

# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



**IMEMR Current Contents**  
December 2006

**Vol. 5 No. 3**

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# IMEMR Current Contents

## Rationale

The Index Medicus for the WHO Eastern Mediterranean Region (IMEMR) was previously published as a retrospective indexing service. For the last two years we have applied a policy of indexing of journals as soon as they reach us. This has changed the whole concept of the Index Medicus from an archiving tool to a current awareness information tool. For technical staff of the Regional Office, health care staff and medical professionals they 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 considered.

## Scope and Coverage

The **IMEMR Current Contents** is issued on a quarterly basis including articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database<sup>1</sup>.

## Indexing Level

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

## Organization of the IMEMR

### The main body of the Index

The Index is organized in alphabetical order, according to the Main Subject Headings (MeSH). In most cases one main subject is assigned to each article. Under the main subject, entries are sorted by Subheading in alphabetical order also. Each entry includes the title of the article, author(s), Journal title, year (date of publication), volume number, issue number, number of pages, number of references, subject descriptors, geographic descriptors and abstract has been added and is 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 publisher interested in a subset of the database may be provided with data on WINISIS format upon request.

### Availability of photocopies

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

### Availability on the Internet

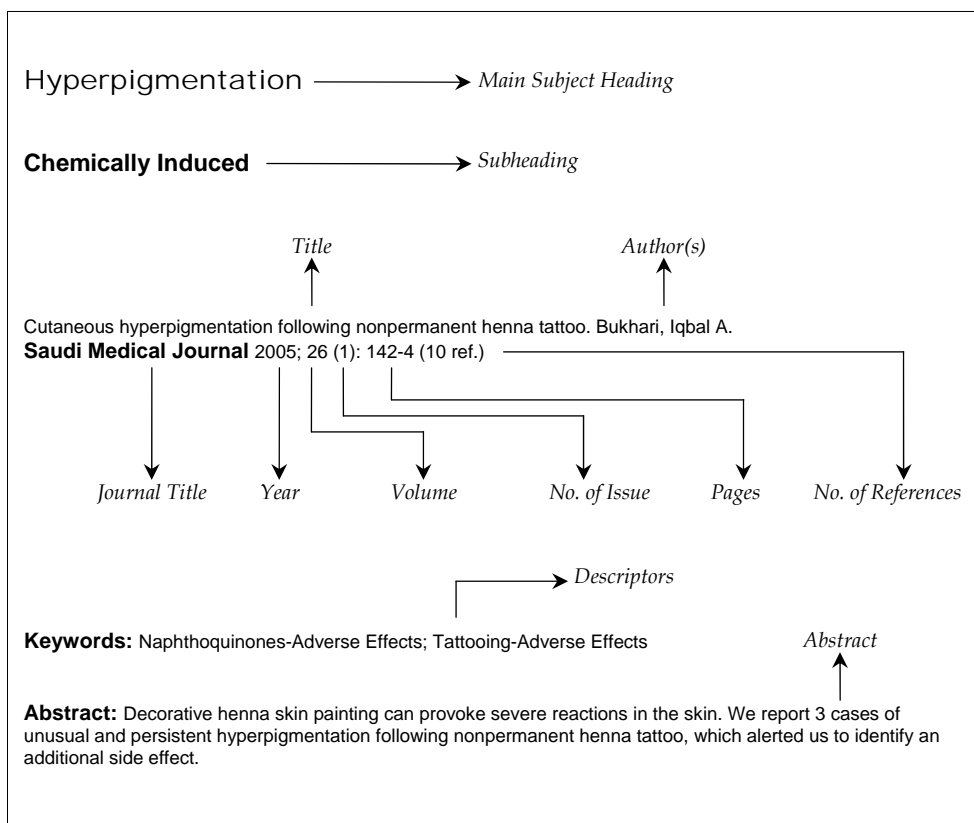
This issue, as well as all forthcoming issues, will appear in WHO/EMRO web site on the Internet, as part of the complete edition of the Index. Internet address is

**<http://www.emro.who.int/HIS/VHSL/Imemr.htm>**

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<sup>1</sup> Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syria Arab Republic, Tunisia, U.A.E., Yemen Arab Republic

**Figure (1) : Sample of entry for one record from the Index Medicus**



# Subjects Index



## Abdomen, Acute

**Epidemiology****Spectrum of general surgical problems in the developmentally disabled adults.**

Khalid, Kamran; Al Salamah, Saleh M.

King Saud University Unit, Riyadh Medical Complex - College of Medicine - Department of Surgery

*Saudi Medical Journal* 2006; 27 (1): 70-75 (11 ref.)

