abstract:** Although the share of malnourished children have gradually been declining over the past 25 years, 167 million children under five years old almost one third of developing country children were estimated to be underweight. Malnutrition is directly responsible for 300,000 deaths per year in children younger than 5 years in developing countries and contributes indirectly to over half the deaths in childhood worldwide. Malnutrition in Egypt is one of the most important factors that affect Egyptian's health and development. For many years, malnutrition has been a severe blow on Egypt's population affecting individuals' production, which in turn affects its economy. The objectives are to identify the determinants of the nutritional status of the studied children and to measure the magnitude of malnutrition among preschool children in Assiut Governorate. A Cross sectional community based study design was applied. A representative sample from 3 districts of Assiut Governorate [Urban 30% and Rural 70%] in the form of cluster sampling technique, with a constant number of preschool children per cluster. A pre-structured questionnaire was used for collecting data, interviewing the mothers in order to collect socioeconomic factors, environmental factors, gastrointestinal and respiratory morbidity. Anthropometric measurements [height, weight, head circumference, mid upper arm circumference, and skin fold thickness] were recorded for each child. The total sample included 732 children aged 24-72 months with the mean age +/- SD [49.9 +/- 75.7] months. The gender distribution was 363 [49.6%] males, and 369 [50.4%] females, illiteracy was 211 [41.5%] mothers and 141 fathers 27.7%. Working status of mothers 53 [10.4%] mothers were working outside the home. 499 mothers [98.0%] had piped water supply in their houses, By using weight/age Z-score [WAZ] 11.1% were underweight, using height/age Z-score [HAZ] 28.4% were stunted and using weight for height Z-score [WHZ] 6.2% were wasted. Stunting constitutes a significant public-health problem among the pre-school children in Assiut Governorate, while under-nutrition represents a relatively less common problem. Interventions to improve socioeconomic and environmental situations are recommended to overcome these problems.

**Obesity prevention and control**

Prevention of obesity using low carbohydrate ketogenic diet.

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**KMJ - Kuwait Medical Journal** 2009; 41 (1): 3-12 (81 ref.)

**Keywords:** Diet, Carbohydrate-Restricted; Ketogenic Diet; Obesity-classification; Overweight; Ketone Bodies; Brain; Cardiovascular Diseases; Diabetes Mellitus; Insulin Resistance; Osteoporosis; Neoplasms

**Abstract:** This review focuses on the effect of low carbohydrate ketogenic diet on obese subjects presenting with various metabolic syndromes. Here, we provide data from our laboratory and from various other investigators on the therapeutic effectiveness of ketogenic diet on obese subjects. In this review we provide the rationale behind using
ketogenic diet as a treatment of obesity and its beneficial role in neurodegenerative/neurological disorders, diabetes, hyperlipidemia, coronary diseases, cancer etc. Administering ketogenic diet for a relatively longer period did not produce any significant side effect. Therefore, based on the data presented in this review, it is recommended that it is safe to use ketogenic diet for a longer period of time for obesity and associated disorders.

Obstetric Labor, Premature

epidemiology

Prevalence of preterm labor in Almukalla MCH Hospital, Hadhramout, Yemen.
Balafair, Amer S.; Baharon, Rogiah; Mostafa, Sayed A.M.
Hadhramout University of Modern Science and Technology - Faculty of Medicine
Assiut Medical Journal 2008; 32 (3): 85-92 (15 ref.)

Keywords: Prevalence; Gestational Age; Parity; Risk Factors; Maternal-Child Health Centers; Pregnancy; Retrospective Studies

Abstract: Preterm labor remains a major obstetric problem because of the high incidence of neonatal mortality or long term handicapped associated with it. Analyzing preterm labor can help to identify factors which lead to preterm labor and help to prevent it. To find out the incidence of preterm labor [PTL] in Almukalla MCH Hospital, Yemen to find out the relation of maternal age, parity, gestational age, sex, etiological factors and mode of deliveries to preterm labor, and to assess the main maternal risk factors associated with preterm labor. It is an observational analytical retrospective study done in the period from January [st] 2007 - December 3[rd] 2007. Questionnaire was performed to document the details of labor. Data entry and analysis was done by using SPSSv11 software computer program. There were 175 patients with PTL out of 4415 deliveries in 2007, including 9 twin pregnancies and one triple pregnancy. The incidence of PTL was [4.21%]. There were only 35 mothers under the age of twenty [19.9%], between twenty one to thirty years there were 94 cases [53.7%], and between thirty one to forty five years or more, there were 46 cases [26.4%]. 58 cases were primigravidae [33.1%] and 117 multigravidae [66.9%]. Sixty one cases of these PTL had gestational age of less than 28 weeks [34.8%], between 29-32 week there were 42 cases [24%] and between 33-36 week there were 72 cases [41.2%].Caesar-ean section [CS] was done for 34 cases [19.4%], and the remaining 141 [80.6%] cases were delivered vaginally. The most common cause of CS was placenta pre via centralis. The cause of PTL was unknown in most of the cases 77 cases [44%]. Male babies were 79 [42.47%], and female babies were 107 [57.53%].131 cases [70.43%] of newborn babies have body weight under 2 kg, and 55 case [29.57%] had body weight more than 2 kg. The rate of preterm labor in Almukalla MCH hospital is 4.21%. The highest rate was among multigravida with the age between 21-30 years. The most common gestational age of preterm labor was 33-36 weeks. The cause of preterm labor was unknown in; 77 cases [44%]. Most of the cases were delivered vaginally except 34 [19.4%] cases who underwent CS. Placenta previa centralis is the most common cause of CS.

Ofloxacin

pharmacokinetics

Effect of pharmacokinetic differences between men and women on pharmacodynamic target attainment of levofloxacin against streptococcus pneumoniae.
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King Saud University - King Khalid University Hospital - Clinical Pharmacy Services

Keywords: Streptococcus pneumoniae-drug effects; Sex Factors; Sex; Ofloxacin-pharmacology; Fluoroquinolones

Abstract: A recently published study reported significantly slower systemic clearance, smaller steady-state volume of distribution, and greater Area Under the Curve [AUC] for levofloxacin in women compared to men [p < 0.01]. Since the AUC[0-24]/MIC ratio predicts clinical and microbiological outcomes for fluoroquinolones, sex-related differences in levofloxacin pharmacokinetics may result in pharmacodynamic differences between men and women. To evaluate the pharmacodynamic [AUC[0-24]/MIC] of levofloxacin 500 mg and 750 mg against Streptococcus pneumoniae in men and women. Sex specific pharmacokinetic data were obtained from the previously mentioned study; likewise sex specific MIC data were obtained from the SENTRY Antimicrobial Surveillance Program [2004-2005], Monte Carlo simulations [10,000 subjects] were performed to calculate the probability of target attainment [PTA] as well as the cumulative fractions of response [CFR] for levofloxacin pharmacodynamic target of free AUC[0-24]/MIC >= 33.7 for men and 12.7 for women. To MIC 30%. Of all isolates were 1 and 177. 77.8% of all pneumoniae isolates have MIC value of 1 microg/ml. For the 500 mg levofloxacin dose, the PTA remained at acceptable range in women [85%] up to MIC 1 microg/ml, but declined very sharply in men [27%] at the same MIC; whereas the PTA approaching 100% in both men and women at MIC 1 microg/ml for the 750mg dose. At the mean
time, while the CFR was 45.4% greater in women than men [41.7% for men, 87.1% for women] for 500 mg dose; it was only 2.3% greater in women [96.2% for men, 98.5% for women] for 750 mg dose. Sex-related differences in Levofloxacin pharmacokinetics result in substantially greater pharmacodynamic target attainment against S. pneumoniae in women than in men at the 500 mg dose, but not at the 750 mg dose. This finding suggests that levofloxacin 750 mg should be used to treat S. pneumoniae infections, especially in men.

**Opium**

**Opium use in a rural area of the Islamic Republic of Iran.**

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Tehran University of Medical Sciences - Department of Community Medicine


**Keywords:** Questionnaires; Rural Population; Smoking; Sex Factors; Employment; Educational Status

**Abstract:** Because of its geographic proximity to the major drug production centres, there is easy access to narcotic drugs in the Islamic Republic of Iran despite efforts by governmental and nongovernmental organizations. Using a structured questionnaire as a basis for conversation, local health workers interviewed 310 residents of a rural area in Babol province about opium use. The self-reported rate of opium use, adjusted due to a bias in the sex ratio of the sample, was 8.9%. All the 42 opium users reported opium use at least 2-3 times per week in the previous 3 months. Opium was smoked by 95.2% and taken orally by 4.8%; there was no injecting use. There was no reported use of other substances, including alcohol. There was a statistically significant relationship between opium use and male sex, unemployment and cigarette smoking.

**Oropharyngeal Neoplasms**

**epidemiology**

**An epidemiological study on survival of oropharyngeal cancer cases in Alexandria, Egypt.**

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**Keywords:** Survival; Retrospective Studies; Cohort Studies; Prognosis; Survival Rate; Neoplasm Staging; Age Factors; Early Detection of Cancer; Oropharyngeal Neoplasms-pathology

**Abstract:** A retrospective cohort study was conducted to determine the 5-year survival and prognostic factors for survival for 407 oropharyngeal cancer cases registered in the 3 main hospitals in Alexandria, Egypt, from 1996-2000. Survival analysis was conducted using Kaplan-Meier curves, and multivariate Cox regression analysis. The overall 5-year survival rate was 30.8%. Multivariate analysis showed that significant prognostic factors for survival were tumour stage [hazard ratio = 2.39; 95% CI: 1.41-11.72], tumour site and patient's age. Secondary prevention of oral cancers can be conducted through examination of the oral cavity to find precancerous and early cancerous lesions and hence improve survival.

**Osteoarthritis, Knee**

**drug therapy**

**Anti-inflammatory activity of silymarin in patients with knee osteoarthritis. A comparative study with piroxicam and meloxicam.**

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**Saudi Medical Journal** 2009; 30 (1): 98-103 (37 ref.)

**Keywords:** Silymarin-therapeutic use; Silymarin-pharmacology; Anti-Inflammatory Agents; Piroxicam-therapeutic use; Thiazines-therapeutic use; Anti-Inflammatory Agents, Non- therapeutic use; Double-Blind Method; Clinical Trials as Topic
Abstract: To evaluate the anti-inflammatory effect of Silymarin in patients with knee osteoarthritis OA in comparison with piroxicam and meloxicam. A double-blind clinical trial was performed at the Department of Rheumatology, Baghdad Teaching Hospital, Baghdad, Iraq during the period from October 2004 to September 2005, in which 220 patients 79 males and 141 females with painful knee osteoarthritis were randomized into 5 groups, treated with either silymarin 300mg/day, piroxicam 20mg/day, meloxicam 15mg, or a combination of silymarin with piroxicam or meloxicam. Serum levels of interleukin-1 alpha, interleukin-8, and the complement proteins C3 and C4 were assessed at zero time, and after 8 weeks. Silymarin reduces significantly serum levels of IL-1 alpha and IL-8, C3 and C4 after 8 weeks compared to the pre-treatment levels. Piroxicam showed no significant reduction in IL-1 alpha levels, while IL-8 decreased significantly, compared to pre-treatment value. Meloxicam elevates serum levels of IL-1 alpha significantly, while IL-8 did not significantly change compared to the pre-treatment value. Piroxicam or meloxicam produced slight, non-significant increase in serum levels of complement proteins after the 8-week treatment period. Adjunct use of silymarin with piroxicam results in significant reduction in both cytokines IL-1 alpha and IL-8, and serum levels of C3 and C4. However, its adjunct use with, meloxicam did not reveal any significant changes in this respect. Silymarin reduces the elevated levels of interleukins and complement proteins, when used alone, or in combination with NSAIDs for the treatment of knee OA.

Osteoblastoma
diagnosis

Benign osteoblastoma of the temporal bone.
Shishegar, M.; Faramarzi, A.; Sari Aslani, F.
Shiraz University of Medical Sciences - Department of Otolaryngology
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 103-106 (11 ref.)
Keywords: Osteoblastoma-therapy; Osteoblastoma-classification; Temporal Bone-pathology; Tinnitus-etiolog;
Osteoblastoma-complications; Tomography, X-Ray Computed
Abstract: We have described a benign osteoblastic lesion in the right temporal bone in a 26 year-old girl who presented with a swell mass on the right supra-auricular area and tinnitus of 17 years duration. She had been operated conservatively through middle cranial fossa approach 17 years ago. After that time the patient has had no problem. There was no other developed neurologic deficit or evidence of malignant change throughout the 17 years. When we compared serial CT scans [the old and new films], there was no important difference between them. During a 17-year follow up period, no progression of the tumor was detected. Conservative treatment for such cases is suggested.

Otitis Externa
etiology

[Mycosic malignant external otitis due to aspergillus, about 2 cases]
Sethom, A.; Akkari, K.; Mardassi, A.; Benzarti, S.; Miled, I.; Chebbi, M.K.
Hospital of Principal Military and Instruction of Tunis - Oto-Rhino-Laryngology and Maxillo-Facial Surgery Department
Maghreb Medical 2009; 29 (391): 239-242 (10 ref.)
Keywords: Otitis Externa-microbiology; Aspergillus; Aspergillosis; Mycoses; Diabetes Mellitus; Immunosuppression
Abstract: Malignant external otitis is a severe uncommon infectious disease of the external auditory canal. Diabetes and immunodepression constitute the principal risk factors. The Pseudomonas aeruginosa is the most common germ. Since it is often a primary bacterial disease, initial mycosic infection is exceptional. However, Aspergillus can cause severe and dangerous forms. The authors reported two cases of mycosic malignant external otitis due to aspergillus. The pretherapeutic check-up included a computed tomography and technetium bone scintigraphy practiced in order to assess the extension. The diagnosis was confirmed by a mycological analysis of auricular sample. Hyperbaric oxygenation and medical treatment associating systemic antymycosic drugs, parenteral antibiotherapy were instituted for both patients. Death occured in one case, due to skull basis osteomyelitis. After 16 months of follow up, the second patient is still alive with no obvious complications.
Pancreatitis

chemically induced

[Acute pancreatitis secondary to L-asparaginase [a case]]
Tazi, I.; Rachid, M.; Quessar, A.; Harif, M.; Benchekroun, S.
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Aout 1953 Hospital 20 - Department of Hematology and Pediatric Oncology
Keywords: Pancreatitis-diagnosis; Pancreatitis-therapy; Asparaginase-adverse effects; Leukemia, B-Cell-therapy; Leukemia, B-Cell-complications; L-Lactate Dehydrogenase-diagnostic use

Parkinson Disease

Savci, Cemile; Sendir, Merdiye
Ministry of Health - Taksim Education and Research Hospital - Department of Neurology
Neurosciences 2009; 14 (1): 60-66 (29 ref.)
Keywords: Quality of Life; Cross-Sectional Studies; Questionnaires
Abstract: To evaluate the socio-demographic and clinical feature of patients with Parkinson's disease, their health-related quality of life [HRQoL], and the relationship between these. This cross-sectional study was conducted in Istanbul University Cerrahpasa Medical Faculty Hospital, Ministry of Health, Taksim and Haseki Education and Research Hospitals in Istanbul, Turkey. The sample consisted of 80 Parkinson's disease patients who attended the Parkinson's and Movement Disorders Outpatient Clinics between March and July 2006. Data were collected using the questionnaire form, which included socio-demographic and clinical characteristics, the Hoehn and Yahr clinical staging scale, the Unified Parkinson's Disease Rating Scale [UPDRS], and the Nottingham Health Profile. The mean age of the patients was 67.5 +/- 8.76 years, 62.5% were males, and approximately 47.5% were in stage one of Parkinson's disease. The highest mean score on the UPDRS was for the "motor function" part [11.62 +/- 7.45]; the quality of life dimensions of, in particular, "energy" [69.79 +/- 21.17], "physical movement" [44.95 +/- 24.23], "sleep" [36.36 +/- 31.96], and "emotional reactions" [35.01 +/- 31.55] were affected. This study indicates that patients with Parkinson's disease who experienced the most problems in mobilizing, had an increase in their scores on the UPDRS with the advancing stage of the disease, and their HRQoL was also negatively affected. Studies such as this one have the potential to improve the quality of individualized care.