**Keywords:** Abdomen, Acute-Surgery; Appendicitis-Surgery; Intestinal Obstruction; Mental Retardation-Epidemiology; Colonic Pseudo-Obstruction; Acute Disease; Pica-Epidemiology; Prospective Studies; Disabled Persons

**Abstract:** This study highlights the spectrum of general surgical problems necessitating admission on intellectually disabled adult patients. Problems encountered in the management and the ways to overcome various difficulties are highlighted. Prospective collection of data on 63 consecutive developmentally disabled adult patients admitted to the Department of General Surgery, Riyadh Medical Complex [RMC], Riyadh, Kingdom of Saudi Arabia for various indications from January 2000 through December 2004. Demographic details, clinical presentation, diagnostic modalities, associated physical and neurological disabilities, coexisting medical condition, treatment options, morbidity and mortality were analyzed. Various difficulties encountered during the management and mean to overcome these problems are addressed. Sixty-three patients accounted for 71 admissions. Mean age was 26.7 years with a male preponderance [4.25:1]. Fifty-four patients were admitted for various emergency conditions. History of pica could be obtained in 33% of the cases. Twenty-seven patients were admitted for acute abdomen. Volvulus of the colon [22.2%] and pseudo-obstruction [18.5%] were the most common causes of acute abdomen. Twenty-one patients were admitted with upper gastrointestinal bleeding. Reflux esophagitis was the most common cause of bleeding [62%]. Overall morbidity was 41% for emergency admissions and 22% for elective surgery. Hospital mortality was 21.4% for emergency surgery. There was no death in elective cases. Developmentally disabled patients comprise a special class of patients with peculiar management problems. The treating clinician should be aware of various unexpected conditions not found as frequently in the normal patient population. Apparent lack of pain does not exclude an acute emergency. Possible surgical condition should be suspected if there is vomiting, abdominal distension, fever, increased irritability of recent onset. Male gender and history of pica are added risk factors.

## Acne Vulgaris

**Drug Therapy****Treatment of acne vulgaris with 2% topical tea lotion.**

Sharquie, Khalifa E.; Al Taurfi, Ihsan A.; Al Shimary, Wathik M.

[ksharquie@yahoo.co.uk](mailto:ksharquie@yahoo.co.uk)

Al-Yarmuk Teaching Hospital - Department of Dermatology and Venereology, Iraq Board for Medical Specialization

*Saudi Medical Journal* 2006; 27 (1): 83-85 (10 ref.)

**Keywords:** Administration, Topical; Skin-Pathology; Tea

**Abstract:** To use 2% tea lotion as natural plant remedy in the treatment of acne vulgaris. We conducted this study in the Department of Dermatology and Venereology in Baghdad Teaching Hospital, Iraq during the period between October 2002 and October 2004. In this single blind randomly controlled therapeutic study, we enrolled 60 patients, their ages ranged from 14-22 years. There were 35 females and 25 males. We divided the patients equally into 2 groups; we instructed group A to use freshly prepared 2% tea lotion twice daily for 2 months, while group B used a control solution. We graded the acne vulgaris as mild and moderate acne by counting the number of papules and pustules. We carried out statistical analysis by computer using t-test, f-test, and chi-square when needed. Forty-nine patients completed the study. In group A [25 patients], we noted a significantly reduced mean lesion count of papules and pustules after 2 months of therapy. The response of patients to treatment was good in 64%, moderate in 24% and no response in 12%. The satisfaction of patients with treatment was full in 64%, partial in 24%, and no satisfaction in 12%. In group B [24 patients], the lesions showed no significant reduction after 2 months and the response of patients to treatment was good in 20.8%, moderate in 45.8%, and no response in 33.4%. The satisfaction of patients with treatment in this group was full in 4.2%, partial in 12.5%, and no satisfaction in 83.3%. The mean difference in outcome after 8 weeks between the 2 study groups was statistically significant. The 2% tea lotion has proved its efficacy as a topical therapy for acne vulgaris. This is a new natural plant extract, which lacks any side effects.

**Psychology****The persian version of the cardiff acne disability index. reliability and validity study.**

Aghaei, Shahin; Mazharinia, Nazila; Jafari, Peyman; Abbasfard, Zahra

[sharinaghaei@yahoo.com](mailto:sharinaghaei@yahoo.com)

Shiraz University of Medical Sciences - Jahrom Medical School - Department of Dermatology

*Saudi Medical Journal* 2006; 27 (1): 80-82 (13 ref.)

**Keywords:** Questionnaires; Disability Evaluation; Quality of Life; Severity of Illness Index

**Abstract:** The Cardiff Acne Disability Index [CADI] assesses the impact of acne on a patients life. The aim of the present study was to translate the CADI into Persian language and to validate the Persian version. Using standard forward-backward translation, 2 bilinguals translated the CADI into Persian language. We back translated it into

English and the final version was provided. We conducted this study from February through December 2004 on 100 patients with acne attending the Department of Dermatology, Jahrom Medical School, Jahrom, Iran who completed the Persian version of the CADI questionnaire. We carried out all statistical analyses using the Statistical Package for the Social Sciences version 11 for Windows. A total of 100 patients [15 men, 85 women] with acne participated in this study. The mean age of the patients was 20.76 +/- 2.94 years. Scores of the CADI ranged from 2-14 [7.57 +/- 2.58]. Reliability analysis showed a satisfactory result [Cronbachs alpha coefficient = 0.79]. Moreover, Pearsons correlation coefficient of 0.72 demonstrated the good internal consistency of the scale. The Persian version of the CADI questionnaire is a reliable, valid, and valuable tool for assessing the impact of acne on a patient's life.

## Acquired Immunodeficiency Syndrome

### Diagnosis

#### Evaluation of a new dot blot assay for confirmation of human immunodeficiency virus type 1 and 2 infection using recombinant p24, gp41, gp120 and gp36 antigens.

Ravanshad, Mehrdad; Sabahi, Farzaneh; Mahboudi, Fereidoun; Kazemnejad, Anoshirvan  
Tarbiat Modarres University - Faculty of Medical Sciences - Department of Virology

**Saudi Medical Journal** 2006; 27 (1): 31-36 (32 ref.)

**Keywords:** HIV Antibodies-Analysis; HIV Antibodies-Immunology; Blotting, Western; Enzyme-Linked Immunosorbent Assay; Evaluation Studies; HIV-1; HIV-2

**Abstract:** Objectives:A sensitive and accurate dot blot assay using recombinant p24 [gag], gp41 and gp120 [env] proteins of HIV-1 and also recombinant gp36, the specific HIV-2 antigen was developed to confirm the presence of antibodies in sera reactive in screening enzyme-linked immunosorbent assays.Methods:We collected sera from Iranian 125 confirmed HIV positive Iranian samples [seropositive group] from AIDS patients, asymptomatic HIV-infected subjects, HIV-infected intravenous drug users and also hemophilic infected subjects. The samples were obtained from the AIDS Specimen Bank, Pasture Institute, Iran during 2002 to 2003. We also obtained 180 samples [seronegative group] from healthy blood donors. Recombinant antigens were expressed in Escherichia coli. By use of highly purified antigens, the dot blot procedure was developed. Analysis of the results was accomplished by capturing the dot blot images.Results:We established and interpreted the results using Centers for Disease Control criteria. We defined the positive test result as the presence of antibody against at least 2 different HIV gene products, one of which had to be an env gene product while a negative test result was defined as no antibodies against any of the HIV gene products and an indeterminate result was defined as antibodies reacting with only one HIV env gene product or against gag gene product only.Conclusion:The recombinant HIV dot blotting assay identified seropositive individuals with a high degree of accuracy; none of the HIV-seropositive subjects had a negative test result. Reactivity with these antigens, demonstrated 100% sensitivity and specificity in distinguishing seronegative from seropositive sera. The different sets of Western blot interpretative accepted criteria did not make a difference in interpretation of the seronegative and seropositive samples.

## Adrenal Hyperplasia, Congenital

#### Congenital adrenal hyperplasia and pseudodiphallia, new association.

Al Jadid, Hassan; Al Aboudi, Mohamad; Hijazi, Said; Yaeesh, Suhad; Ameer, Mamoon; Al Hammouri, Fawzi  
Departments of Pediatrics Surgery, Gynecology and Obstetrics and Pediatrics and Child Endocrinology

**Jordan Medical Journal** 2006; 40 (1): 66-69 (10 ref.)

**Keywords:** Genitalia, Male-abnormalities; Scrotum-abnormalities

**Abstract:** We are presenting and to the best of our knowledge a new neonatal presentation of congenital adrenal hyperplasia, where a male newborn was born with pseudodiphallia and proved to have congenital adrenal hyperplasia. The metabolic derangement end product of congenital adrenal hyperplasia may have affected the fetus external genitalia leading to development of this anomaly. We therefore, presented this case because of this rare association.

#### Hyperplasie congenitale des surrenales par bloc en 21-hydroxylase : evolution - quels problemes a l'age adulte?.

Hachicha, M.

**Revue Maghrébine de Pédiatrie [La]** 2006; 16 (1): 51-53 (6 ref.)

**Keywords:** Steroid 21-Hydroxylase

#### [21-hydroxylase deficiency : an exemplary model of the contribution of molecular biology in the understanding and management of the disease].

Forest, M.G.; Tardy, V.; Nicolino, M.; David, M.; Morel, Y.

**Revue Maghrébine de Pédiatrie [La]** 2006; 16 (1): 54-61 (26 ref.)

**Keywords:** Steroid 21-Hydroxylase; Molecular Biology; Virilism; Genetic Counseling; Prenatal Diagnosis; Heterozygote Detection; Disease Management

**Abstract:** Congenital adrenal hyperplasia [CAH] is a family of autosomal recessive disorders caused by mutations in genes encoding the enzymes involved in one of the various steps of adrenal steroid synthesis. Steroid 21-hydroxylase deficiency [21-OHD] is responsible for over 95% of the 5 forms of CAH, and results due to enzymatic defect owing to mutation in the CYP21 gene. The disease has two major clinical presentations. The classical" form is severe, and