Patient Rights

Patient rights: Knowledge of managers of private hospitals.
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University of Medical Sciences - Health Faculty and Health Research Institute - Health Economy and Management Group
Keywords: Knowledge; Hospital Administrators; Hospital Administration; Hospitals, Private; Cross-Sectional Studies; Awareness; Questionnaires
Abstract: To determine awareness of managers of private hospitals about patient rights and its effective factors in Tehran, Iran. This cross-sectional study was conducted among all managers of private hospitals in Tehran [N = 35], using a questionnaire including 32 questions. Data were analyzed using descriptive and analytical statistical procedures. The results showed that 23% of managers had good level of awareness. However, 54% and 23% of them had intermediate and low level of awareness regarding patient rights, respectively. There were four effective factors on awareness of the managers about patient rights including educational degree, discipline, academic institute and training in management. 77% of the managers had less than good level of awareness regarding patient rights. As awareness could be a proxy of consequent behavior, therefore it could be predicted that the managers might perform inadequately in their responsibilities related to patient rights. It seems that there is need to promote awareness on patient rights among hospital managers.
Pelvis

injuries

Spino-pelvic fixation for vertically unstable type C fractures of the pelvis.
Peivandi, M.T.; Hasankhani, E.G.
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Mashhad University of Medical Sciences - Department of Orthopedics
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 42-45 (16 ref.)
Keywords: Pelvis-surgery; Fractures, Bone-surgery; Fractures, Bone-classification; Fracture Fixation-methods; Fracture Fixation-instrumentation; Sacroiliac Joint-injuries; Traction-utilization; Bone Screws-utilization
Abstract: Evaluating the radiological and functional results of surgical treatment of unstable pelvic injuries by spinopelvic fixation. The purpose of this study was to find out whether the surgical technique can reduce fractures of the sacrum and dislocations of the sacroiliac joint and provide pelvis with stable fixation. Ten vertical shearing pelvic fractures were treated by pedicular screw placement in L5 vertebra and in the wing of the ilium. According to Tile's classification system, there were 10 type C fractures [8 type C1, one type C2 and one type C3]. The patients were evaluated by plain radiographs at a mean follow-up period of 2 years [range 1-3 years] after surgery. The patients had a mean age of 37.3 years at the time of surgery. The fracture was reduced by skeletal traction under general anesthesia and in prone position. A pedicular screw was placed in L5 vertebra on the same side of the fracture. Another screw was placed into the pelvic wing from PSIS [posterior superior iliac spine] toward AIIS [anterior inferior iliac spine]. A molded titanium rod connected these two pedicular screws. This study supports the use of screw and rod system for posterior fixation of the VS injuries of the pelvis.

Penis

pathology

Penile necrosis due to calciphylaxis in a patient of end stage renal disease.
Rizvi, Tanvir; Al Nakshabandi, Nizar A.
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King Fahd Medical City - Department of Radiology
Keywords: Necrosis; Calciphylaxis; Kidney Failure, Chronic; Gangrene
Abstract: A case of a 72-year-old diabetic, hypertensive male with end stage renal disease as a result of the underlying condition of calciphylaxis, presenting with gangrene of the glans penis is reported. In calciphylaxis, calcification of small and medium-sized arteries occurs, which may result in ischemia and gangrene. A computed tomography scan of the lower abdomen, pelvis, and the upper thigh was performed, which showed diffuse and extensive calcification of the walls of the small and medium-sized arteries, with almost complete obliteration of the lumen of the small arteries. A 3-dimensional reconstruction of the penis using volume rendering technique, demonstrated the ulceration of the glans penis in an exquisite manner. The appearance is so peculiar that no histological confirmation is needed. A review of relevant literature related to the etiopathogenesis, radiological findings, treatment, and prognosis is also discussed.

Periodontal Ligament

Effect of human platelet-derived growth factor-BB on attachment of periodontal ligment cells on root surfaces.
Becerik, Sema; Sonmez, Sule; Sen, Bilge H.; Delioglu Gurhan, Imsit; Evrenosoglu, Evren
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Ege University 35100 Bornova - School of Dentistry - Department of Periodontology
Keywords: Platelet-Derived Growth Factor; Bone Regeneration
Abstract: To evaluate the effects of platelet-derived growth factor-BB PDGF-BB on the attachment of human periodontal ligament cells HPLCs on the root surfaces demineralized with different agents. We performed this study at Ege University, Izmir, Turkey between 2005 and 2006. Eighty root slices were subjected to one of following treatments after root planing: 1 only root planing, 2 Platelet derived growth factor-BB PDGF-BB, 3 citric acid demineralization, 4
citric acid demineralization + PDGF-BB, 5 tetracycline hydrochloric acid T-HCl demineralization, 6 T-HCl demineralization + PDGF-BB, 7 ethylenediamine tetra-acetic acid EDTA demineralization, and 8 EDTA demineralization + PDGF-BB. Human periodontal ligament cells were seeded on the root surfaces. Following the 2-hour incubation period, the number of cells was calculated by the colorimetric assay. Three slices from each group were processed for scanning electron microscopy. The number of attached cells was tested by analysis of variance p = 0.05. There were no significant differences among the groups with regard to the mean number of attached cells p = 0.843, which was highest in the fourth group, and lowest in the sixth group. Root planing is the most important treatment to make the diseased root surfaces biocompatible to HPLCs adherence. Application of PDGF-BB to root surfaces demineralized with citric acid may be advocated to enhance periodontal regeneration.

Phenytoin

pharmacology

Effect of phenytoin sodium on reproductive parameters in adult male wistar rats.
Rao, Yeshwanth; Kuradi, Laxminarayana Bairy; Paul, Vijay
Maleka Manipal Medical College - Department of Pharmacology
Keywords: Reproduction-drug effects; Rats, Wistar; Spermatozoa-drug effects; Sperm Count; Sperm Motility-drug effects; Testis-drug effects; Testis-pathology
Abstract: To assess the effects of phenytoin sodium on rat sperm morphology, sperm count, motility and histopathological changes in testis. Experimental study. Kasturba Medical College, Manipal, Karnataka State, India. Male Wistar rats [13-14 weeks old] were treated with phenytoin sodium and sacrificed at the end of 2nd, 4th, 5th, 7th, 10th and 15th week after the last exposure to phenytoin sodium. Epididymal sperm count, sperm motility, sperm morphology and histopathology of testes were analysed. Sperm count and sperm motility were decreased significantly by phenytoin sodium. The percentage of abnormal sperms increased significantly in a time dependent manner. Histopathological study revealed that phenytoin sodium caused sloughing of epithelial cells in the testis. Phenytoin sodium caused reversible change in sperm motility, count, morphology and cytoarchitecture of testes.

Pheochromocytoma

diagnosis

[Pheochromocytoma, report of 10 cases]
El Baghoul, M.; El Messaoudi, Y.A.; Aboutaib, R.; Dakir, M.; Fekak, H.; Rabii, R.; Debbagh, A.; Joual, A.; Bennani, S.; Meziane, F.
Ibn Rochd Central University Hospital - Urology Department - Casablanca, Morocco
Maghreb Medical 2009; 29 (391): 232-234 (13 ref.)
Keywords: Pheochromocytoma-surgery; Adrenal Gland Neoplasms; Hypertension; Retrospective Studies; Magnetic Resonance Imaging
Abstract: The pheochromocytoma is a rare endocrine tumor, issued from the chromaffine surrenalian or extra-surrenalian tissue. We report a retrospective study of 10 cases of pheochromocytoma collected during a period 3 years. Our study concerned 3 men and 7 women, with an average age of 32, 5 years. Revealing symptomatology was dominated by an arterial hypertension [8 cases]. The triad of Menard [headaches, sweating and palpitations] was found in 6 cases. The biological assessment found a rise in the urinary catecholamine. Complementary exams [ultrasonography, tomodensitometry, magnetic resonances] were usefull for the location of the tumor. The adenalecetomy realised by transperitoneal under costal way was realised in all the cases. Histological examination confirmed the diagnosis. The pheochromocytoma is a neuroendocrine tumor of neuroectodermic origin. The clinical and biological presentations depend on the importance of the hypersecretion of catecholamines. The treatment is surgical. The objective of this study is to insist on the rarity of this pathology, the diagnostic difficulties, the severity of this pathology and curability of the benign forms.
**Phosphonic Acids**

*Application of UV-spectrophotometric methods for estimation of tenofovir disoproxil fumarate in tablets.*
Shirkhedkar, Atul A.; Bhirud, Charushila, H.; Surana, Sanjay J.
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RC Patel College of Pharmacy

**Keywords:** Fumarates-analysis; Spectrophotometry, Ultraviolet; Anti-HIV Agents

**Abstract:** Two new, simple and cost effective UV-spectrophotometric and first order derivative methods were developed for estimation of tenofovir disoproxil fumarate in bulk and tablets. Tenofovir disoproxil fumarate was estimated at 260 nm in 0.1N HCl. In first order derivative, it showed amplitude at 273 nm. In both the methods linearity was found to be in the range of 5 - 40 micro g/ml; for UV-spectrophotometric method \[Y = 0.02586 X+0.0083; r^2 = 0.9999\] and for first order derivative spectrophotometric method \[Y = 0.00132 X+0.00035; r^2 = 0.9995\], respectively. These methods were tested and validated for various parameters according to USP guidelines. The quantitation limits were found to be 1.546 and 1.986 micro g/ml, for both the methods. The proposed methods were successfully applied for the determination of tenofovir disoproxil fumarate in pharmaceutical formulations. The results demonstrated that the procedure is accurate, precise and reproducible [relative standard deviation < 2%], while being simple, cheap and less time consuming and can be suitably applied for the estimation of tenofovir disoproxil fumarate in different dosage forms.

**Pilonidal Sinus**

*surgery*

*Comparative study of different surgical modalities for treatment of sacrococcygeal pilonidal sinus.*
Helmy, Ashraf A.; Ammar, Samir A.; Ali, Ayman M.A.
Assiut University - Department of General Surgery
**Assiut Medical Journal** 2008; 32 (3): 101-106 (11 ref.)

**Keywords:** Combined Modality Therapy; Recurrence; Postoperative Complications; Prospective Studies

**Abstract:** Pilonidal sinus disease of the natal cleft is a painful debilitating condition which often recurs despite different surgical procedures. In this thesis, the outcome of different methods for treatment of this disease are described and compared. A review of sixty patients were randomized into three groups. Group A were operated upon by sinus excision and leaving the resultant cavity to heal by granulation tissue. Group B were operated by excision with primary closure in natal cleft. Group C were operated by excision with oblique closure by z-plasty. Recurrence was highest in group B [25%] followed by group A [15%] and no recurrence occurred in group C. The mean satisfaction grading was 5, 2 in group A, 7.1 in group B and 9.3 in group c. Excision of pilonidal sinus and oblique closure by z-plasty offers improved patient satisfaction and no recurrence rate.

**Piroxicam**

*chemical synthesis*

*Spectrofluorimetric method for determination of some oxicams using potassium bromate.*
Abdel Wadood, Hanaa M.
Assiut University - Faculty of Pharmacy, Assiut - Department of Pharmaceutical Analytical Chemistry
**Bulletin of Pharmaceutical Sciences - Assiut University** 2008; 31: 169-181 (69 ref.)

**Keywords:** Drug Monitoring-methods; Spectrometry, Fluorescence; Drug Compounding; Chemistry, Pharmaceutical; Bromates
Abstract: A sensitive and selective spectrofluorimetric method has been developed for the determination of some non-steroidal anti-inflammatory oxicams derivatives namely; tenoxicam [Tx], piroxicam [Px] and lornoxicam [Lx] after their complete oxidative acidic hydrolysis to 2-aminopyridine. The hydrolytic product 2-aminopyridine exhibits fluorescence emission at 365 nm [excitation at 305 nm]. The optimal conditions of the reaction were investigated. The method was found to be linear in the ranges of [0.015-0.500 micro g/ml] for Tx [0.006-0.300 micro g/ml] for Px and [0.060-0.200 micro g/ml] for Lx. The suggested method was successively applied for the determination of the studied drugs in different dosage forms with a recovery percentages ranged 96.82-102.79 +/- 0.614-2.578. The method was also applied for the determination of the drugs in spiked urine with a recovery percentages ranged 80.51-105.35 +/- 1.067-/+5.338. The validity of the method was assessed according to USP guidelines > Statistical analysis of the results revealed high accuracy and good precision.

Placenta Accreta

An unusual presentation of placenta percreta.
Ibrahim, Uroosa; Tariq, Marium; Hussain, Rubina
Ziauddin Medical College
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 189-191 (10 ref.)
Keywords: Placenta Accreta-ultrasonography; Placenta Accreta-therapy; Postpartum Hemorrhage; Cesarean Section-adverse effects; Risk Factors; Pregnancy
Abstract: Morbidly adherent placenta is a rare clinical condition resulting from abnormally invasive implantation of the placenta into the uterine substance and potentially into the surrounding organs [percreta]. We report a case of invasive placation extending through the uterine wall into the bladder and causing primary and recurrent secondary postpartum hemorrhage. It is emphasized that to avoid catastrophic complications, efforts to reach an early antenatal diagnosis should be made through various imaging modalities available in patients with a history of lower segment caesarean section.

Plant Extracts

therapeutic use

Antitumor effects of ethanolic extracts from Sophora moorcroftiana seeds in mice.
Xingming, Ma.; Hongjuan, Yu.; Ying, Deng; Yanping, Luo; Weihua, Tian; Fangyu, An.; Jun, Guo
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Lanzhou University - School of Basic Medicine
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 18-22 (17 ref.)
Keywords: Medicine, Traditional-utilization; Sophora-drug effects; Antineoplastic Agents; Apoptosis-drug effects; Stomach Neoplasms-drug therapy; Mice; Sarcoma-drug therapy; Tumor Necrosis Factor-alpha-drug effects; Interleukin-2; Cytokines; Ethnobotany
Abstract: Sophora moorcroftiana [Wallich] is an endemic shrub species in Tibet, China, and is a plant with a great value in folk medicine. The previous studies had shown that the ethanolic [95%] extracts were much more effective than other extracts from Sophora moorcroftiana seeds on antiproliferative effects, inducing apoptosis in the human stomach cancer SGC-7901 cell line in vitro. To investigate the antitumor activity of the ethanolic extracts from Sophora moorcroftiana seeds, various doses of ethanolic extracts [200 mg/kg/d, 400 mg/kg/d, 800 mg/Kg/d] were administered via gavage to tumor-bearing mice with S180 sarcoma cell for ten days. The weights of tumor tissue stripped from the left flank, TNF-alpha and IL-2 in blood-serum were tested and analyzed for photochemical composition, using standard procedures. The weight of tumor tissue was significantly decreased upon the treatment with ethanol extracts, but the decrease was more prominent in the group receiving ethanol extracts treatment at 800 mg/kg/d [1.35 +/- 0.21mg] and the inhibition rate on the growth of tumor tissue was higher [28.1%]. The structural changes of post-treatment in the tumor tissue by the ethanolic extracts at a dose of 800 mg/kg/d showed larger areas of necrosis and more significantly invaded lymphocytes. IL-2 and TNF-alpha in serum from the treated mice significantly increased in ethanolic extract-treated groups, compared with the untreated control animals. This suggested that the ethanolic extracts from Sophora moorcroftiana seeds had a weak antitumor role and in high concentration to tumor-bearing mice in vivo, the 95% ethanolic extracts was rather effective.
Effects of total extract of Dracocephalum moldavica on ischemia/reperfusion induced arrhythmias and infarct size in the isolated rat heart.
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Tabriz University of Medical Sciences - School of Pharmacy, Drug Applied Research Center and Research Center for Pharmaceutical Nanotechnology - Department of Pharmacology
Iranian Journal of Basic Medical Sciences 2009; 11 (4): 229-235 (31 ref.)
Keywords: Reperfusion Injury; Arrhythmias, Cardiac-chemically induced; Myocardial Infarction; Rats, Wistar; Heart; Myocardial Ischemia; Plant Extracts-pharmacology
Abstract: Dracocephalum moldavica [D. moldavica] have been traditionally used as a cardiotonic agent in the folk medicine of some regions of Iran. In the present study, effects of total extract of D. moldavica on ischemia/reperfusion induced arrhythmias and infarct size investigated in isolated rat heart. The isolated hearts were mounted on a Langendorff apparatus then perfused during 30 min regional ischemia and 120 min reperfusion, either by a modified Krebs-Henseleit solution as the control group or by enriched Krebs solution with total extract of D. moldavica [25-200 micro g/ml] as the treatment groups. The ECGs recorded and analyzed to determine cardiac arrhythmias. At the end of the reperfusion, the hearts stained by Evans blue solution then incubated by triphenyltetrazolium chloride. The volume of infarcted tissue and percentage of infarct size determined by computerized planimetry. The results demonstrated that total extract of D. moldavica caused a significant reduction in the number of ventricular tachycardia [VT], total ventricular ectopic beats [VEBs] and VT duration in ischemic and reperfusion periods. The incidence of ischemic VT reduced from 93% in the control group to 0, 50 and 50% in the treatment groups. The infarct size was 37 +/- 1% in the control group, however, perfusion of the extract [25, 50, 200 micro g/ml] reduced it to 13 +/- 2, 8 +/- 1 and 18 +/- 2%, respectively [P < 0.001]. In addition, the extract remarkably lowered volume of infarcted tissue compared to the control group [P < 0.05]. Our findings showed cardioprotective effects of total extract of D. moldavica against ischemia/reperfusion injuries in the isolated rat heart.