divided into a salt wasting [SW] and simple virilizing [SV] subgroups. In both, affected female fetuses undergo virilization of the external genitalia prenatally and present at birth with sexual ambiguity. In addition, in both sexes infants with SW CAH are at risk of life-threatening adrenal crisis without treatment. This is why it is so important to make a diagnosis and to counsel the families. The diagnosis is easy by measuring the plasma levels of 17-hydroxyprogesterone [17-OHP] in antenatal [amniotic fluid], or prenatal samples [peripheral blood]. Confirmation by molecular genetic analysis is advised. The second form of 21-OHD is called "non classical" because the presentation is much less severe and the onset of clinical expression occurs long after birth, often in the peripubertal period, as non-specific symptoms of hyperandrogeny. The unambiguous diagnosis of the latter requires a simple short ACTH test, with the measurement of 17-OHP at 60 mm. In both forms, the mutations on the gene CYP21 responsible for the disease are now well known and can be identified by molecular biology techniques. There is a good correlation between phenotypes and genotypes, due to variable amount of the 21-hydroxylase-enzyme activity left [null to 50-60%]. SW, SV and NC forms are associated with distinct mutations or combination of mutations. Nowadays, by combining hormonal and molecular tests, it is possible to predict the clinical form of the disease in a given family in the context of a prenatal diagnosis, which can lead to a prenatal treatment. Therefore, 21-OHD genotyping also appears essential for a new approach of genetic counseling, prediction of clinical form after postnatal screening and to define the post-ACTH 17-OHP values indicating the cut-off lines between NC, heterozygote and normal subjects.

## Aged

### Elderly phenomena and its outcomes in Iran.

Amirsadri, A.; Soliemani, H.

**Journal of Hygiene and Health** 2006; 2 (1): 19-34 (9 ref.)

**Keywords:** Health Services for aged; Life Expectancy; Population

## Air Pollution

### Determination of Tehran's air quality in 2004, using Pollutant Standard index.

Aredkani, S. Sobhan; Sari, A. Esmaeili; Cheraghi, M.; Aredkani, A. Sobhan; Tayebi, L.

**Journal of Hygiene and Health** 2006; 2 (1): 13-18 (11 ref.)

**Keywords:** Air Pollutants; Environmental Pollution

### Respiratory symptoms reported by adults living in an air polluted area in Jordan.

Shishani, Kawkab

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The Hashemite University - Department of Community health Nursing

**Jordan Medical Journal** 2006; 40 (1): 21-28 (14 ref.)

**Keywords:** Prevalence; Signs and Symptoms, Respiratory; Research Design

**Abstract:** Al-Hashemeya area is declared officially as one of the most air polluted areas in Jordan. Some of the hazardous air pollutants in Al-Hashemeya are SO<sub>2</sub>, CO, CO<sub>2</sub>, NO<sub>x</sub> and PM<sub>10</sub>. This descriptive study aims to describe prevalence of self-reported respiratory symptoms in Al-Hashemeya area, and examine the factors associated with respiratory symptoms. The sample was 400 male and female residents of Al-Hashemeya 8 years or older. Data on respiratory symptoms were collected using Respiratory Risk Profile [RRP]. The most frequent respiratory symptoms self-reported were difficulty in breathing when inhale dust or fumes [53%], flu lasting more than one week [51%], difficulty in breathing when exercising [42%], difficulty in breathing because of nasal congestion [39%], mucus without having cough [39%], difficulty in breathing when exposed to cold air [37%]. Use of asthma medication was the only factor associated with respiratory symptoms [ $r = 0.27$ ,  $p = .01$ ]. the rates of self-reported respiratory symptoms were high.

## Air Pollution, Indoor

### Present situation of house dust mites in Dakahlia governorate, Egypt.

El Shazly, Atef M.; El Besh Bishi, Samar N.; Azab, Manar S.; El Nahas, Hala A.; Soliman, Mohamed E.; Fouad, Mahmoud Ali Hassan; Monib, Mohammad El Salahy M. M.

Mansoura University, Egypt - Faculties of Medicine - Departments of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 113-126 (29 ref.)

**Keywords:** Dust; Mites-Classification; Urban Population; Rural Population; Ecology; Seasons

**Abstract:** House dust mites are common inhalant allergens, which can precipitate atopic disease episodes. The present study revealed presence of four mites. These are Dermatophagoides farinae, D. pteronyssinus, Acheles gracilis and Ornithonyssus bacoti. Population densities of different live adult mites were investigated in different house habitats. In urban houses, pyroglyphid mites were the predominant in bedrooms and D. farinae was the most abundant. A. gracilis was more abundant in living rooms followed by D. farinae then D. pteronyssinus. A. gracilis was the most prevalent in kitchens. While in rural houses, O. bacoti was the most abundant species followed by pyroglyphid mites. Since Dermatophagoides species and A. gracilis were present in numbers high enough to allow their ecological consideration, their seasonal abundance in urban bed-rooms was investigated and revealed that both D. farinae and D. pteronyssinus have two peaks of abundance, one slightly higher in spring and the second in autumn. A. gracilis has two peaks but the higher occurred in autumn and the second in spring.



## Amblyopia

### Complications

#### Medium term outcomes of strabismus surgery in patients with monocular dense amblyopia.

Bayramlar, Huseyin; Gunduz, Abuzer

**Saudi Medical Journal** 2006; 27 (2): 276-278 (5 ref.)

**Keywords:** Strabismus-Surgery; Follow-Up Studies; Treatment Outcome

## Anal Canal

### Injuries

#### Surgical treatment of anorectal injuries.

Kaymakcioglu, Nihat; Ozer, Tahir M.; Yagci, Gokhan; Simsek, Abdurrahman; Mentese, Oner; Harlak, Ali; Zeybek, Nazif; Tufan, Turgut

**Saudi Medical Journal** 2006; 27 (2): 272-274 (5 ref.)

**Keywords:** Anal Canal-Surgery; Rectum-Injuries; Rectum-Surgery; Digestive System Surgical Procedures; Retrospective Studies

## Anemia, Iron-Deficiency

#### Iron status in preschool Jordanian children of 12-59 months of age.

Kharabsheh, Sa'ad H.; Qarqash, Wisam; Faqih, Ahmad M.  
University of Jordan - Ministry of Health - Nutrition Department

**Jordan Medical Journal** 2006; 40 (1): 4-13 (33 ref.)

**Keywords:** Iron, Dietary; Cross-Sectional Studies; Child, Preschool

**Abstract:** A national cross-sectional study was conducted in Jordan in 2002 to assess the iron status of 12- to 59-month-old preschool children, using a multistage cluster sampling design that included a total of 1253 of all eligible children. The prevalence rate of anemia [Hemoglobin [Hb] 11.0 g/dL], Iron Deficiency [ID; serum ferritin [SF] 12micro g/L] and Iron Deficiency Anemia [IDA; Hb 11.0 g/dL + SF 12micro g/L] were found to be 20.1%, 26.1%, and 10.1%. The respective prevalence rates in toddlers of 12 to 23 months of age attained higher levels of 34.4%, 45.9%, and 21.3%. This is the first national study whereby Hb and SF were used to assess the iron status of preschool children. It is concluded that more attention should be given to the iron status of preschool Jordanian children particularly those who are less than two years old since this is a period during which lack of iron causes impairment to mental development.

## Anemia, Sickle Cell

### Metabolism

#### Zinc and antioxidant vitamin deficiency in patients with severe sickle cell anemia.

Hasanato, Rana M.W.

[akalmomen@yahoo.com](mailto:akalmomen@yahoo.com)

King Saud University - College of Medicine and King Khalid University Hospital - Department of Medical Biochemistry

**Annals of Saudi Medicine** 2006; 26 (1): 17-21 (44 ref.)

**Keywords:** Anemia, Sickle Cell-Blood; Zinc-Deficiency; Vitamin E Deficiency; Minerals; Antioxidants; Dietary Supplements; Vitamin A; Ascorbic Acid; Copper

## Anesthesia, Inhalation

#### Anesthetic management of a morbidly obese patient using laryngeal mask airway.

Siddiqui, Ahsan K.; El Saleh, Abdul Rahman; Zahran, Fathi B.; Mowafi, Hany A.

**Saudi Medical Journal** 2006; 27 (2): 280-282 (5 ref.)

**Keywords:** Laryngeal Masks; Obesity, Morbid-Complications

## Animals, Domestic

### Parasitology

#### Some parasitic flukes infecting farm animals in Al-Santa center, Gharbia governorate, Egypt.

Haridy, Fouad M.; El Sherbiny, Gehad T.; Morsy, Tossou A.

Ain Shams University, Cairo 11566, Egypt - Faculty of Medicine - The General Organization for Veterinary Services

(Formerly), Cairo Curative Organization, and Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 259-264 (21 ref.)

**Keywords:** Parasitic Diseases, Animal; Trematode Infections; Cattle; Buffaloes; Sheep; Fasciola; Paramphistomatidae; Commiphora-Drug Effects; Treatment Outcome

**Abstract:** A total of 213 farm animals in the vicinity of Al-Santa Center [73 cattle, 90 buffaloes and 50 sheep] were coprologically examined for natural infection with trematode-parasites. The results showed that cattle were infected with *Fasciola* sp. [21.8%] and *Paramphistomum* sp. [7.3%], buffaloes were infected with *Fasciola* sp. [17.7%] and *Paramphistomum* sp. [10%], while sheep were infected with *Fasciola* sp. [30%], *D. dendriticum* [5%] and *Paramphistomum* sp. [4%]. The three animal species were treated for paramphistomiasis with a total dose of 1800, 6000 and 7500 mgm of Oleo-resin solution of *Commiphora molmol* [dose of 6 ml of 10 gm% equal to 2 Mirazid [R]. The cure was 100% in sheep 80% in cattle and 44.4% in buffaloes. High dose for both cattle and buffaloes to reach 100% cure rate was not tried.

## Anthropometry

### **Anthropometric assessment of primary school children for design of desk and bench in classroom.**

Habibi, E.; Haysalehi, E.