Plants, Medicinal

microbiology

Total phenolic content, antioxidant and antimicrobial activities of some medicinal plants.
Sengul, Memnune; Yildiz, Hilal; Gungor, Neva; Cetin, Bulet; Eser, Zeynep; Ercisli, Sezai
E-mail:memnunese@hotmail.com
Ataturk University - Faculty of Agriculture - Department of Food Engineering
Keywords: Phytotherapy; Anti-Infective Agents; Antioxidants; Hydroxybenzoic Acids; Plant Extracts-therapeutic use
Abstract: Crude extracts from Inula aucherana, Fumaria officinalis, Crocus sativus, Viscum album, Tribulus terrestris, Polygonatum multiflorum, Alkanna tinctoria and Taraxacum officinale were screened for their in vitro antioxidant and antimicrobial properties. Total phenolic content of extracts from these plants were also determined. Beta-carotene bleaching assay and Folin-Ciocalteu reagent were used to determine total antioxidant activity and total phenols of plant extracts. Antimicrobial activity was determined by using disk diffusion assay. Antioxidant activity and total phenolic content varied among plants used and Viscum album and Crocus sativus had the highest antioxidant [82.23%] and total phenolic content [42.29 mgGAE/g DW], respectively. The methanol extracts from Viscum album and Alkanna tinctoria showed antimicrobial activity against 9 out of 32 microorganisms, however extract from Inula aucherana showed antimicrobial activity against 15 out of 32 microorganisms. The results provided evidence that the studied plant might indeed be potential sources of natural antioxidant and antimicrobial agents.

Pneumothorax

Primary spontaneous pneumothorax: an update.
Ayed, Adel Khader
Keywords: Emphysema; Thoracoscopy; Lung
Posterior Leukoencephalopathy Syndrome

diagnosis

Status epilepticus as a presenting sign of reversible posterior leukoencephalopathy syndrome in a liver transplant recipient.
Taghdiri, Mohammad Mehdi; Amanati, Ali; Musavi, Seyed Mohammadali
Hamadan University of Medical Sciences - Department of Pediatrics

Keywords: Posterior Leukoencephalopathy Syndrome-epidemiology; Posterior Leukoencephalopathy Syndrome-complications; Posterior Leukoencephalopathy Syndrome-radiography; Status Epilepticus-drug therapy; Status Epilepticus-radiography; Liver Transplantation-adverse effects; Immunosuppressive Agents-adverse effects; Immunosuppressive Agents-therapeutic use; Magnetic Resonance Imaging-utilization; Tacrolimus-adverse effects; Tacrolimus-therapeutic use; Valproic Acid-therapeutic use; Midazolam-therapeutic use; Phenytoin-therapeutic use; Phenobarbital-therapeutic use

Abstract: Reversible posterior leukoencephalopathy syndrome [RPLE] is an increasingly recognized disorder, most commonly associated with immunosuppressive and cytotoxic agent, malignant hypertension and toxemia of pregnancy. Neurological symptoms are headache, mental and visual disturbance, and seizures. Brain MRI findings are symmetrical bilateral hyper intense areas of occipital and parietal lobes in T2-weighted magnetic resonance [MR] images. This finding is reversible with prompt successful treatment which may take days to weeks for full reversal. We observed a case of status epilepticus which occurred 32 days after liver transplantation in a patient on regimen consisting of Tacrolimus [FK 506]. He had no history of neurologic disease or metabolic abnormalities. Typical findings of RPLE were present on brain MRI. The recurrence of seizures terminated after a few hours with adding Na-valproate to Phenytoin, Phenobarbital and Midazolam. The radiological finding of brain MRI gradually diminished after several weeks. A physician should be alert of seizures during early post transplant period of liver transplantation. He should bear in mind the diagnosis of RPLE and consider discontinuation of immunosuppressive drugs.

Prednisone

metabolism

Biotransformation studies of prednisone using human intestinal bacteria; part I: aerobic incubation.
Al Sanea, Mohammed M.; Abdel Hafez, Atef A.; Omar, Farghaly A.; Youssef, Adel F.
Assiut University - Faculty of Pharmacy - Department of Medicinal Chemistry
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 215-228 (9 ref.)

Keywords: Biotransformation; Chromatography, High Pressure Liquid; Bacteria, Aerobic; Intestines

Abstract: Several corticosteroids are commonly used for treatment of conditions associated with inflammatory disorders and as immune modulators. Specifically in cases of ulcerative colitis and the related inflammatory bowel syndromes, these therapeutic agents are administered rectally and are subjected to several intestinal micro floras. The present study aimed to investigate the effect of human intestinal bacterial [HIB] aerobic incubation on prednisone 1 as a model for corticosteroids. Within 96 hours, 1 was mostly transformed by HIB in vitro to various metabolites, which could be separated by column chromatography into two fractions. The first eluted fraction. A was found to contain the major metabolite adrenosterone androst-4-ene-3, 11,1 7-trione m[1], whereas fraction B contains metabolite m[2] which was identified by chiral HPLC as a mixture of androst-1,4-diene-3, 11, 1 7-trione enantiomers. The structures of metabolites m[1]and m[2] were identified and characterized by spectroscopic techniques, including 2D-NMR and mass spectrometry. Time course of biotransformation of 1 by HIB was also studied.
**Pregnancy**

Development of a stress scale for pregnant women in the South Asian context: the A-Z Stress Scale.

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Aga Khan University - Department of Community Health Sciences


**Keywords:** Stress, Psychological-adverse effects; Psychiatric Status Rating Scales; Educational Status; Employment; Reproducibility of Results; Pregnancy Outcome

**Abstract:** Stress in pregnancy can lead to low-birth-weight and preterm babies and to psychological consequences such as anxiety and depression during pregnancy and the puerperium. Previous scales to measure stress contain items that overlap with the symptoms of pregnancy. A stress scale was developed based on in-depth interviews with pregnant women in Pakistan. Construct validity, test-retest reliability and inter-rater reliability were carried out. Cronbach alpha was 0.82 for the 30 short-listed items, with item-total correlations of 0.2-0.8. Multidimensional scaling determined 2 dimensions: socioenvironmental hassles and chronic illnesses. This was the first scale developed for pregnant women based on stressors in a developing country in South Asia.

**Pterocarpus**

**Peltophorum pterocarpum** [DC.] Baker ex K. Heyne growth in soils of Korangi and Landhi Industrial areas of Karachi, Pakistan.

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University of Karachi - Department of Botany


**Keywords:** Mimosa; Soil; Industry; Soil Pollutants; Plants

**Abstract:** The growth of Peltophorum pterocarpum [DC.] Baker ex K. Heyne were studied in soils collected from Khan Towel, Tanveer Garment, One Tech Rubber and One Tech Ply Board factories in the vicinity of Korangi and Landhi industrial areas under natural environmental conditions. Various growth variables of P. pterocarpum were reduced from industrial areas soils particularly of One Tech Rubber factory soil exhibited decrease in many plant growth parameters than a control soil of Karachi University Campus. Reduction was pronounced in plant height, leaves numbers, plant cover, leaflets numbers, leaf area and dry weights of root, shoot, leaf and total plant in One Tech Rubber factory soil as compared to University soil. Tanveer Garment factory soil inhibited apparently shoot, seedling length, specific leaf area and leaf area ratio while root length and root/shoot ratio was retarded by One Tech Ply Board factory soil. Khan Towel factory soil stunted the root/shoot ratio of P. pterocarpum as correlated to University soil.

**Puberty**

**Puberty health: knowledge, attitude and practice of the adolescent girls in Tehran, Iran.**

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Ministry of Health and Medical Education - Deputy of Research

**Payesh - Health Monitor** 2009; 8 (1): 59-85, 99 (20 ref.)

**Keywords:** Health Knowledge, Attitudes, Practice; Adolescent; Mothers-education; Menarche; Questionnaires

**Abstract:** Puberty is a critical period of life. Considering the importance of this event and its effects on adolescents' future and healthy generations, research in this field and its challenges is very necessary and important. In this study, knowledge, attitude and practice of the adolescent girls in puberty health were assessed in Tehran. For this purpose, 386 students studying in educational districts in five areas of Tehran [North, South, West, East and Center] were randomly selected by clustered sampling. Puberty health data was gathered through knowledge, attitude and performance questionnaires and was statistically analyzed using descriptive statistics as well as analysis of variance. This study showed that the mean age of Menarche was 12.5 years. There was no significant difference between mean ages of menarche in the students of five education districts in Tehran. 45.5% of students believed that puberty is not pleasant and found it troublesome and 36.7% believed that it was a physiologic event. 10.4% of cases were scarred in the first menstrual period and only 17.1% of the students were previously ready for it. The knowledge of 50.3% of
students was high. 54.4% had positive attitude about puberty health and the performance of 57% of students was moderate [most frequencies]. The correlation between mothers level of literacy and students knowledge and practice regarding puberty health were statistically significant [P < 0.05]. Results suggest that considering the totally high [and very high] level of students knowledge [57.5%] as well as totally positive [and very positive] attitude regarding menstrual health [60.9%], the practice was supposed to be better [just 38.9% had correct and very correct practice]. Therefore education in the field of puberty health especially menstrual health is necessary to improve knowledge, attitude and practice of the students. Furthermore, since the family is preferred as the main source of education [in 73.4% of cases] as well as consultation [in 76.5% of cases], informing and training the families and especially mothers is recommended.

**Purines**

**chemical synthesis**

Antitumor activity of some new 1,3,8-trisubstituted purine-2,6-diones and 1,3,6-trisubstitutedthiazolo[2,3-f] purine-2,4-diones.

Hayallah, Alaa M.; Momekov, Georgi; Famulok, Michael
Assiut University - Faculty of Pharmacy - Department of Pharmaceutical Organic Chemistry

**Bulletin of Pharmaceutical Sciences - Assiut University** 2008; 31: 391-399 (25 ref.)

**Keywords:** Thiazoles-chemical synthesis; Antifibrinolytic Agents; Drug Screening Assays, Antitumor; Tumor Cells, Cultured

**Abstract:** New 1,3,8-trisubstituted purine-2,6-diones and 1,3,6-trisubstituted thiazolo[2,3-f] purine-2,4-diones were designed and synthesized as potential antitumor agents. The cytotoxic effects of the tested compounds were assessed against two human malignant-cell lines: T-cell leukemia derived SKW-3 and breast cancer -derived MDA-MB-231 using the methyl thiazolyl tetrazolium [MTT-dye] reduction assay, after 72 h exposure. The data were fitted to sigmoidal concentration response curves and the corresponding IC 50 values were calculated using commercially available software [GraphPad Prizm]. Compound AH-206 was the most potent cytotoxic agent among the newly synthesized compounds, with IC 50 value of 17.3 micro M. Prominent activity was also encountered with compounds AH-201, AH-205, AH-208, AH-214 and AH-217, all having IC[50] values below 100 micro M.

**Pyrazoles**

**pharmacology**

Modification of antiinflammatory, antipyretic and analgesic effects of celecoxib with some antiulcer drugs in experimental animals.

Abdel Rahim, Mahmoud H.; Mangoura, Safwat A.; Omran, Faten M.; Madkour, Hala I.
Assiut University - Faculty of Medicine - Department of Pharmacology

**Assiut Medical Journal** 2008; 32 (3): 149-162 (53 ref.)

**Keywords:** Cyclooxygenase Inhibitors; Ranitidine; Drug Combinations; Rats; Mice; Sulfonamides-pharmacology; Anti-Inflammatory Agents; Analgesics, Non-Narcotic; Analgesics; Anti-Ulcer Agents; Omeprazole

**Abstract:** Patients under antulcer therapy may suffer from a concurrent disease which requires the use of one of NSAIDs. In such cases, these patients are likely to receive a combination of one of the antiulcer drugs plus the NSAIDs. Accordingly, the simultaneous use of one of the NSAIDs with one of the antulcer drugs may lead to drug-drug interaction. The present work was devoted to the assessment of the modification of the anti-inflammatory, antipyretic and analgesic effects of celecoxib after the concurrent administration of the antulcer drugs, omeprazole and ranitidine. This study was performed on two animal species, rats and mice. Rats were used to detect the anti-inflammatory and the antipyretic activities of the investigated drugs. Mice were utilized to study the analgesic activity of the same drugs. Male albino rats were divided into 2 main groups: Group I. rats were divided into 5 subgroups, to study the anti-inflammatory activity of the tested drugs by induction of inflammation by subcutaneous injection of 0.1 ml of 20% brewer's yeast suspension into planter surface of the right hind paw and measuring the rats paw thickness according to the treatment received. Group II: rats were divided into 5 subgroups, to study the anti-pyretic activity of the tested drugs by induction of pyrexia by subcutaneous injection of 2.5ml of 20% aqueous suspension of yeast dorsally and ventrally and recording the rectal temperature according to the treatment received. GroupIII: mice were divided into two set of experiment each of which divided into 5 subgroups. The analgesic activity of the drugs was evaluated by chemical method [p-benzoquinon induced -writhing response and the thermal method [hot plate method]. Intraperitoneal [i.p.] administration of celecoxib produced highly significant reduction in the rat's paw edema. Intraperitoneal injection of celecoxib and ranitidine caused highly significant decrease in the rat's paw edema. Similarly the combined i.p. injection of celecoxib and omeprazole gave a highly significant reduction in the rat's paw edema.
Intraperitoneal administration of celecoxib into hyper-thermic rats led to a remarkable reduction in body temperature of rats. Combined administration of celecoxib and ranitidine produced highly significant decrease in body temperature. The i.p administration of celecoxib before the injection of P-benzoquinone (PBQ) protected the animals against writhing response. Intraperitoneal injection of celecoxib and ranitidine resulted in protection of animals from PBQ-induced writhing response which was highly significant. Intraperitoneal injection of celecoxib revealed a highly significant increase in the reaction time. The combined administration of celecoxib and ranitidine caused highly significant increase in the reaction time. Intraperitoneal administration of celecoxib and omeprazole also produced highly significant increase in the reaction time to thermal stimulus. Intraperitoneal injection of ranitidine or omeprazole caused non significant change in the rat's paw edema or yeast induced pyrexia, but ranitidine caused a significant decrease in PBQ-induced writhing response and in hot plate-induced pain. On the other hand omeprazole produced non significant change in PBQ-induced writhing response and in hot plate-induced pain. It could be suggested that ranitidine is a relatively better drug than omeprazole with respect to anti-inflammatory, antipyretic and analgesic actions when used concurrently with a selective COXII inhibitor.

Pyrimidinones

chemical synthesis

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Cairo University - Faculty of Pharmacy - Pharmaceutical Chemistry Department
Keywords: Pyrimidinones-pharmacology; Antineoplastic Agents; Pyrrolizidine Alkaloids
Abstract: Seven new series of condensed pyrrolizine derivatives of anticipated antitumor activity have been synthesized. Comprises ethyl-1-cyano-3-phenylcarbamoyl-6, 7-dihydro-5Hpyrrolizin- 2-yl-carbamate, 2, 4-dioxo-1H-pyrimido [4, 5-b] pyrrolizine-9carbonitrile, 1-cyano-2 [3-substituted ureido]-3N-phenyl-6, 7-dihydro-pyrrolizine-3-carboxamide, 3- [alkyl / phenyl]-4-imino-2-oxo-9N-phenyl-2, 3, 4, 5, 6, 7-hexahydro-1H-pyrimido [5, 4-a] pyrrolizine-9-carboxamide, 4-amino-3-[alkyl / phenyl]-2-oxo-2, 3, 4, 5, 6, 7-hexahydro-1H-pyrimido [5, 4-a] pyrrolizine-9-carboxamide, of 2-amino-3N-phenyl-6, 7-dihydro-5H-pyрrolizin-е, 3-dicarboxamide and 4-oxo-9N-phenyl-4, 5, 6, 7-tetrahydro-3H-pyrimido [5, 4-a] pyrrolizin-9-carboxamide derivatives. Eleven were screened for their in vitro antitumor activity and ten compounds proved to possess moderate to weak activities.
Quality of Life

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Keywords: Evaluation Studies as Topic; Cancer Care Facilities; Neoplasms; Patients; Breast Neoplasms; Questionnaires; Drug Therapy-adverse effects
Abstract: Limited research has been devoted to quality of life [QOL] of cancer patients in developing countries. To assess the feasibility of QOL assessment in a cohort of Tunisian cancer patients, the EORTC QLQ-C30 questionnaire was administered to 23 women treated with adjuvant chemotherapy for early breast cancer on an outpatient basis at baseline and during the 3rd cycle of chemotherapy. We observed a significant deterioration in physical functioning, cognitive functioning and social functioning during chemotherapy. However, a wide range of methodological and practical obstacles to routine QOL evaluation were identified through this study. Further improvement of cancer care infrastructure and public education is still needed before reliable QOL studies can be performed.

Is quality of life data predictive of the survival in cancer patients? a rapid and systematic review of the literature.
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Iranian Institute for Health Sciences Research ACECR - Public Health and Epidemiology
Keywords: Survival Rate; Survival Analysis; Anorexia; Fatigue; Prognosis; Neoplasms
Abstract: To review literature on relationship between quality of life data and the length of survival in cancer patients. A literature search was carried out using MEDLINE to assess existing knowledge on relationship between quality of life data as a prognostic factor and survival in cancer patients. The intention was to review all full publications in English language biomedical journals. The search strategy included the combination of keywords 'cancer', 'prognostic', 'predictor', 'predictive', 'quality of life' and 'survival' in titles of publications. The literature was also examined to ensure that the study used multivariate analyses. Pure psychological studies were excluded. The initial search was carried out twice in December 2008 and twice for a final check in early and late January 2009. A manual search also was performed for including possible additional papers. In all 146 citations were identified and reviewed. Of these, 88 citations on relationship between quality of life and survival were found relevant and examined in this rapid and systematic review of the literature. The findings are summarized under different headings including studies on heterogeneous sample of cancer patients, lung cancer, breast cancer, gastro-oesophageal cancers, colorectal cancer and other cancers. Except a few exceptions most studies found that quality of life data or some aspects of quality of life measures were significant independent predictors of survival duration. Global quality of life, functioning domains and symptom scores such as appetite loss, fatigue and pain individually or in combined were the most important factors that predicted the length of survival in cancer patients after adjusting for one or more demographic and known clinical prognostic factors. Studies reported in this review provide evidence for a positive relationship between quality of life data or some aspects of quality of life measures and the length of survival in cancer patients. Pre-treatment quality of life data are appeared to be most reliable information that could help clinicians to establish prognostic criteria for treatment of their cancer patients. Indeed, conducting studies using valid instruments, applying sound methodological approaches and adequate but not sophisticated multivariate statistical analyses adjusted for demographic characteristics and known clinical prognostic factors are recommended in order to yield more specific quality of life related prognostic variables for specific cancers.