**Journal of Hygiene and Health** 2006; 2 (1): 6-12 (10 ref.)

**Keywords:** Ergometry; Schools; Data Collection

### **Morphological evaluation of Head and face in 18-25 years old women in Southeast of Iran.**

Heidari, Zahra; Sageheb, Hamid Reza; Mugahi, Mohammad Husein

Zahedan University of Medical Sciences - School of Medicine - Department of Anatomical Sciences

**Journal of Medical Sciences** 2006; 6 (3): 400-404 (19 ref.)

**Keywords:** Cephalometry; Cross-Sectional Studies; Head-anatomy and histology; Face-anatomy and histology

**Abstract:** Measurement of human head or cephalometry is used in identification, forensic medicine, plastic surgery, orthodontics, archeology and examine the differences between races. This investigation was undertaken on 800 young women [18-25 years old] to determine the head and face phenotypes among them in two aborigines of Sistani [Fars] and Baluchi who were resident in southeast of Iran. In this study cephalic and prosopic indices were determined by classical cephalometric method. Means and standard deviation of cephalic indices were 78.4\_4.15 and 81.94\_4.99 and prosopic indices were 83.22\_4.02 and 84.86\_5.15 in Sistani and Baluchi subjects, respectively. Based on the cephalic index, the dominant and rare head types in Sistani group was mesocephalic [41.3%] and hyperbrachycephalic [6%] and in Baluchi group was brachycephalic [42%] and dolichocephalic [5.5%], respectively. Furthermore, according to the prosopic index, the dominant and rare face type among Sistanis were euryprosopic type [50.8%] and hyperleptoprosopic [0.5%] and in Baluchi group were euryprosopic [37%] and hyperleptoprosopic [2.5%], respectively. This research showed that differences in terms of head and face type indices between these two groups were statistically significant. Based on this cross-sectional study, it seems that there is differences between the aforementioned groups.

## Antimony

### **Pharmacokinetics**

#### **Pharmacokinetics and tissue distribution of antimony after multiple intramuscular administration in the hamster.**

Al Jaser, May H.; Radwan, Mahasen A.; Zaghoul, Iman Y.

King Saud University - College of Science - Department of Zoology

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 52-58 (25 ref.)

**Keywords:** Antimony; Antimony Sodium Gluconate-Pharmacokinetics; Cricetinae; Leishmaniasis-Drug Therapy; Injections, Intramuscular

**Abstract:** The fate of pentavalent antimony [Sb. ] in different tissues in the body after intramuscular administration is of great interest for the future study of Sb. therapy in different sitting. Pharmacokinetics and tissue distribution of antimony [Sb. ] were studied in the hamster after daily dose of sodium stibogluconate equivalent to 120 mg kg. 1 of Sb. , administered intramuscularly for two weeks. Liver, spleen, heart, kidney and skin tissues were isolated after blood collection at the specified time. Antimony was measured in these tissues after suitable treatment, ashing and processing, by flameless atomic absorption spectrophotometry. The concentrations of Sb. time profile in blood showed a linear rapid decline with elimination half life [t. /2] of 1.7 h. The concentration of drug [micro g/gm] declined in a biphasic manner from almost all tissues. However, the concentrations of Sb. were declined in slower fashion from the hamster tissues than from the blood. The maximum concentration of Sb. was determined in the kidney tissues [3416 +/- 631 micro g/gm] while the lowest concentration was in the spleen [209 +/- 187 micro g/gm]. The maximum concentration of Sb. in the kidney [micro g/gm] was more than 25 fold higher than that measured from blood [micro g/ml]. The AUC of Sb. in the studied tissues was in this rank: kidney liver skin spleen heart blood. Surprisingly, the heart, spleen and liver showed a similar t. /2 of 5.2-6.2 h while the kidney and skin had a t. /2 of about 3 h. Therefore, disposition of Sb. seems to kinetically follow multicompartmental model. The kidneys got the highest concentration of drug which may lead to nephrotoxicity on long term therapy.

## Antiphospholipid Syndrome

### Complications

#### Recurrent intestinal perforations as a presentation of antiphospholipid syndrome.

Al Daqal, Saleh; Mansouri, Majed; Qari, Mohammed H.; Sibiany, Abdulrahman  
King Abdulaziz University - Department of Surgery

**Annals of Saudi Medicine** 2006; 26 (1): 52-55 (13 ref.)

**Keywords:** Thrombosis-Etiology; Thrombosis-Complications; Fatal Outcome; Intestinal Perforation-Etiology; Antibodies, Antiphospholipid-Blood; Abortion, Habitual-Etiology; Recurrence

## Antithyroid Agents

### Pharmacology

#### Effect of abouthiouline, a novel drug with therapeutic potential as antithyroid, on some biochemical and hematologic parameters in mice and rats .

Abou Auda, Hisham S.; Abou Shaaban, Rafiq R.A.

[hisham@ksu.edu.sa](mailto:hisham@ksu.edu.sa)

King Saud University - College of Pharmacy - Department of Clinical Pharmacy

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 34-41 (20 ref.)

**Keywords:** Methimazole-Metabolism; Thyroid Gland-Drug Effects ; Thyroid Gland-Metabolism; Mice; Rats; Propylthiouracil-Pharmacology

**Abstract:** Abouthiouline [1-Cyclohexyl-3[3-quinolyl]-2-thiourea] is a novel compound with antithyroid activity. Abouthiouline [ABL] was designed based on structure-activity relationships [E-state indexes] aimed at reducing the antioxidant properties of the compound by modification of acyclic thiourylene moiety. Antioxidant effects of currently available treatments such as propylthiouracil [PTU], methimazole [MTM] are associated with an incidence of agranulocytosis and aplastic anemia. In the present study, the preclinical toxicology of ABL was determined in mice and rats and compared with two reference compounds, namely, propylthiouracil, methimazole. Following short-term administration [7 days] to mice, ABL had minimal effects on biochemical parameters, although significant reductions in both total protein and albumin were noted. Long-term studies [30 days] in rats revealed significant effects of Abouthiouline, propylthiouracil and methimazole on serum electrolyte and glucose levels. Abouthiouline had no detrimental effects on hematologic parameters. However, total WBC count [propylthiouracil] and neutrophil levels [propylthiouracil and methimazole] were significantly decreased among other treatment groups. The results of this investigation suggest that Abouthiouline is a promising new antithyroid therapy with a reduced risk of hematologic toxicity that is associated with PTU and MTM. Further studies are warranted to assess the safety and efficacy of Abouthiouline.

## Antitussive Agents

#### Antitussive effect of herbal tea on chemical induced coughing in mice.

Khan, Rafeeq Alam; Sadruddin, Shireen; Ul Haq, Rizwan; Mirza, Talat  
University of Karachi - Department of Pharmacology

**Journal of Basic and Applied Sciences** 2006; 2 (2): 79-82 (16 ref.)

**Keywords:** Beverages; Mice; Plants, Medicinal; Dextromethorphan; Cough

**Abstract:** The antitussive activity of herbal tea was evaluated in un-anaesthetized mice. A cough model described by Miyagoshi et al., 1986, using SO<sub>2</sub> for induction of cough was used. Herbal tea inhibited the cough induction in a dose-dependent manner when administered in the dose of 0.14, 0.2 and 4gm/kg following oral administration to the mice. The antitussive activity of herbal tea was comparable to dextromethorphan against coughing induced by sulfur dioxide gas.

## Aortitis

### Pathology

#### Tuberculous aortitis.

Bukhary, Zakeya A.; Alrajhi, Abdulrahman A.

Taibah University - College of Medicine - Department of Medicine

**Annals of Saudi Medicine** 2006; 26 (1): 56-58 (17 ref.)

**Keywords:** Aortitis-Complications; Tuberculosis, Cardiovascular-Pathology; Tuberculosis, Cardiovascular-Complications; Aortic Rupture; Tomography, X-Ray Computed; Emergencies

## Appendix

### anatomy and histology

#### **Histomorphometric profile of the human vermiform appendix.**

Shugaba, A.I.; Umar, M.B.T.; Singh, S.P.

University of Jos - Faculty of Medical Sciences - Department of Human Anatomy

**Journal of Medical Sciences** 2006; 6 (3): 445-451 (49 ref.)

**Keywords:** Appendicitis-etiology; Mucous Membrane; Serous Membrane

**Abstract:** The mucosal, luminal and lymphoid follicle diameters of the vermiform appendix were measured in micrometers from the basal, middle and terminal segments and their relationships analyzed and plotted. There is a strong relationship between these diameters, especially between lymphoid follicle diameter and the thickness on one hand and that between the luminal diameter and the lymphoid follicle diameter on the other. The lumen decreases when either the thickness or the lymphoid follicle diameter increases in size, suggesting that obstruction can occur at such sites with the resulting microscopic and macroscopic changes that come to bear on normal subjects. This segmental profile shows that, histomorphological and histomorphometric changes in the appendix are capable of explaining the basis and indeed the likely sites of obstruction in appendicitis.

## Arteriovenous Fistula

### Surgery

#### **The use of endovascular stent-grafts for the treatment of common carotid-internal jugular fistula.**

Bawazeer, Mohammed A.; Al Jared, Mohammad S.; Al Brekeit, Khalid A.; Al Harbi, Wedad M.

[masbawazeer@hotmail.com](mailto:masbawazeer@hotmail.com)

Armed Forces Hospital - Department of Vascular Surgery

**Saudi Medical Journal** 2006; 27 (1): 101-104 (7 ref.)

**Keywords:** Carotid Artery Diseases-Surgery; Stents; Carotid Artery, Common; Catheterization; Kidney Failure, Chronic; Jugular Veins

**Abstract:** We report a case of a fistula between the common carotid artery and the internal jugular vein due to a hemodialysis catheter insertion. We managed the fistula by the insertion of a covered-stent at the common carotid artery, and completely sealed the fistula without immediate complications. We present this case to highlight this new successful method of treatment.

## Arteriovenous Shunt, Surgical

#### **The factors of arteriovenous fistula failure in hemodialysis patient.**

Talaiezhadeh, Abdolhassan; Paziar, Faramar

**Saudi Medical Journal** 2006; 27 (1): 114-116 (5 ref.)

**Keywords:** Kidney Failure, Chronic-Therapy; Kidney Failure, Chronic-Mortality; Renal Dialysis-Adverse Effects; Risk Factors; Treatment Failure; Prospective Studies

## Arthritis

### Surgery

#### **Subtalar distraction arthrodesis for post-traumatic arthritis.**

Refae, Hesham H.

South Valley University, Egypt - Sohag Faculty of Medicine - Department of Orthopaedics

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 47-54 (24 ref.)