Reactive Oxygen Species

blood

Increased oxygen free radical production from isolated human pmnls and whole blood by luminol-enhanced chemiluminescence in autistic children.
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King Saud University - Faculty of Medicine - Department of Physiology, Head of the Autism Research and Treatment Unit
Keywords: Neutrophils-chemistry; Luminescence; Luminol; Autistic Disorders-blood; Child; Cohort Studies; Mental Retardation-blood; Chemiluminescent Measurements; Free Radicals; Oxygen
Abstract: To investigate the estimated capacity of polymorphonuclear leucocytes [PMNLs] and whole blood to produce reactive oxygen species [ROS] in children with autism and mental retardation, and compare it with normal children. Cohort study conducted between January and April 2007. Chemiluminescence laboratory [CL], Department of Physiology, Faculty of Medicine, King Khaled University Hospital, Riyadh, Saudi Arabia. Forty autistic and eight mentally retarded children. Oxygen free radical production [O2-, H2O2, OH-] was detected by luminol-enhanced chemiluminescence, from isolated PMNLs and whole blood, stimulated by phorbol myristate acetate [PMA] and opsinized zymazan [OPZ]. Oxygen free radical production from whole blood and PMNLs. Forty autistic [35 male and five female] and eight mentally retarded children [study group] were compared with forty six normal Saudi children [control group]. The mean age was 7.4 +/- 0.5 years. The CL peak response of whole blood and PMNLs stimulated with PMA and OPZ, in autistic children was significantly higher [p < 0.05] compared to control children. However, the CL peak response in children with mental retardation did not show any significant differences when compared to the control group. There is an increase in oxygen free radicals production from whole blood and from PMNLs in autistic children. Therefore, an increase the antioxidant consumption in autistic children is strongly recommended.

Receptors, Nicotinic

Modulation of basal glutamatergic transmission by nicotinic acetylcholine receptors in rat hippocampal slices.
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Iranian Journal of Basic Medical Sciences 2009; 11 (4): 221-218 (33 ref.)
Keywords: Rats, Wistar; Excitatory Amino Acid Agents; Glutamic Acid; Epilepsy; Hippocampus; Acetylcholine
Abstract: Nicotinic acetylcholine receptors [nAChRs] regulate epileptiform activity and produce a sustained proepileptogenic action within the hippocampal slices. In the present study, we investigated the effect of nAChRs on evoked glutamatergic synaptic transmission in area CA3 and CA1 of rat hippocampal slices to identify possible excitatory circuits through which activation of nAChRs produce their pro-epileptogenic effects. Hippocampal slices [400 micro m thick] prepared in vitro from male Wistar rats [3-5 weeks], using standard procedures. Following 1 hr equilibration in artificial cerebrospinal fluid [ACSF], slices transferred to an interface recording chamber. Stimulatory electrodes placed within the hilus or Schaffer-collateral pathways and extracellular field recordings made in the stratum radiatum of the CA1 and CA3 regions to investigate evoked synaptic responses. Bath application of the selective nAChR agonist dimethylphenyl-piperanzinium [DMPP, 30 micro M] resulted in a sustained and reversible enhancement of glutamate afferent evoked fEPSP amplitude by 15.7 +/- 5.1% [mean +/- SEM; n = 8 of 12] in the CA3 region of the hippocampus but not in the CA1 [-5.25 +/- 8.3%, mean +/- SEM; n = 5]. Activation of nAChRs may produce pro-epileptogenic actions in part through regulating glutamatergic circuits. Difference in nAChR regulation is also evident between different regions of hippocampus.

Rectal Neoplasms

surgery

Anastomotic leakage following low anterior resection of rectal cancer considering the role of protective stoma.
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Beheshti University [MC] - Shohada Hospital - Department of Surgery
Keywords: Rectal Neoplasms-epidemiology; Anastomosis surgical-adverse effects; Anastomosis, Surgical-methods; Surgical Stomas; Surgical Procedures, Operative; Risk Factors; Retrospective Studies
Abstract: Probable risk factors of clinical anastomotic leakage and the role of defunctioning stoma in patients undergoing low anterior resection [LAR] for rectal cancer, is still controversial. The goal of our study was to find out possible risk factors of anastomotic leakage and to locate the influence of protective stoma in the rate of anastomotic leakage. In this retrospective study, 44 patients underwent LAR with total mesorectal excision [TME] during the period from 2001 to 2006 were analyzed. From these 44 patients 24 were treated with protective stoma while 20 were not. Overall anastomotic leakage rate was similar among patients with and without protective stoma [odds ratio=0.51, P=0.2357]. Male gender, Low anastomosis, Coronery Artery Disease, preoperative radiotherapy, and smoking were great risk factors for developing anastomotic leakage. We did not find any differences between handsewn and stapled anastomosis [odds ratio = 0.6]. protective stoma will be helpful depending on surgeon experiences and is not recommended for all the patients routinely. Beside this, male gender, low anastomosis, coronary artery disease, preoperative radiotherapy, and smoking are the major risk factors of anastomotic leakage.
Referral and Consultation

Consultation time and its determinants in general practitioners of Gorgan, Iran.
Vahid, Khoori; Changizii, Shima; Poorreza, Abolghasem; Zeinali, Ramezan
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Golestan University of Medical Sciences - Cardiovascular Research Center
Keywords: Time; Physicians, Family; Drug Prescriptions; Time Factors; Questionnaires
Abstract: To determine average consultation time and evaluate its determinants in general practice in Gorgan, Iran. 620 consultations from 62 general practitioners were evaluated. In addition physician consultation time was measured with a stopwatch. After the consultation, a questionnaire was completed for all patients. Data was analyzed by SPSSv 11.5 software. The average consultation time of general practitioners in Gorgan was 6.9 +/- 2.6 minutes. Consultation time was directly correlated with patient’s interruption, educational level of patient and prescribing volume of physician. This study showed that consultation time in Gorgan is lower than many developed and developing countries. High number of patients in waiting rooms and high prescription volume might explain shorter consultation time in Gorgan.

Reflex Sympathetic Dystrophy

diagnosis

[What is your diagnosis? Reflex Sympathetic Dystrophy right hand finger rigidity]
Sbai, M.A.; Maalla, R.; Boussen, M.; Zaalouni, I.; Tabib, M.
MT Maamouri Hospital - Orthopedics Department - Nabeul
Maghreb Medical 2009; 29 (391): 221-252 (12 ref.)
Keywords: Reflex Sympathetic Dystrophy-drug therapy; Reflex Sympathetic Dystrophy-rehabilitation; Fingers-pathology

Renal Artery

injuries

Blunt injury to the renal artery.
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Al Sabah Hospital - department of Urology
KMJ - Kuwait Medical Journal 2009; 41 (1): 63-65 (10 ref.)
Keywords: Wounds, Nonpenetrating; Fever; Hematuria; Accidental Falls; Tomography, X-Ray Computed; Kidney-injuries
Abstract: Renal artery injury is an uncommon complication of blunt abdominal trauma. We report a case of blunt injury to the renal artery in a 13 year-old girl who presented with low grade fever and microscopic hematuria, following a fall from the horse-back. Although Computed tomography [CT] done initially reported normal, a subsequent imaging revealed a diffuse subcapsular hematoma in the left kidney compressing the non-functioning renal tissue as well as left renal artery and a diffuse renal cortical infarct. This result was similar to what was found in the subsequent isotope scan, which revealed poor left renal function of 3%. Increasing the use of CT scan to evaluate blunt abdominal trauma helps to identify more cases of renal artery injury, which might otherwise be missed.
Reperfusion Injury

drug therapy

The effects of N-acetylcysteine on intestinal ischemia/reperfusion injury in rats.
Ayvaz, Suleyman; Aksu, Burhan; Inan, Mustafa; Uzun, Hafize; Aydin, Seval; Bilgi, Selcuk; Umit, Hasan C.; Pul, Mehmet
Trakya University - Faculty of Medicine - Department of Pediatric Surgery
Keywords: Rats, Wistar; Acetylcysteine-therapeutic use; Intestines-pathology; Intestines-Injuries
Abstract: To evaluate the effects of N-acetylcysteine NAC on the injury of intestinal ischemia-reperfusion. Forty-eight Wistar-Albino rats were divided into 6 groups: as control, ischemia, ischemia-reperfusion, ischemia + N-acetylcysteine, ischemia-reperfusion + N-acetylcysteine IRN, and reperfusion + N-acetylcysteine RN. Histopathologic examination was performed to all groups. In the tissue and plasma, and erythrocyte samples, malondialdehyde, superoxide dismutase, glutathione, and nitric oxide NO levels were evaluated. The present study was carried out in Trakya and Istanbul University, Edirne, Turkey between December 2002 and July 2003. The most severe histopathological damage was seen in the intestinal ischemia-reperfusion group, and this damage was observed to be reduced by NAC administration. Lowest plasma malondialdehyde levels were observed in RN group. The tissue glutathione levels were found to be higher in RN group than those in IRN group. It was found that administration of NAC has important effects on the injury of intestinal ischemia, as well as, reperfusion in rats. N-acetylcysteine administration causes an improvement in the histopathologic findings of ischemia/reperfusion damages. The N-acetylcysteine treatment protects the antioxidant enzymes in the tissue, plasma, and the erythrocytes, which are crucially important in the intestinal ischemia/reperfusion injury in rats.

therapy

The effects of acupuncture on rats with brain ischemia-reperfusion.
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Firat University - School of Medicine - Department of Anatomy
Neurosciences 2009; 14 (1): 10-13 (25 ref.)
Keywords: Acupuncture Therapy; Rats, Wistar; Brain Ischemia-therapy
Abstract: To investigate the damage of brain ischemia-reperfusion [I/R] caused by occlusion of the middle cerebral artery [MCA], and the effects of acupuncture on this damage. This investigation took place in the Experimental Research Unit of Firat University, Elazig, Turkey in January-February 2007. For this aim, 14 rats were divided into 2 groups: I/R [control] and I/R+acupuncture [experiment]. In the I/R group, the MCA was occluded for 60 minutes, after this reperfusion was applied. In the I/R+acupuncture group, dry needle acupuncture was applied after reperfusion for 10 days. At the end of the experiment, all rats were sacrificed. The brain tissues were examined after staining with hematoxylin and eosin. In the samples belonging to the I/R group, widespread necrotic areas, red neurons, vacuolization, congestion, and edema were observed. In the I/R+ acupuncture group, the findings of ischemia were significantly decreased when compared with the I/R group. The damage caused by I/R was decreased by manual acupuncture therapy, however, further clinical studies are needed to determine the mechanism of acupuncture treatment, the optimal timing, and duration of acupuncture treatment in such disorders.

Respiratory Distress Syndrome, Newborn

physiopathology

Plasma-free carnitine levels in preterm infants with respiratory distress syndrome.
Mohamed, Gamal B.; Abdel Hakeem, A.; Emad, Allam, A.; Makhloof, F.
Al Minya University - Faculty of Medicine - Department of Pediatrics
Keywords: Infant, Premature; Carnitine-blood; Gestational Age; Birth Weight
Abstract: Antenatal carnitine administration has been shown to induce fetal lung maturity by increasing pulmonary surfactant in animal and human studies. In this study, the aim was to investigate the status of carnitine in maternal and neonatal plasma of preterm infants with respiratory distress syndrome [RDS] in the first hours of life. We also aimed to characterize the carnitine status in these neonates with respect to sex, gestational age, birth weight, mode of delivery,
and antenatal corticosteroid administration. Maternal plasma-free carnitine levels were determined before delivery and neonatal plasma-free carnitine levels were determined within 2 h of birth in preterm infants \( \leq 34 \) weeks gestational age] who developed RDS in the first 6 h of life and in the control group. The results showed that the mean neonatal plasma-free carnitine level was significantly lower in preterm infants with RDS than in the control group [19.96 +/- 5.77 micro mol/L, and 37.9 +/- 5.77 micro mol/L, respectively; \( p = 0.001 \)] while the mean maternal plasma-free carnitine levels were similar in both groups [33.28 +/- 9.58 micro mol/L, and 37.3 +/- 9.55 micro mol/L, respectively; \( p = 0.168 \)]. Neonatal plasma-free carnitine levels correlated negatively with gestational age and birth weight in the RDS group \( [r = -0.512; p = 0.009 \text{ and } r = -0.476; p = 0.016 \] ) and in the control group \( [r = -0.869; p = 0.001 \text{ and } r = -0.810; p = 0.0001 \] ). Sex, mode of delivery, and antenatal corticosteroid administration had no statistically significant effect on the level of plasma-free carnitine in the studied preterm infants. Low neonatal plasma-free carnitine levels in preterm infants with RDS maybe due to decreased maternal-fetal transfer of carnitine or to increased consumption of carnitine in fetal lung tissue for surfactant synthesis. This could be contributing factor in the pathogenesis of RDS in preterm infants.

**Restless Legs Syndrome**

**diagnosis**

Restless legs syndrome in a person with Fahr's disease.
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Mustafa Kemal University - Faculty of Medicine - Department of Neurology

Neurosciences 2009; 14 (1): 89-90 (5 ref.)

Keywords: Calcinosis; Basal Ganglia; Cerebellar Nuclei; Cerebellar Diseases; Basal Ganglia Diseases; Tomography, X-Ray Computed; Magnetic Resonance Imaging

**Retinopathy of Prematurity**

**etiology**

Prevalence and predisposing factors of retinopathy of prematurity in very low-birth-weight infants discharged from NICU.
Saeidi, Reza; Hashemzadeh, Ahmad; Ahmadi, Sina; Rahmani, Shagayeg
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Mashed University of Medical Sciences - Ghaem Hospital - Department of Pediatrics


Keywords: Retinopathy of Prematurity-complications; Retinopathy of Prematurity-diagnosis; Retinopathy of Prematurity-epidemiology; Retinopathy of Prematurity-statistics and numerical data; Infant, Very Low Birth Weight; Prevalence; Infant, Premature-abnormalities; Cross-Sectional Studies; Intensive Care Units, Neonatal-standards; Sepsis-complications; Respiratory Distress Syndrome, Newborn-complications; Retrospective Studies

Abstract: Retinopathy of prematurity [ROP] is a disease of the eye caused by disorganized growth of retinal blood vessels resulting in scarring and retinal detachment. All preterm babies are at high risk for ROP, and very low birth weight is an additional risk factor. An increased incidence of ROP is expected in Iran because of improved survival of low birth weight and premature babies, and it is obvious that pediatricians and ophthalmologists are concerned about prevention and timely treatment of ROP in these children. To asses the real situation of ROP in our NICU we studied its prevalence and risk factors. This was a retrospective analysis of premature infants with birth weight of \( \leq 1500 \) grams or gestational age of \( \leq 32 \) weeks, admitted April 1, 2005 to March 28, 2006, to the Neonatal Intensive Care Unit of Gaem Hospital, Mashhad, Iran. The collected data of 47 cases in this cross-sectional study are analyzed by SPSS [Mann-Whitney, t-Student]. Forty five infants were included in the study. Out of these, 4 [8.5\%] developed ROP [inclusive all stages]. Our analysis revealed that low gestational age, sepsis and respiratory distress syndrome were independent predictors for the development of ROP. The frequency of ROP in our hospital was lower than the range reported in developed countries, and our risk factors were a little different.
Rhodanine analogs and derivatives

New synthesis of aminorhodanin and condensed derivatives.
Jalili, Mohammad Ali; Hosseini, Kamran Mousavi
Iranian Blood Transfusion Organization - Research Center
Keywords: Rhodanine-chemical synthesis; Hydrazines; Sulphhydryl Compounds
Abstract: Aminorhodanins are heterocyclic compounds of dithiocarbazoyl which include sulphur and nitrogen in their structures. Different research studies have been performed on rhodanin and its condensed derivatives and several reports have been issued indicating their antimicrobial properties. In the present work, first a new method has been developed for production of aminorhodanin, which include one more nitrogen atom in third position compare to rhodanins molecule, then condensed reactions with aldehydes have been investigated. The probable biological properties of produced compounds will be investigated in another research study.

Salmonella Infections

Food-borne salmonella outbreak at a bank cafeteria: an investigation in an Arab country in transition.
Hanna, N.M.; Adib, S.M.; Daoud, Z.
University of Balamand - Faculty of Health Sciences - Department of Medical Laboratory Sciences
Keywords: Disease Outbreaks; Gastroenteritis-microbiology; Food Contamination; Salmonella Food Poisoning; Food Handling

Satellite Cells, Perineuronal

Histochemical and morphometric studies of perfneuronal nets in the retrosplenial cortex of albino rat.
Mubarak, Wafaa A.; Sayed, Ramadan; Mubarak, Heba A.; Ohtsuka, A.; Mura kami, T.
Assiut University - Faculty of Medicine - Department of Anatomy
Assiut Medical Journal 2008; 32 (3): 107-120 (45 ref.)
Keywords: Spleen; Rats, Wistar; Proteoglycans; Glycoproteins
Abstract: Reticular or net-like perineuronal coatings, termed perineuronal nets [PNs], enriched with proteoglycans [PGs] and/or glycoproteins [GPs] were demonstrated to ensheath cell surfaces of certain neuronal circuits in the central nervous system of mammals, reptiles and fishes. In this investigation, three types of coated neuronal circuits were histochemically demonstrated in the adult rat retrosplenial cortex [RSC]; PGs-, GPs- and PGs/GPs- coated neuronal types. The PGs coated neurons were histochemically detected with a cationic iron colloid [CIC] staining or CIC/Bodian enhancement procedure. The GPs coated ones were detected with certain plant lectins from Vicia villosa agglutinin VVA Wisteria florihunda agglutinin WFA or Glycine max agglutinin SBA for N-acetylgalactosamine-binding. The net associated neurons were mostly distributed throughout the cortical layers II-V Their mean number per UA [60.15 micro M[2] was ranged from 9.87 +/- 0.43-10.50+2.61 in 8-month old rat and forming about 24-26% of total neuronal population. Statistical Analysis revealed that the mean numbers of PGs, GPs and PGs/GPs coated cells were 0.84 +/- 0.07, 6.33 +/- 0.34 and 2.70 +/- 0.22, respectively. Their percentages represented about 9%, 64% and 27% of total coated neurons in RSC, respectively. Notably, the labeled retrosplenial neurons underwent a non-significant increase in number with progression of age during the first post natal year; however, they declined thereafter toward senility. This data indicated that the extracellular matrix of net-associated retrosplenial neurons in adult albino rat was enriched with GPs and/or PGs molecules and this neurochemical heterogeneity might have diverse biological and functional properties of the neurons in RSC.
**Scaphoid Bone**

**anatomy and histology**

Foramen of Vesalius.
Kale, Aysin; Aksu, Funda; Ozturk, Adnan; Curses, like A.; Gayretli, Ozcan; Zeybek, Fatma G.; Bayraktar, Bulent; Ari, Zafer; Onder, Neslihan
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Istanbul University - Istanbul Faculty of Medicine - Department of Anatomy

**Saudi Medical Journal** 2009; 30 (1): 56-59 (16 ref.)
**Keywords:** Skull-anatomy and histology

**Abstract:** To investigate the frequency of unilateral or bilateral foramen of Vesalius FV, number of FV present on one side, and presence of a septum on FV. We bilaterally examined, 347 sphenoid bones of collections of the Department of Anatomy, Istanbul Faculty of Medicine, Istanbul University, Istanbul and Dokuz Eylul Faculty of Medicine, Izmir, Turkey in 2007. Of the 347 bilaterally examined skulls, 87 25.1% had bilateral FV, 191 55% specimens did not have any FV on both sides, and 69 specimens 19.9% had unilateral FV 33 skulls had FV on the right side, and the remaining 36 skulls had FV on the left. Of the 156 skulls which had FV, only 4 skulls 3 on the right, one on the left had double FV on the same side. We have not observed any specimens which had 3 or more FV on the same side. Of the 156 skulls which had FV, 11 skulls had a septum on FV, 3 skulls had a septum on FV on the right side, and 6 skulls had a septum on FV on the left side. Two skulls bilaterally had a septum on both sides. We believe that our data about FV will be enlightening not only for anatomists, but also for clinicians.

**Schizophrenia**

**diagnosis**

The estimation of cerebral asymmetries in schizophrenia by the Cavalieri principle.
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Eskisehir Osmangazi University - Faculty of Medicine, Meselik - Department of Anatomy

**Neurosciences** 2009; 14 (1): 67-70 (24 ref.)
**Keywords:** Brain; Tomography, X-Ray Computed

**Abstract:** To demonstrate hemispheric asymmetry in patients with schizophrenia using a cheap, simple stereologic method on the basis of standard CT scans of the brain. To demonstrate hemispheric asymmetry, standard CT scans of 30 schizophrenic patients [14 males, 16 females] were compared with 39 [13 male, 26 female] control subjects at Eskisehir Osmangazi University, Eskisehir, Turkey in 2005. Brain volumes were investigated by using a cheap, simple stereologic method, namely, Cavalieri. In patients with schizophrenia, we found that as age increases, right and left hemisphere volumes decrease. However, in the control group there was no relationship found between age and hemisphere volumes. In the control group, the left hemisphere was significantly bigger in males compared to females. There was a significant difference in both right and left hemisphere volumes between the control group and the schizophrenic group. In the schizophrenic group, a significant difference was observed in right hemisphere volumes between genders [p = 0.002], while there was no difference in the control group. There was a difference in left hemisphere volumes between genders in both groups. Right and left hemispheric volumes of the schizophrenic group were smaller than those of control group. Cerebral asymmetry is an arguable subject for the diagnosis of schizophrenia. The method that we used in this study will be useful in estimating hemispheric volumes.

**Sciatic Nerve**

**anatomy and histology**

The division level of the sciatic nerve and its relevance to popliteal nerve block. A cadaveric study.
Barut, Cagatay; Comert, Ayhan; Esmer, Ali F.; Sevinc, Ozdemir; Ozden, Hihmi; Tekdemir, Ibrahim; Ethan, Alaittin
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Karaelmas University - School of Medicine - Department of Anatomy

**Neurosciences** 2009; 14 (1): 104-105 (5 ref.)
**Keywords:** Nerve Block; Cadaver-Anesthesia, Conduction
Scurvy

Scurvy: presenting as musculoskeletal pain.
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The Children's Hospital and Institute of Child Health - Department of Paediatric Medicine
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 198-200 (10 ref.)
Keywords: Scurvy-complications; Ascorbic Acid Deficiency-complications; Ascorbic Acid Deficiency-prevention and control; Ascorbic Acid-metabolism; Mass Screening; Social Class; Musculoskeletal Diseases; Musculoskeletal System; Pain
Abstract: The incidence of scurvy in the paediatric population is very low. This report describes a case of scurvy in toddler girl who was admitted with severe pain in legs and difficulty in walking along with bleeding from gums. After extensive investigation, she was found to have vitamin C deficiency resulting from restrictive eating pattern. There was significant improvement in presenting symptoms and general health after introduction of vitamin C and fresh fruits and vegetables to her diet. Nutrition-based diseases can still occur in any socioeconomic setting. Nutritional screening remains an important part in every child's general health care.

Seizures, Febrile

etiology

Serum zinc level in children with febrile convulsion and its comparison with that of control group.
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Iran University of Medical Sciences - Department of Pediatrics
Keywords: Seizures, Febrile-physiopathology; Seizures, Febrile-blood; Zinc-analysis; Zinc-blood; Zinc-cerebrospinal fluid; Neurotransmitter Agents-analysis; Trace Elements-analysis; Case-Control Studies; Spectrophotometry, Atomic; Seizures-classification
Abstract: Febrile convulsion is the most common disorder in childhood with good prognosis. There are different hypotheses about neurotransmitters and trace element [such as zinc] changes in cerebrospinal fluid and serum, which can have a role in pathogenesis of febrile convulsion. The aim of the present prospective analytical case-control study was to determine whether there was any changes in serum zinc level in children with febrile convulsion during seizure. Ninety-two children aged 6 months to 5 years were divided into three groups: group A, 34 children with febrile convulsion, group B, 40 children having fever without convulsion, and group C, and 18 children with non-febrile convulsion. Serum zinc levels for the three groups were estimated by atomic absorption spectrophotometry [AAS]. Data were analyzed to compare zinc level among the three groups using appropriate statistical tools employing SPSS 13. Serum zinc levels of groups A, B, and C had a mean value of 76.82 +/- 24.36mg/l, 90.12 +/- 14.63 mg/l and 94.53 +/- 17.39 mg/l, respectively. Serum zinc level of group A was lower than those of the other two groups [P < 0.006]. It was also lower in group B than in group C [P < 0.006]. These findings revealed that serum zinc level decreases during infection; this decrease was more significant in patients with febrile convulsion.

Showdomycin

analysis

Conformational analysis [geometry optimization] of nucleosidic antitumor antibiotic showdomycin by argslab 4 software.
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**Keywords:** Antibiotics, Antineoplastic; Nucleosides; Nucleic Acids-antagonists and inhibitors

**Abstract:** Showdomycin is a naturally maleimide antitumor antibiotic of the C-nucleoside, it inhibits the nucleic acid synthesis in bacteria. Conformational analysis and geometry optimization of showdomycin was performed according to the Hartree-Fock [HF] calculation method by ArgusLab 4.0.1 software. The minimum potential energy is calculated by geometry convergence function by ArgusLab software. The most feasible position for the drug to interact with the receptor was found to be -0.269696 K.cal/mole.

**Silymarin**

**chemical synthesis**

Preparation, characterization and evaluation of fast-dissolving silibinin-enriched silymarin [SES].

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Al Minia University - Faculty of Pharmacy - Department of Pharmaceutics

Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 265-280 (33 ref.)

**Keywords:** Drug Compounding; Drug Evaluation; Protective Agents; X-Ray Diffraction; Chromatography, High Pressure Liquid; Spectrophotometry, Infrared

**Abstract:** The hepato-protective activity of silymarin is well demonstrated. However, silymarin is not a single component, but a mixture of silydianin, silychristin and silibinin. Silibinin is the least soluble and the most active component of silymarin. Accordingly, as silibinin content of silymarin increases, its activity is expected to increase. These were the objectives of the study i.e. to prepare silibinin enriched silymarin [SES] and enhance its dissolution by preparing its adsorbates and co-adsorbates with Florite. Silibinin enriched silymarin was prepared by extracting the water soluble components of silymarin using water. The silibinin content of the SES was evaluated using HPLC method of assay. The fast dissolving SES systems were characterized using differential scanning calorimetry, x-ray diffractometry and infra-red spectroscopy. The obtained results indicated the compatibility of Florite with SES. The biological activity of SES systems was evaluated in rats using paracetamol as a hepatotoxic agent and compared to that of silibinin alone. The results showed that SES-co-adsorbate was more efficient in lowering the serum level of the specific liver enzymes [ALT and AST] than silibinin alone.

**Simplexvirus**

**immunology**

Development of a western blot assay for detection of antibodies against HSV using purified HSV virions prepared by sucrose density gradient.

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Iranian Journal of Basic Medical Sciences 2009; 11 (4): 215-220 (20 ref.)

**Keywords:** Antibodies, Viral-isolation and purification; Blotting, Western; Laboratory Techniques and Procedures; Virion; Sucrose; Centrifugation, Density Gradient; Enzyme-Linked Immunosorbent Assay

**Abstract:** Herpes simplex viruses [HSV] have widespread and ubiquitous prevalence in the human population and they have received a great deal of attention due to the range of diseases, they caused as a result of an infection. It seems that the fast and reliable diagnostic methods are needed for detecting the herpes simplex virus type 1 [HSV1] antibodies especially in patients with HSV encephalitis, immunocompromised people, and neonatal infections. The aim of this study was designing a Western blotting method for HSV1 antibody detection, using the purified virus by sucrose density gradient centrifugation procedure. The most reliable method for HSV detection is virus neutralization test but it needs cell culture preparation, high expertise, as well as the high amounts of serum samples. Considering the difficulties of this method, we tried to run a new one for HSV antibody detection by propagating the viruses and then purify them by sucrose density gradient centrifugation method. The purified viruses used as antigens in Western blotting assay. Diluted sera [1:100, and 1:200 dilutions] used in Western blotting and two-fold dilutions of the sera applied in virus neutralization test. Five of twenty seven samples were negative in Western blotting and the same results obtained in virus neutralization test. Comparing with our gold standard, the sensitivity and specificity of the developed assay were both 100%. Our results show that the designed method is a reliable method for replacing the virus neutralization test in diagnostic laboratories. It can also, be used for confirming the ELISA results.
Smoking trends

Waked, M.; Salameh, P.; Aoun, Z.
St George University Hospital - Department of Pulmonology

Keywords: Demography; Smoking-complications; Risk Factors; Respiratory Tract Diseases-etiology; Questionnaires; Sex Factors

Abstract: We carried out a comparative study to assess the demographic and social characteristics of water pipe [WP] smokers, the association with cigarette smoking and chronic respiratory diseases and the dependence profile on 4 groups: exclusive WP smokers, exclusive cigarette smokers, mixed smokers and absolute non-smokers. Cigarette smoking was statistically significantly higher in WP smokers than non-WP smokers; 36.5% of exclusive WP smokers smoked >/= 7 WPs/week. Chronic respiratory disease and chronic bronchitis were reported more frequently in exclusive WP smokers than absolute non-smokers. WP smoking seems to be as great a risk factor as cigarette smoking for chronic respiratory disease.

Spermatic Cord Torsion congenital

Intrauterine testicular torsion with undescended junction obstruction.
Rahmani, Maryam; Amini, Elahe; Molaeelian, Mansour; Chegini, Hosein
Tehran University of Medical Sciences - Department of Radiology

Keywords: Spermatic Cord Torsion-diagnosis; Cryptorchidism-cangenital; Cryptorchidism-diagnosis; Cryptorchidism-surgery; Cryptorchidism-ultrasonography; Spermatic Cord Torsion-surgery; Spermatic Cord Torsion-ultrasonography; Testicular Hydrocele-cangenital; Testicular Hydrocele-diagnosis; Testicular Hydrocele-ultrasonography; Prenatal Diagnosis-utilization; Ultrasonography, Doppler, Color-utilization; Ureteral Obstruction-congenital; Ureteral Obstruction-complications; Ureteral Obstruction-diagnosis; Orchidectomy-utilization

Spherocytosis, Hereditary pathology

Association of spinal cord dysfunction with hereditary spherocytosis.
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Al Jahra Hospital - Department of Medicine

Keywords: Spinal Cord Diseases; Spinal Cord-pathology; Jaundice; Splenomegaly; Magnetic Resonance Imaging

Abstract: Hereditary spherocytosis is a familial hemolytic disorder of red cell membrane cytoskeleton characterized by anemia, jaundice and splenomegaly. There are very few cases on record, of spinal cord dysfunction associated with this disorder, which are considered to be due to an abnormality in the cytoskeletal protein present in red cells, neuronal and dendritic cell membranes. We describe a rare case of hereditary spherocytosis which presented with spinal cord dysfunction.
Splanchnic Circulation

drug effects

The effect of intraoperative use of esmolol and nicardipine on splanchnic perfusion in functional endoscopic sinus surgery.
Ali, Soliman M.M.; Hady, Kamel I.; Mostafa, Mostafa G.
Al Azhar Assiut University - Faculty of Medicine - Department of Anesthesia
Assiut Medical Journal 2008; 32 (3): 9-18 (18 ref.)

Keywords: Propanolamines-administration and dosage; Nicardipine-administration and dosage; Intraoperative Care; Heart Rate; Blood Pressure; Anesthesia, Inhalation; Endoscopy; Blood Gas Analysis; Hemodynamics; Prospective Studies; Double-Blind Method

Abstract: There are many techniques for reduction of mean arterial blood pressure [MAP] and heart rate [HR] during anesthesia. We designed this prospective, randomized, double-blinded study to test the effect of this technique for maintaining hemodynamic stability during general anesthesia and their influences on splanchnic perfusion. Sixty healthy consenting patients undergoing functional endoscopic sinus surgery [FESS] were randomly assigned to 1 of 3 treatment groups: Group I [control n = 20] received normal saline 5 mL and 1 mL, followed by a saline infusion at a rate of 0.005 mL kg\(^{-1}\) min\(^{-1}\); Group 2 [n = 20] received esmolol 50 mg and saline 1 mL, followed by an esmolol infusion 5 micro g kg\(^{-1}\) min\(^{-1}\); and Group 3 [n = 20] received esmolol 50 mg and nicardipine 1 mg, followed by an esmolol infusion 5 micro g kg\(^{-1}\) min\(^{-1}\). The study drugs were administered after the induction of anesthesia with fentanyl 1.5 micro g/kg, and propofol 2 mg/kg IV. Tracheal intubation was facilitated with vecuronium 0.12 mg/kg IV. Anesthesia was initially maintained with sevoflurane 2% end-tidal and N\(_2\)O 50% in oxygen in all 3 groups. After induction of anesthesia a gastric tonometer [TRIP] NGS Catheter and a radial catheter were inserted. Baseline values of gastric intramucosal pH [pHi] were determined before induction of hypotension. The [pHi] values were calculated every 30 min until hypotension was discontinued . The CO2 -gap [i.e., the difference between arterial and gastric Pco2] was registered. Arterial blood lactate levels also were measured. During surgery, the mean arterial blood pressure [MAP] was maintained within +/- 15% of the baseline value by varying the study drug infusion rate and the inspired concentration of sevoflurane. In addition to MAP and heart-rate values, were recorded throughout the perioperative period. Recovery times and postoperative side effects were assessed. None of the [pHi] values calculated was less than 7.35 in the three studied groups. Arterial blood lactate levels did not increase in any of the patients. Compared with the control group, adjunctive use of esmolol and nicardipine attenuated the increase in heart rate [in Group 2] and MAP [in Group 3]. Arterial blood lactate levels did not increase in any of the patients. Compared with the control group, adjunctive use of esmolol and nicardipine attenuated the increase in heart rate [in Group 2] and MAP [in Group 3]. Furthermore, the use of an esmolol infusion as an adjunct to sevoflurane to control the acute autonomic responses during the maintenance period significantly decreased emergence times [4 +/- 2 versus 7 +/- 4 min], decreased the need for postoperative opioid analgesics [35% versus 60%], and reduced the time before discharge [209 +/- 89 versus 269 +/- 100 min]. We conclude that the adjunctive use of esmolol alone or in combination with nicardipine during the induction of anesthesia reduced the hemodynamic response to tracheal intubation. It did not compromise splanchnic tissue oxygen balance in healthy patients nor increased blood lactate. Furthermore, use of an esmolol infusion as an adjuvant to sevoflurane- N\(_2\)O anesthesia for controlling the acute hemodynamic responses during the maintenance period improved the recovery profile after functional endoscopic sinus surgery.

Stomach Ulcer

drug therapy

Role of copper complexes in the protection against stress-induced gastric ulcer in rats.
Abdel Rahim, Mahmoud H.; Omran, Faten M.; Ahmed, Nagwa S.; Mohammed, Walaal I.
Assiut University - Faculty of Medicine - Department of Pharmacology
Assiut Medical Journal 2008; 32 (3): 43-58 (44 ref.)

Keywords: Stress, Psychological; Protective Agents; Copper-therapeutic use; Stomach-pathology; Histology; Superoxide Dismutase-blood; Nitric Oxide; Rats, Wistar

Abstract: Copper complexes achieve an anti-ulcer activity, several investigations were submitted to clarify the possible mode of action of these copper complexes as potent anti-ulcer drugs. These agents have a wide range of pharmacological activities that could be explained on the basis of theactivation of copper dependant enzymes and their physiochemical properties. Copper complexes are reported to have potent anti-inflammatory and anti-ulcer effects. All of these copper complexes were found to be more active than either inorganic copper salts or their parent completing agents. Copper complexes were effective in reducing ulcer number as well as ulcer severity, they have an antisecretory activity. To further clarify this point, the present study was conducted to evaluate anti-ulcer activity of two types of copper complexes which are: Cu [l]-nicotinic acid][2]Cl complex and Cu[II][glycinate][2] complexe and their combination in water immersion-restraint stressed [WIRS] ulcer rat model. The present study was conducted on 25
mule Wister albino rats, that were randomly divided into three groups: Group I: Control non-stressed group: in which animals were received only an intragastric dose of 0.5ml of vehicle [0.25% Tween -80 in saline solution]. Group II: Non-pretreated WIRS group; in which rats were subjected to restraining by WIRS and received an intragastric dose of 0.5ml of vehicle. Group III: Treated WIRS groups: in which rats were subjected to restraining and subdivided according to the received drug into: Subgroup A: received an intragastric dose of 8 mg/kg body mass Cu[I]-[nicotinic acid][2]Cl complex, in 0.5ml of vehicle immediately prior to stress. Subgroup B: received an intragastric dose of 5 mg/kg body mass Cu[II][glycinate][2] complex + 8 mg/kg body mass Cu[T]-[nicotinic acid][2]Cl complex, in 0.5 ml of vehicle immediately prior to stress. Group II and III were subjected to restraining by fixing I he four limbs to a metal board, and placed in a water bath maintained to the level of the xiphoid process at a temperature of 23 +/- 1 °C for 3 to 5 hours. Blood samples were taken from all groups as plasma for determination of total superoxide dismutase [SOD] activity or serum for determination of total nitrite level. After withdrawal of the blood samples, their stomachs were removed and opened along the greater curvature. All the stomachs were formalin fixed and paraffin embedded, for assessment of histopathological changes affecting these structures using light microscopic examination. Administration of intragastric copper complexes increased plasma level of SOD from 0.54 +/- 0.02 unit/ml and 0.32 +/- 0.63 unit/ml for control non-stressed group and non-pretreated WIRS group to 0.84+0.10 unit/ml 1.39 +/- 0.15 unit/ml and 2.27 +/- 0.13 unit/ml for Cu[I]-[nicotinic acid][2]Cl complex, Cu[II][glycinate][2] complex and combination of two types of copper complexes, respectively. In the other hand, WIRS was associated with a significant increase in total serum nitrite level with a mean of 70.11 +/- 6.12 micro mol/l in a comparison with non-stressed group [32.09 +/- 2.05 micro mol/l]. Pretreatment of WIRS animals with both types of copper complexes; Cu[I]-[nicotinic acid][2]Cl complex and Cu[II][glycinate][2] complex and their combinations intragastrically did not produce a significant reduction of nitrite level, compared to WIRS group, with means 59 +/- 1.90 micro mol/L, 64.93 +/- 2.66pmol/L and 63.20+1.78 micro mol/L for both Cu[I]-[nicotinic acid][2]Cl complex and Cu[II][glycinate][2] complex and their combined mixture respectively. The histopathological findings of the light microscopic examination demonstrated that there was no microscopic abnormality in the gastric mucosa in the non-stressed control group [group I]. Moderate to severe gastric erosion was seen in the examined cases, with denudation of parts of the gastric mucosa of different thickness. A complete gastric ulceration with complete necrosis of parts of the gastric mucosa seen in the most severe forms of non-pretreated WIRS group [group II]. Either no histopathologic abnormality or mild erosion was seen in WIRS groups treated with Cu[I]-[nicotinic acid][2]Cl, Cu[II][glycinate][2] complexes and their combined mixture [group III]. From these results It can be concluded that both intragastrically injected copper complexes and their combined mixture exerted protective effect on the gastric mucosa of WIRS induced ulcer in rats. This is confirmed by the inconsistently measured biochemical parameters [plasma SOD and serum nitrite levels] and the histopathological examination of the gastric mucosa.

**Stroke**

**Should the Nottingham Health Profile or the Short Form-36 be given preference in stroke?.**

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**Neurosciences** 2009; 14 (1): 45-52 (45 ref.)

**Keywords:** Prospective Studies; Quality of Life; Questionnaires

**Abstract:** To compare the usefulness of the Nottingham Health Profile [NHP] and the Short Form 36 [SF-36] as general outcome measures for chronic stroke patients with respect to the response rate, internal consistency reliability, validity analyses, and agreement in similar domains of the 2 instruments. In this prospective study, 90 consecutive stroke patients attending the Neurology outpatient clinic at Erciyes University, Kayseri, Turkey from March 2004 to March 2005 were evaluated for the study. Seventy outpatients who had a stroke 6 months previously were included in the study. As a datacollecting device, SF-36 and NHP scales were used. The prevalence of patients with highest quality of life score [ceiling effect] was higher for the NHP scale [10-35.7%] than for the SF-36 scale [1.4-37.1%]. The prevalence of patients with lowest quality of life score [floor effect] was also higher for the NHP scale [1.4-45.7%] than for the domains of SF-36 [1.4-30.0%]. The internal consistencies of the subscales of both the SF-36 and the NHP showed satisfactory values. Regarding convergent validity, correlations were found between comparable subscales of the 2 instruments. Limits of agreement in similar domains of the 2 instruments were very large. In all 5 demonstrated Bland-Altman plots, there was agreement of the scales in the measurement of the similar fields of quality of life. Both the SF-36 and the NHP have acceptable degrees of reliability, convergent validity, and response rate. Limits of agreement in similar domains of the 2 instruments were very large.

**complications**

**Epidemiological evaluation of post stroke depression in Babol, Northern Iran.**

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**Neurosciences** 2009; 14 (1): 102-103 (5 ref.)

**Keywords:** Depression-etiologie; Depression-epidemiology-Epidemiology; Stroke-psychotherapy

104
epidemiology

Ischemic stroke: prevalence of modifiable risk factors in male and female patients in Pakistan.
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University of Karachi - Department of Physiology
Keywords: Brain Ischemia-epidemiology; Risk Factors; Dyslipidemias; Hypertension; Obesity; Diabetes Mellitus; Smoking; Prevalence
Abstract: Stroke is the commonest neurological cause of morbidity and mortality all over the world being the third leading cause of death. Estimation of stroke risks in population is not only helpful for healthcare providers but also important to identify persons at elevated risk and to select proper treatments in clinical trials. The aim of the present study was to identify the prevalence of common modifiable risk factors for ischemic stroke in Pakistan. Patients of either sex above the age of 25 yrs who were admitted to Neurology Ward or came to OPD in Jinnah Post Graduate Medical Centre were included in the study. Type of stroke was identified by brain CT scans or MRI and risk factors for stroke and other details were noted on a proforma. Out of 55 patients studied for present study, 78% were males and 22% were females. Most of them belonged to low socioeconomic status and almost 50% were having family history of stroke. Most of the patients had multiple risk factors which included: hypertension [65%], smoking [32%], diabetes mellitus [36.3%], dyslipidemia [32.7%], coronary artery disease [9%], obesity [18%], epilepsy [16.3%] and left ventricular hypertrophy [3.6%]. On the basis of these findings, it can be concluded that hypertension, smoking, dyslipidemia and diabetes mellitus are major risk factors for stroke and might be considered as main targets for primary and secondary prevention of stroke.

Substance-Related Disorders

epidemiology

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Keywords: Students; Schools; Cross-Sectional Studies; Prevalence; Tobacco; Ethanol; Opium; Cannabis; Heroin; N-Methyl-3,4-methylenedioxymphetamine
Abstract: To determine the prevalence of substance use among high-school students in Guilan province, Iran. Cross-sectional study conducted from September 2004 to June 2005. Guilan province high-schools, Iran. A representative sample of 1927 students. A self-report questionnaire that included socio-demographic data, type of substance used, history of lifetime and past month substance use, firstmotivation, first place and first provider of substance was applied. Frequency of substance use in high-school students and some associated factors. About 24% of subjects had substance use during their lifetime. 24% of the sample used tobacco and 10.5%, alcohol. Substance use was significantly higher in males [p < 0.001]. The highest frequency of substance use was among 3rd and 4th grade students [28.8% and 23.7% respectively]. Substance use was related with higher educational grades in boys [p < 0.001] and significantly associated with smoker parents[p < 0.001]. First experience with substances most commonly happened at home [26.6%], friends’ parties [26.3%] and park / street [20.4%]. 55.68% had obtained drugs, firsttime, fromfriends. Curiosity was the most common reason for drug use in 42.61% of the sample. Although substance use was higher in public schools and students with illiterate parents, it was not related with the type of school and parents’ educational levels. A large number of high-school students had the experience of substance use, mostly tobacco and alcohol. Effective solutions and preventive programs should be applied to reduce substance use in Iranian youth population.
**Sweet Syndrome**

**diagnosis**

Sweet's syndrome.
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Keywords: Sweet Syndrome-drug therapy; Steroids-therapeutic use; Pneumonia; Skin-pathology
Abstract: Sweet's syndrome [acute febrile neutrophilic dermatosis] is characterized by classical skin lesions accompanied by fever and malaise. Systemic involvement may be present and lung involvement in Sweet's syndrome has been reported in the form of bilateral pulmonary infiltrates, bronchiolitis obliterans organizing pneumonia and pleural effusion. There are dense papillary neutrophilic infiltrates on histopathology. We present a case of Sweet's syndrome with right lower lobe consolidation and persistent fever which was non-responsive to antibiotics but showed clinical improvement with clearing of radiological opacities on oral steroid therapy.

**Syringomyelia**

**diagnosis**

A patient with cape like sensory loss of arms and shoulders.
El Azm, Mowaffak; Fatehi, Farzad
Al Hada Armed Forces Hospital - Department of Neurosurgery
Neurosciences 2009; 14 (1): 106 (1 ref.)
Keywords: Syringomyelia-therapy; Syringomyelia-surgery-Arm; Shoulder-innervation

**Takayasu Arteritis**

**complications**

[Medical interruption of pregnancy for severe Takayasu's disease, about two cases]
Charles Nicolle Hospital - Department of Obstetrics Gynecology - Tunisia
Maghreb Medical 2009; 29 (391): 236-238 (9 ref.)
Keywords: Takayasu's Arteritis-diagnosis; Pregnancy; Pregnancy Complications; Abortion, Therapeutic; Hypertension
Abstract: Takayasu's arteritis is a rare clinical entity characterized by a progressive obliteration of the aortic arch and the main vessels arising from it. The association with a pregnancy may lead to some maternal and fetal complications. Nevertheless, a normal outcome of pregnancy is not rare if a careful follow-up is provided. We report the observations of two patients who underwent a medical interruption of pregnancy in the department of obstetrics and gynecology "A" of Charles Nicolle hospital in Tunis because of a severe multi-visceral localization of Takayasu's arteritis. The aim of our study is to stress on the maternal and foetal prognostic factors of this association.
Tetralogy of Fallot

surgery

Right ventricular diastolic dysfunction in post operative fallot tetralogy.
Hussein, Gehan
Cairo University - Faculty of Medicine - Department of Pediatrics
Keywords: Postoperative Complications; Ventricular Dysfunction, Right; Pulmonary Valve Insufficiency; Electrocardiography; Echocardiography; Child; Cross-Sectional Studies
Abstract: Tetralogy of Fallot [TOF] is the most common cyanotic congenital heart disease. Complete repair of TOF is associated with pulmonary regurge [PR] and right ventricular [RV] functional abnormalities. We aimed to study the incidence of RV diastolic dysfunctions in relation to age of surgical repair and correlate it with severity of pulmonary regurge. Cross sectional descriptive study was conducted on cases of TOF after surgical repair. Cases were classified into 2 groups, group 1 operated after the age of 2 years [33 cases], group 2 operated in infancy [14 cases]. Clinical assessment for stage of heart failure, 12 leads ECG, and Transthoracic color Doppler echocardiography for assessment of right ventricular diastolic function were done. E value was significantly lower in group 1 [p = 0.0001], E deceleration time was significantly prolonged in the 1[st] group [p = 0.002] with negative significant correlation between age of surgery and E/A ratio in the same group [p = 0.04, r = -0.5]. No significant correlation between severity of PR and RV defective relaxation [p = 0.6] with positive predictive value 52%. We conclude that early surgical repair for TOF is associated with less affection of right ventricular diastolic function. PR severity did not correlate with nor predict RV defective relaxation.

Therapeutics

psychology

Medical sciences in the third millennium: an avicennian approach.
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Shiraz University of Medical Sciences - Department of Pathology
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 4-9 (16 ref.)
Keywords: Therapeutics-methods; Therapeutics-ethics; Patients-psychology; Medicine-methods; Integrative Medicine; Complementary Therapies; History of Medicine
Abstract: This paper sets off with an argument that as an outcome of modernism, medical sciences excluded human soul and spirit and followed a more, if not mere, mechanico-chemical approach in treating patients. It then discusses alternative approaches to medicine and that models of medicine and health care are looking into not only the fundamental spiritual dimension of care, but also the significance of spiritual development of the individual towards healing. The paper presents Avicenna as a forerunner in medical sciences with a [w] holistic view while his contribution to cure and healing will be highlighted. The paper will end with some concluding remarks.

Thermodynamics

Modeling of the ranque effect on the basis of the expanded version of thermodynamics.
Nekofar, Koros; Ommi, Fathollah
Iranian Space Agency
Keywords: Gases
Abstract: The Ranque vortex tube [effect Ranque] is a device by which cold gas can be generated using compressed gas. In this article, the process of gasses' thermal division in turbulent tubes is described on the basis of thermodynamic theory according to Newtonian time. Based on new approach, explaining the essence of the effect of the temperature separation of gas and procedure of the thermodynamic calculation.
Thiamine

therapeutic use

Effect of thiamine on lipid profile in diabetic rats.
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Army Medical College - Department of Biochemistry and Molecular Biology
JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (3): 165-168 (23 ref.)
Keywords: Dyslipidemias-drug therapy; Diabetes Mellitus; Cholesterol, HDL; Cholesterol, LDL; Hemoglobin A, Glycosylated; Hyperglycemia; Rats, Sprague-Dawley
Abstract: To determine the effect of high dose thiamine on dyslipidemia in diabetic rats. Experimental interventional study. The Animal House/Laboratory of the National Reference Laboratory for Poultry Diseases [NRLPD]/Biochemistry Department, Army Medical College, Rawalpindi, from December 2006 to January 2007. The study was conducted on 120, 12 weeks old male albino rats of Sprague Dawley Strains randomly divided into 4 groups of 30 rats each. Group I comprised of 30 normal rats, on normal [regular] diet. Group II comprised of 30 diabetic rats, on normal [regular] diet. Group III comprised of 30 normal rats, on thiamine supplemented diet. Group IV comprised of 30 diabetic rats, on thiamine supplemented diet. Out of the 120 rats, 60 were made diabetic by injecting Alloxan. Blood glucose levels were measured by applying glucose oxidase method. Determination of total HbA1c, triglyceride, HDL [High Density Lipoproteins] and total cholesterol was performed by diagnostic kits. The significance of difference in mean values of study groups [glycemia and lipid profile] was assessed by applying ANOVA and independent Student's t-test. Significant difference was found in the levels of triglycerides, cholesterol and LDL in the diabetic rats on supplemented diet p <0.05, but no significant difference was noticed in the value of glycosylated Hb [HbA1c] [p>0.05] of all the 4 groups. Thiamine corrected dyslipidemia but not hyperglycemia in diabetic rats.

Thiazolidinediones

pharmacology

Antidepressant-like activities of rosiglitazone in the rat forced swim and the mouse tail suspension tests.
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King Saud University - Faculty of Pharmacy - Department of Pharmacology
Keywords: Antidepressive Agents; Rats; Mice; Swimming
Abstract: The current study aimed to investigate the possible antidepressant-like activity of rosiglitazone using the rat forced swimming test [FST] and the mouse tail suspension test [TST], two models predictive of antidepressant activities. In FST, 5 days administration of rosiglitazone [6 or 12 mg/kg, p.o.] significantly decreased the time of immobility without affecting the swimming time. Moreover, rosiglitazone significantly increased climbing, head shaking, and rubbing water away behaviors. These effects were not accompanied by any alteration in the locomotor activity of rats when tested in the open field test [OFT]. Additionally, treatment of rats with rosiglitazone significantly reduced plasma corticosterone levels. Administration of fluoxetine [10 mg/kg, p.o.] to the rats for 5 consecutive days, as a positive control, significantly reduced floating and increased swimming time without affecting climbing duration. Moreover, fluoxetine significantly increased head shaking behavior and reduced fecal boli count. However, fluoxetine produced no effect on plasma corticosterone levels. In TST, 5 days administration of rosiglitazone [8.5 or 17 mg/kg, p.o.] significantly reduced the immobility time, this effect was comparable to that observed with fluoxetine. Furthermore, rosiglitazone [17 mg/kg, p.o.] significantly antagonized dexamethazon-induced prolongation of immobility time in mice TST. In conclusion, the present Investigation suggests that rosiglitazone possesses a specific antidepressant-like activity in rodents' behavioral models and that this effect may be mediated through reduction of plasma corticosterone level.
Thymomoma

diagnosis

Incidental invasive thymoma during coronary artery bypass surgery.
Al Smady, Moaath M.; Hammdan, Farouq F.; Abu Abeeleh, Mahmood M.; Massad, Islam M.
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University of Jordan - Division of Cardiothomcic and Vascular Surgery - Department of General Surgery
Saudi Medical Journal 2009; 30 (1): 140-142 (14 ref.)
Keywords: Thymus Neoplasms; Coronary Artery Bypass; Thymoma-pathology
Abstract: We encountered 2 incidental cases of invasive thymomas at Jordan University Hospital, Amman, Jordan; during routine coronary artery bypass graft surgery between 2005 and 2008 with an incidence of 0.6%. Both patients presented with angina pain. None of the 2 patients had pressure symptoms cough, shortness of breath or superior vena cava syndrome or Myasthenia Gravis symptoms. Total thymectomy with dissection of perithymic fat was performed on both cases. No radiotherapy was given. No recurrence of the tumor was seen in 2 years follow up. These cases are presented to emphasize the occurrence of this tumor.

Thymus Plant

Antinociceptive effects of hydroalcoholic extract of thymus vulgaris.
Taherian, Abbas Ali; Babaei, Mahdi; Vafaei, Abbas Ali; Jarrahi, Morteza; Jadidi, Majid; Sadeghi, Hassan
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Keywords: Phytotherapy; Plant Extracts-therapeutic use; Analgesics; Mice
Abstract: Previous investigation has shown that Thymus Vulgaris [TV] modulates pain. The aim of this work was to examine the role of TV on acute and chronic pain and compares its effect with dexamethasone [DEX] and stress [ST] by using Hot plate, Tail flick and Formalin tests in mice. In this study male albino mice [25-30 g.] in 21 groups [n = 147] were used. TV [100, 500 and 1000mg/kg], DEX [0.5, 1 and 2 mg/kg] and vehicle [VEH] were injected 30 minutes before pain assessment tests. Stress was applied by 1 min swimming in cold water [18 - 22°]. Acute and chronic pain was assessed by Hot plate, Tail flick and Formalin tests. For assessment of the role of opioid receptors in antinociception of TV extract, Naloxon [NAL, 2mg/kg, ip] as opioid receptor antagonist was injected before the injection of the more effective dose [500mg/kg] of TV extract. Results indicated that TV, DEX and ST have analgesic effects in all tests [P < 0.01 in comparison with control group]. Above findings showed that TV extract, DEX and ST have modulatory effects on acute and chronic pain. Further research is required to determine the mechanisms by which TV extract has an inhibitory effect on pain sensation.

Thyroid Gland

abnormalities

Intraoperative imprint cytological diagnosis of heterotopic thyroid presenting as sellar mass.
Vasei, M.; Azarpira, N.; Farokhi, S.; Salehi, M.
Shiraz University of Medical Sciences - School of Medicine - Department of Pathology
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 100-102 (10 ref.)
Keywords: Thyroid Gland-embryology; Choristoma-diagnosis; Thyroid Dysgeresis-diagnosis; Sella Turcica-abnormalities; Sella Turcica-surgery; Cytological Techniques-utilization; Vision, Low-etiolo; Pituitary Gland-abnormalities; Thyroglobulin-diagnostic use
Abstract: A 43-year-old woman presented with headache, nausea, severe visual impairment and galactorrhea and decreased visual acuity. A 4 x 3.5 x 3 cm mass completely filling the sphenoid sinus, elevating the pituitary gland and stalk was observed. The patient underwent transsphenoidal removal of the lesion to alleviate visual loss. The tumor cells showed strong positivity for thyroglobulin and TTF-1. This patient was followed up for 2 years after the operation; the laboratory study and computed tomography showed no lesions. In conclusion, this is a rare benign finding in which complete surgical resection achieves a cure.
Tongue

abnormalities

[Aglossia adactylia syndrome with anterior maxillo mandibular fusion: a case report]
Chaouachi, S.; Ben Hamida, E.; Dahmane, M.; Ayadi, I.; Marrakchi, Z.
Charles Nicolle Hospital - Neonatology Department - Tunisia

Maghreb Medical 2009; 29 (391): 256-257 (9 ref.)
Keywords: Limb Deformities; Congenital-abnormalities; Fingers-abnormalities; Syndrome; Maxilla-abnormalities; Mandible-abnormalities

Abstract: The hypoglossia-hypodactylia syndrome [Hanhart syndrome] is a congenital birth defect. The major features of this syndrome are a reduction in tongue size, micrognathia, limb anomalies and many occasional other anomalies. The neurosensorial development is preserved: We report a particular case with anterior maxillo-mandibular fusion. The patient, a male neonate, was the third child of a 42 year old woman. There was parental consanguinity but no similar cases in the family. The physical examination at birth revealed an eutrophic newborn with facial dysmorphism, impossibility of opening the mouth, aplasia of the fingers on the level of the metacarpo-phalangeal articulations and apodia. Computed tomography scan noted anterior maxillo mandibular fusion, glossopalatine ankylosis and cleft palate. The chromosomal chart, cardiac echography and transfontanellar ultrasound scan were normal. The Hanhart syndrome is a rare malformatif syndrome, grave because of the limbs reductionnal anomalies and feeding difficulties. The etiopathogeny is unknown; drug-taking during the pregnancy, genetic and vascular theories has been implicated.

Translocation, Genetic

Disease associated balanced chromosome rearrangements-report on 12 cases.
Kholeif, Soha F.; Nazmy, Nahla A.; Mahrous, Hanan S.
University of Alexandria - Medical Research Institute - Department of Human Genetics
Keywords: Mental Retardation-genetics; Phenotype; Karyotyping

Abstract: The population frequency of familial disease balanced chromosome rearrangement with discordance for an abnormal phenotype is unknown. De novo balanced chromosome rearrangements are present in approximately 1:2000 newborn. The increased frequency of associated diseases may be due to truncation, inactivation or overexpression of specific genes. Uniparental disomy [UPD] has also been implicated. We report on 12 cases with apparently balanced chromosome rearrangements with abnormal phenotypes, 8 familial [5 families] and 4 de novo. Maternal inheritance accounted for 7/8 cases. The rearrangements included reciprocal translations in 8 cases, Robertsonian translocation in 2 cases and pericentric inversion in 2 cases. Apparently balanced rearrangements in general, represent an interpretational and counseling dilemma when detected in cases with abnormal phenotypes and/or mental retardation.

Tretinoin

adverse effects

The effects of all-trans retinoic acid on blood cells in rat's embryo.
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Semnan University of Medical Sciences - Department of Anatomical Sciences
Keywords: Tretinoin-pharmacology; Blood Cells-drug effects; Rats, Wistar; Embryonic Structures

Abstract: All-trans retinoic acid [ATRA] has beneficial and teratogenicity effects when used in a variety conditions. The objectives of this study were to determine the effects of ATRA on the Progenitors of red blood cell and platelets in rat's embryo. Single oral dose [100 mg/kg] of ATRA was administered to rat on gestation day [GD] 10 and fetuses were observed on GD 18 and compared with untreated group. In the experimental embryos of GD 18, the mean number of red blood cells [RBC, 10.5%] and platelets number [16%] were decreased. There was a significant relationship in RBC and platelets count. The mean diameter of RBC and nucleated red blood [NRBC] were compared in two groups. There was no significant relationship between experimental and control groups, except in NRBC diameter. Thus, the present data shows that ATRA may have negative effects on proliferation, differentiation and maturation of erythroid cells and platelets, without having any deleterious effects on the dimenation of RBC.
Triazolam

chemical synthesis

Synthesis of some novel 1, 3, 5-trisubstituted [1,2,4] triazole derivatives as potential antibacterial agents.
Hayallah, Alaa M.; Heta, Helal F.
Assiut University - Faculty of Pharmacy - Department of Pharmaceutical Organic Chemistry
Bulletin of Pharmaceutical Sciences - Assiut University 2008; 31: 375-390 (28 ref.)
Keywords: Anti-Bacterial Agents; Gram-Negative Bacteria; Gram-Positive Bacteria; Schiff Bases
Abstract: In the present work, some new 1,3,5-trisubstituted [1,2,4]-triazole derivatives and their Schiff's bases were synthesized. The chemical structure of the target compounds was confirmed by IR, [1]H-NMR, [13]C-NMR, FAB-MS, EI-HRMS spectra and elemental analyses. The title compounds were tested for their in vitro antibacterial activity against Gram-positive and Gram-negative ones using ampicillin and nalidixic acid as reference drugs. Some of them showed antibacterial activity more significant than the reference drugs.

Tuberculosis
diagnosis

Association between PPD and quanti FERON gold TB test in TB infection and disease among HIV-individuals in southern Iran.
Davarpanah, M.A.; Rasti, M.; Mehrabani, D.; Allahyari, S.S.; Neirami, R.; Saberi Firoozi, M.
Gastroenterohepatology Research Center
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1): 71-75 (14 ref.)
Keywords: Tuberculin Test-utilization; HIV; Mycobacterium tuberculosis-immunology; Interferon-gamma-diagnostic use; Tuberculosis-epidemiology; CD4 Lymphocyte Count
Abstract: Tuberculosis is one of the most common diseases among HIV-infected patients. A person with a positive tuberculin skin test [TST] acquiring HIV infection has a 3-13% annual risk of developing active tuberculosis. The diagnosis of TB in HIV infected patients may be difficult. Quantil FERON-TB Gold [QFT-G] test is a novel method as an aid for diagnosis of Mycobacterium tuberculosis infection. We evaluated the association between TST and QFT-G test in latent TB infection [LTBI] and TB in HIV-infected patients. One hundred and seventy six HIV-infected subjects from Shiraz Consultation and Behavioral Modification Center [SCBMC] entered our study. The individuals were screened for TST, using 5TU purified protein derivative [PPD]. Also, blood sample was provided for QFT, measuring INF-gamma response to M. tuberculosis antigen. Of 176 participants, 98.3% returned for evaluation of TST results. Among them, 63% and 37% were negative and positive for TST, respectively. All the participants returned for QFT-G sampling. Of them, 64.8% and 27.8% were respectively negative and positive for the test and 7.4% showed undetermined results. The agreement between PPD and QFT-G in their negative results was 39.9% and 8.1% in their positive results and the overall agreement was 50%. Disagreement of TST-/QFT[+] was noticed in 19.7% of the subjects and TST[+]/QFT-disagreement in 24.9%. CD4[+] count <100 mm[3] was seen in 5.9%, >/= 100 and < 200 mm[3] in 17.1% and CD4[+] T cell count >/= 200 mm[3] in 76.9% of subjects. As the agreement rate between QFT-G and TST in HIV-infected patients was fair, a strategy of simultaneous TST and QFT-G testing would maximize the potential for LTBI diagnosis in HIV-infected subjects.

[Pseudotumoral form of abdominal tuberculosis in child, about 4 cases]
Khatala, K.; El Madi, A.; Rami, M.; Alifi, M.; Bouabdealla, Y.; Sbai, H.; Harrandou, M.; Kanjaa, N.
MT Maamouri Hospital - Orthopedics Department - Tunisia
Maghreb Medical 2009; 29 (391): 253-255 (12 ref.)
Keywords: Abdomen-pathology; Tuberculosis-pathology; Child
Abstract: The primary infection is the major form of infantile tuberculosis. The pseudo-tumoral form of tuberculosis is very rare in the child. It often poses a problem of positive diagnosis. Four cases were diagnosed over a four years period, in the paediatric service of surgery of the CHU Hassan II of Fez. All children were admitted initially for abdominal tumours and whose diagnosis was made in per operational.
Tuberculosis case-finding and treatment in the central prison of Qazvin province, Islamic Republic of Iran.
Assefzadeh, M.; Barghi, R.Gh.; Shahidi, Sh.S.
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Qazvin University of Medical Sciences - Department of Infectious Diseases
Keywords: Tuberculosis-drug therapy; Prisons; Prevalence; Early Diagnosis; Radiography; Thoracic
Abstract: As a part of a comprehensive programme of tuberculosis [TB] control in the central prison in Qazvin, Islamic Republic of Iran, a programme of active case-finding was carried out from February 2004 to July 2005. From the 768 prisoners examined, 41 [5.3%] were suspected of TB and gave sputum samples. A total of 7 smear-positive TB cases were found, giving a TB prevalence in the prison of 910 per 100 000, 113 times the total TB prevalence in Qazvin province in the same year. From 7 diagnosed and treated patients, 4 were cured with the category 1 standard regimen, 1 completed treatment and 2 failed to complete treatment. Improvements are needed in TB case recognition of prisoners, especially newcomers.

Tuberculosis, Meningeal

drug therapy

Use of urokinase in the treatment of tuberculous meningitis hydrocephalus.
Abuhamed, Mutasem M.; Zhi, Song; Bo, Xiao
Central South University - The Third and the First Affiliated Xiangya Hospital - Department of Neurology
Neurosciences 2009; 14 (1): 75-77 (11 ref.)
Keywords: Hydrocephalus-drug therapy; Hydrocephalus-etiology; Urokinase-Type Plasminogen Activator-therapeutic use; Tuberculosis, Meningeal-complications; Tuberculosis, Meningeal-diagnosis; Antitubercular Agents; Treatment Outcome
Abstract: We present a patient with hydrocephalus after tuberculous meningitis successfully treated with urokinase. She presented with multiple episodes of headache, fever, and vomiting. She underwent external ventricular drainage and was treated with urokinase in addition to dexamethasone, acetazolamide, and 4 antituberculous drugs. She was evaluated clinically, radiologically, and by laboratory work-up. On short-term clinical follow-up [3 months], she was asymptomatic after the treatment with urokinase. She was radiologically evaluated 3 weeks after the treatment. An MRI of the brain showed a decrease in ventricular size. Urokinase can be considered as a safe and promising adjunctive treatment for tuberculous meningitis hydrocephalus.

Tuberculosis, Multidrug-Resistant

etiology

Risk factors for multi-drug resistant tuberculosis in patients at tertiary care Hospital, Peshawar.
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Keywords: Tuberculosis, Multidrug-Resistant-epidemiology; Risk Factors; Questionnaires; Cross-Sectional Studies
Abstract: To determine the frequency of common risk factors for multi-drug resistant tuberculosis in patients presented at a tertiary care hospital, Peshawar. Cross-sectional, observational study. Pulmonology Department, Khyber Teaching Hospital, Peshawar, from December 2006 to October 2007. Patients with positive AFB culture and sensitivity results and found resistant to both rifampicin and isoniazid with or with resistance to other first line anti-tuberculosis drugs, were recruited from both Pulmonology Ward and Outpatient Department [OPD]. Informed verbal consent was taken and a questionnaire administered to all participants of the study. Information regarding demographics, education status, occupation, monthly household income, AFB C/S, details of past history of tuberculosis and family history of TB or Multi-Drug Resistant [MDR-TB] was recorded. Data was analyzed on SPSS version 11. A total of 30 patients of MDR-TB were interviewed. Male [n=17] and female [n=13] ratio was 1.3:1. Mean age was 34.2 +/- 15.3 years. Ninety-two percent female and 52.9% male were uneducated. In 56.7%, monthly income was less than 5000 rupees and in 40% between 5000-10,000 rupees. All patients had previous history of Antituberculous Treatment [ATT], in which 20% had undertaken ATT course once, 53.3% twice and 26.7% thrice in the past. In the study group, 13 [43.3%] patients had not completed their first ATT course and 11 of them were receiving ATT from a general practitioner [GP] at that time. Seven [23.3%] patients had family history of TB but no one had
documented MDR-TB in the family. Resistance to RH was present in all patients; moreover, 56.7% had resistance to RHEZ+S. The most common factors in the study group were previous history of tuberculosis, repeated courses of ATT, prescribed by different clinicians and unsupervised treatment by a GP during the initial course of ATT.

**Typhoid Fever**

**drug therapy**

In vitro activity of gentamicin and amikacin against Salmonella enterica serovar Typhi: a search for a treatment regimen for typhoid fever.
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Calcutta School of Tropical Medicine - Department of Bacteriology and Serology

**Keywords:** Gentamicins-therapeutic use; Gentamicins-pharmacology; Aminoglycosides-therapeutic use; Amikacin-pharmacology; Amikacin-therapeutic use; Microbial Sensitivity Tests; Salmonella enterica-drug effects

**Abstract:** The emergence of Salmonella enterica serovar Typhi isolates resistant to ciprofloxacin and 3rd-generation cephalosporins is a concern for physicians in developing countries. This study assessed the in vitro activity of gentamicin and amikacin against 464 S. enterica serovar Typhi isolates obtained from blood of patients clinically suspected of enteric fever who attended the Calcutta School of Tropical Medicine from 1991 to 2003. The isolates were sensitive to gentamicin and amikacin, showing minimum inhibitory concentrations 0.01-4 microg/mL and 0.005-3.5 microg/mL respectively. Both agents showed bactericidal activity at concentrations of 2 microg/mL after incubation for 6 hours. Aminoglycoside antibiotics such as gentamicin and amikacin may thus be introduced as a treatment regimen for typhoid fever.

**Ureteral Obstruction**

**diagnosis**

Split renal function in young children with unilateral pelvi-ureteric junction obstruction using [99m]Tc-DTPA or [99m]Tc-MAG3.
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Cairo University - Department of Nuclear Medicine

**Keywords:** Child; Radioisotope Renography; Kidney Function Tests; Abdomen-ulasonography; Technetium Tc 99m Pentetate; Technetium Tc 99m Medronate

**Abstract:** Cases of unilateral hydronephrosis in pediatric patients are mostly due to pelvi-ureteric junction obstruction [PUJO] that causes hindrance in the drainage of urine outflow, leading to kidney function impairment. The impaired excretory drainage is expected to have diminished or normal split renal function [SRF] on the affected side. However, in a significant number of patients with severe PUJO an elevated SRF can be found. The aim of this work was to estimate the frequency of various grades of SRF in children with PUJO. Secondly, to find out whether there is a difference between [99m] Tc-DTPA or[99m]Tc-MAG3 in assessing the SRF in these children. Fifty-eight children with unilateral PUJO referred for dynamic renography were included in this study on retrospective basis. Twenty-four patients underwent dynamic renography using [99m] Tc-DTPA while 34 were evaluated using [99m] Tc-MAG3. For both [99m]Tc-DTPA and [99m] Tc-MAG3, the dynamic renography started by perfusion phase [1 frame/sec for 1 min] followed by 15-sec frames for 29 minutes. In all patients frusemide was given at a dose of 1mg/kg at 10 minutes post injection, In the DTPA and MAG3 studies, glomerular filtration rate [GFR] and renal plasma flow [ERPF] were estimated respectively and SRF was calculated from both figures. The normal range for SRF was considered 45% to 55%, in all patients; diagnostic ultrasound was done prior to isotopic renography. The mean age of the studied children was 18 +/- 10 months. The children in the DTPA and MAG3 groups were age and sex-matched. In the DTPA group 25% of the patients had a diminished SRF [< 45%], [46%] had normal SRF and 29% showed paradoxical SRF [> 55%]. In the MAG3 group, 32% of patients had diminished SRF, 41% had normal SRF and 26% showed paradoxical SRF of > 55%. There was no significant difference between DTPA and MAG3 in estimation of SRF in those with normal and suprnornnal SRF [P value = 0.0865 and 0.094 respectively] however MAG3 tends to be superior to DTPA in cases of impaired renal function [P value < 0.05. The obstructive renogram patterns define the functional significance of the various grades of hydronephrosis detected by ultrasound. Both [99m]Tc-MAG3 and [99m]Tc-DTPA are comparable and can estimate the SRF in young children with unilateral PUJO, however, in cases of impaired renal function [99m]Tc-MAG3 tends to be better than [99m]Tc-DTPA. Impaired and Paradoxical supranormal split renal function are significantly present in young children with unilateral PUJO.
Urinary Catheterization

adverse effects

Association between periurethral colonization with uropathogens and subsequent bacteriuria in catheterized patients.
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Keywords: Bacteriuria-etiopathology; Bacteriuria-microbiology; Urinary Tract Infections-microbiology; Pseudomonas aeruginosa; Staphylococcus aureus; Escherichia coli; Candida albicans; Cohort Studies

Abstract: To determine the number of catheterized patients who develop bacteriuria due to the presence of organisms in their periurethral flora, which may subsequently cause Urinary Tract Infection [UTI] in these patients. Non-interventional, cohort study. This study was conducted on patients of Medical Intensive Care, Surgical and Urology Units of Combined Military Hospital, Lahore, from February to April 2006. A total of 60 hospitalized patients, who were catheterized for various underlying diseases, were included in the study. Urine samples and periurethral swabs were obtained from all patients and cultured on appropriate culture media. Various tests used for the identification of microorganisms were: Gram-staining, catalase test, coagulase test and esculin hydrolysis for the identification of Gram-positive bacteria, API 20e for Gram-negative bacilli, whereas lactophenol blue preparation and germ tube test were used for the identification of yeasts. Results: Out of 60 patients, 41[68.3%] were males and 19 [31.7%] were females. The mean duration of catheterization was 4.5 days. In males, culture of periurethral swabs revealed coagulase negative staphylococci in 11 [40.7%], Staphylococcus aureus in 10 [37%] and Enterococcus fecalis in 3 [11.1%] patients. In females, the organisms isolated were coagulase negative staphylococci in 4 [25%], Staphylococcus aureus in 4 [25%], Enterococcus fecalis in 4 [25%], Pseudomonas aeruginosa in 2 [12.5%], Escherichia coli in 3 [18.6%] and Candida albicans in 3 [18.6%] patients. Twenty nine patients developed bacteriuria [p <0.05]. Escherichia coli was the commonest organism causing bacteriuria in either gender followed by other Gram-negative organisms. Coagulase negative Staphylococcus was isolated in the urine of one male patient only. In males, 2 [10%] out of 20 patients with Gram-negative bacteriuria were colonized by the same organism, whereas in females, 4 [44.4%] out of 9 bacteriuric patients were colonized by the same organism. Predominantly Gram-positive organisms colonized the periurethral area in males as well as in the majority of females, whereas Gram-negative bacteria were mainly responsible for the bacteriuria in both genders. There was a significant association between periurethral colonization and subsequent bacteriuria, however, prior colonization with a particular organism is not a decisive event in the initiation of bacteriuria.

Urinary Tract Infections

complications

Renal scar formation in children with recurrent urinary tract infections.
Najib, K.H.; Fallahzadeh, E.; Fallahzadeh, M.K.; Fallahzadeh, M.H.; Erjaee, A.
 Shiraz University of Medical Sciences - Department of Pediatrics
IRCMJ - Iranian Red Crescent Medical Journal 2009; 11 (1); 93-95 (10 ref.)
Keywords: Urinary Tract Infections-microbiology; Cicatrix-etiopathology; Cicatrix-diagnosis; Vesico-Ureteral Reflux-complications; Technetium Tc 99m Dimercaptosuccinic Acid-diagnostic use; Escherichia coli; Child; Retrospective Studies

Abstract: Reports of renal scar formation in children even in the absence of vesicoureteral reflux necessitates studying other causes of this major complication. The present study mainly focuses on the role of recurrent urinary tract infections [UTI] in renal scar formation. The records of 53 patients with recurrent UTI and the data on their regular follow up visits were reviewed. Renal scar formation was confirmed by dimercapto-succinic acid [DMSA] scan. DMSA scan, done at a mean age of 8.31 years, revealed renal scar formation in 12 cases [22.44%]. Seventy-five percent of the patients with scar formation and 80.5% without scar were older than 3 years at the time of the first documented UTI. The etiologic organism was found to be Escherichia coli in 89.2% of the infections in the scar forming versus 78.8% in the non-scar forming group. In the presence of normal urinary tract anatomy, recurrent UTI can be a significant cause of renal scar formation in children.
Venous Thromboembolism

diagnosis

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Saudi Medical Journal 2009; 30 (1): 13-23 (94 ref.)

Keywords: Venous Thromboembolism-therapy; Pregnancy Complications, Cardiovascular; Venous Thrombosis-diagnosis; Venous Thrombosis-therapy; Pregnancy Complications; Risk Factors

Abstract: Venous thromboembolic VTE complications are leading causes of maternal mortality in the developed world. Over the past 20 years, there has been an increase in the incidence of deep venous thrombosis DVT in pregnant women, and this increase may be explained by the risk factors including older age, cesarean section, history of VTE, and presence of thrombophilia. To reduce the incidence of VTE in pregnancy and improve the outcomes, a wider understanding of the risk factors, and a better identification of women at risk of the thrombosis, with objective diagnosis and provide the optimal effective and safe treatment. Deep venous thrombosis and pulmonary embolism, considered manifestations of the same disease, are often preventable and usually treatable. Nevertheless, VTE remains a substantial problem despite the dramatic decline in pregnancy-related mortality in industrialized countries over the past century. While diagnosis and management of VTE in pregnancy are challenging, and many diagnostic tests are less accurate in pregnant than non-pregnant patients, and the available options are suboptimal. This is a review in 2 parts, in part I, we address the following questions: In pregnant women, who developed DVT; how to diagnose, and the treatment once the diagnosis is confirmed. For each of these problems, the relevant background is briefly summarized, approaches recommended, and the suggested practical and relatively safe diagnostic management approaches. Part II, we address pregnant women with pulmonary embolism, how to diagnose and treat.

Waxes

Potential of Carnuba wax in ameliorating brittle fracture during tableting.
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University of Benin - Department of Pharmaceutics and Pharmaceutical Technology

Keywords: Drug Industry; Tablets

Abstract: Carnuba wax [as binder] forms hard tablets even at low compression load attributable to its high plasticity. The aim of the present study is to investigate its potential in ameliorating brittle fracture [i.e., lamination and capping] a problem often encountered during tableting. Granules of paracetamol [test drug] were made by triturating the drug powder with the melted wax or starch mucilage [20%w/v]. Resulting granules were separated into different size fractions which were separately compressed into tablets with and without a centre hole [as in- built defect] using different compression loads. The tablets were evaluated for tensile strength and the data used to calculate the brittle fracture index [BFI], using the expression: BFI = 0.5[T/T[0]-1] where T[0] and T are the tensile strength of tablets with and without a centre hole respectively. The BFI values were significantly lower [p < 0.05] in tablets made with carnuba wax compared with tablets made with maize starch as binders. Increase in particle size of the granules or lowering of the compression load further ameliorated the brittle fracture tendency of the tablets. Using granules with the larger particle size [850 micro m] and applying the lowest unit of load [6 arbitrary unit on the load scale of the tableting machine] the BFI values were 0.03 [carnuba wax tablets] and 0.11 [maize starch tablets]. When the conditions were reversed [i.e., a highest load, 8 units and the smallest particle size, 212 micro m] the BFI values now became 0.17 [carnuba wax tablets] and 0.26 [maize starch tablets]. The indication is that the use of large granules and low compression loads to form tablets can further enhance the potential of carnuba wax in ameliorating brittle fracture tendency of tablets during their manufacture.
Wounds and Injuries

Developing a national trauma management workshop in Iran applying an animal model.
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Baqiyatallah University of Medical Sciences - Trauma Research Center
Keywords: Wounds and Injuries-prevention and control; Education-methods; Medical Staff-education; Models, Animal; Clinical Competence-education
Abstract: Traumas take a heavy toll throughout the world and Iran is increasingly involved in this problem. So, education and training of medical staff for successful handling of traumatic patients seem necessary. In this study, we tried to develop and evaluate a national training program on trauma management to use animal models through a trauma management workshop. After primary survey and designing an advanced trauma management workshop, 144 practitioners of one armed force were randomly selected to be trained. Participants could experience some practical and new aspects. For example, they handled high velocity traumas and were involved throughout the different phases of trauma management under the supervision of experienced leaders. To assess the program, participants completed open-ended [essay], multiple-choice question [MCQ], and skill exams before and after the workshop. A trauma training program was developed and evaluated. In essay exam, scores significantly increased from 26 to 58, MCQ scores significantly rose from 49 to 65, and the participant's practical competency significantly improved from 46 to 75. Immense attention is required to optimize doctors' training in trauma care to avoid fossilization of cognitive knowledge and skills.

Xanthogranuloma, Juvenile

[A dermatosis papulo-nodulose of a new-born baby]
Abdel Moula, F.; Lahmar Boufaroua, A.; Rekik, W.; Bouraoui, S.; Goutalier, C.; Kourda, M.; Mzabi Regaya, S.
Khereddine Regional Center Hospital - Dermatology Department
Maghreb Medical 2009; 29 (391): 231, 255 (5 ref.)
Keywords: Xanthogranuloma, Juvenile-Surgery; Histiocytes; Infant, Newborn.
Appendix I

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Vakili, Rahim  
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Wahbi, Abdel Aziz M.  
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AJAIC - Alexandria Journal of Anaesthesia and Insentive Care N/A
Al Azhar Medical Journal 1110-0400
Al-Azhar Journal of Dental Science * N/A
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Alexandria Journal of Pediatrics N/A
Alexandria Journal of Pharmaceutical Sciences * 1110-1792
Alexandria Journal of Veterinary Science * 1110-2047
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Annals of Pediatric Surgery 1687-4137
Arab Journal of Biotechnology 1110-6875
Arab Journal of Laboratory Medicine [The] 1110-1822
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ASJOG - Ain Shams Journal of Obstetrics and Gynecology * 1687-2193
ASNJ - Alexandria Scientific Nursing Journal N/A
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Medical Journal of Cairo University [The] 0045-3803
Medical Journal of Teaching Hospitals and Institutes [The] * 1110-2039
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- Revue Marocaine de Chirurgie Orthopedique et Traumatologique
- Revue Marocaine de Medecine et de Sante
- Revue Marocaine des Maladies de L'Enfant *

OMAN (3)

- Oman Journal of Ophthalmology 0974-620X
- Oman Medical Journal N/A
- SQUMJ - Sultan Qaboos University Medical Journal 1029-4066

PAKISTAN (65)

- Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College 1563-3241
- Annals of Jinnah Postgraduate Medical Centre – Karachi *
- Annals of King Edward Medical College 1684-6680
- Bahria Journal of Professional Psychology 1816-0840
- Biomedica N/A
- Challenge - Quarterly [The] *
- Community Medicine *
- Diabetes Digest 1369-7501
- GJMS – Gomal Journal of Medical Sciences 1819-7973
- Hamdard Medicus 0250-7188
- Infectious Disease Journal of Pakistan 1027-0299
- International Journal of Pathology 1810-0155
- JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan 1025-9589
- JCPSP - Journal of the College of Physicians and Surgeons Pakistan 1022-386X
- JDUHS - Journal of the Dow University of Health Sciences 1995-2198
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Gulf Journal of Dermatology and Venereology [The] * N/A

Heart Views 1995-705X

JEMTAC – Journal of Emergency Medicine, Trauma & Acute Care 1995-4522

Qatar Medical Journal 0253-8253

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Annals of Saudi Medicine 0256-4947

Annals of Thoracic Medicine 1817-1737

Hematology, Oncology and stem Cell Therapy 1658-3876

Joint Centre for Research in Prosthetics and Orthotics [The] * N/A

Journal of Family and Community Medicine 1319-1683

Journal of Infection and Public Health 1876-0341

Journal of Taibah University Medical Sciences 1658-3612

Journal of King Abdulaziz University - Medical Sciences * 1319-1004

Journal of the Saudi Heart Association 1319-9218

MEJO - Middle East Journal of Ophthalmolgy * N/A

Neurosciences N/A

Pan Arab Journal of Neurosurgery 1319-6995

Rehabilitation International * N/A

Research Centre Bulletin * 1019-5335

Saudi Epidemiology Bulletin 1319-3965

Saudi Heart Journal * 1018-077X

Saudi Journal of Disability and Rehabilitation * 1319-6499

Saudi Journal of Gastroenterology [The] 1319-3767

Saudi Journal of Ophthalmology 1319-4534

Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The] * 1319-8491

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Last update September 2009
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* No issues received since 2005

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