**Keywords:** Arthritis-Etiology; Arthrodesis-Adverse Effects; Subtalar Joint-Surgery; Follow-Up Studies; Treatment Outcome

**Abstract:** Surgical fusion of the subtalar joint is the salvage procedure available for post-traumatic arthritis in adults. Combined distraction of the talo-calcaneal joint with iliac crest bone grafting and fixation with a screw was used to achieve a fusion of the talo-calcaneal joint in 32 adults [36 arthrodesis], 26 were males and 6 females. Their age ranged from 19 to 55 years [average 37 years]. The mean follow-up was twenty two months [range 12 - 30 months]. Based on the modified scoring system for pain and function of the hind foot, the results were good in 29 feet [80.6%], fair in 5 feet [13.9%] and poor in 2feet [5.5%], and overall 29 patients [30 feet] were satisfied with the operation. The indication of the operation is post-traumatic subtalar arthritis with pain. We concluded that subtalar distraction with iliac bone block and arthrodesis and fixation with internal compression screw was a satisfactory method for treating intra-articular calcaneal fractures with sub talar arthritis. It restores the anatomy between the hind foot and midfoot, restores the heal heigh and increases the Achilles tendon fulcrum. We advice to do it late three to six months after the injury to avoid the high complications of early fusion.

## Arthritis, Juvenile Rheumatoid

### diagnosis

#### **Soluble adhesion molecules in juvenile idiopathic arthritis : relation to activity and clinical subtype.**

Al Haggag, Mohammad S.; Ragab, Mohamed; Awad, Manal; Al Baz, Rizk  
Mansoura University - Faculty of Medicine - Department of Pediatrics

**Journal of Medical Sciences** 2006; 6 (3): 474-479 (24 ref.)

**Keywords:** Arthritis, Juvenile Rheumatoid-immunology; E-Selectin; Cell Adhesion Molecules

**Abstract:** The present research aimed to evaluate serum Adhesion Molecules [AMs] in patients with Juvenile Idiopathic Arthritis [JIA] to correlate their values with disease activity in different clinical subtypes. Serum levels of some soluble AMs [E-selectin, sICAM. and sVCAM. ] were assayed by ELISA in 37 patients with JIA both during activity and after remission. Other activity parameters like sedimentation rate and leukocytic counts were tested as well. Twenty healthy children of matched age and sex were taken as control. Serum E-selectin was found significantly higher in JIA compared to control [in all subtypes across all disease stages], with significant drop after remission, yet not reached the normal values. These changes were more evident in systemic JIA compared to other subtypes. Serum ICAM. and VCAM. showed the same changes in relation to control and to the disease activity. We can conclude that systemic JIA is associated with higher levels of soluble AMs thus explaining the perpetual inflammatory process and hence the remissions and exacerbations which are usually associated with higher morbidity in systemic JIA than in the other subtypes. We recommend following JIA patients until laboratory remission [normalization of serum AMs] to correlate AMs levels to clinical course aiming to put forward a therapeutic plan.

## Arthroplasty, Replacement, Hip

#### **Early results of minimal incision total hip arthroplasty.**

Abdel Baki, Hisham; Hassan, El Zaher; El Beltagy, Atef K.  
Ain Shams University - Orthopedic Department, Egypt

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 1-6 (15 ref.)

**Keywords:** Postoperative Complications; Follow-Up Studies; Length of Stay; Treatment Outcome; Hip-Surgery

**Abstract:** Aim: The aim of this paper is to evaluate the early results of minimal incision total hip arthroplasty. Patients and methods: Thirteen patients were operated upon by primary total hip arthroplasty through a minimal incision posterior approach. The average length of the incision was 9.5 cm. They were 7 males and 6 females with an average age of 50.5 years. Conventional instruments for total hip arthroplasty were used in all patients. No intra operative complications were encountered. The mean operative time was 114 minutes and the average blood loss was 450 ml. One case had a postoperative dislocation of the hip. There were no cases of infection, sciatic nerve injury or thromboembolic manifestations. All patients were discharged on the third or fourth postoperative day. Postoperatively the patients were assessed clinically and radiologically and were followed up for 6 weeks. At six weeks postoperatively the average hip score was 69 [range 51-85]. The potential benefits of the smaller incision and the quicker rehabilitation need to be balanced against the added operative difficulty, reduced visualization, possibly increased operating time, and the drawbacks of a new learning curve.

### Adverse Effects

#### **Blood parameters as potential non invasive methods to diagnose deep venous thrombosis in T.H.R..**

Barouni, I.M.; El Sallakh, S.A.; Rowley, D.; Belch, J.J.F.  
Tayside University Hospitals, Dundee, UK - Orthopaedic Department

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 78-84 (22 ref.)

**Keywords:** Venous Thrombosis-Diagnosis; Phlebography; Hematologic Tests; Prothrombin; Antithrombin III; Pyrimidine Dimers

**Abstract:** DVT is considered to be one of the major complications seen mainly after total joint replacement. The diagnosis of deep venous thrombosis [DVT] is carried out by clinical examination and objective investigations which confirm the clinical signs. Blood parameters as potential non-invasive methods are used to diagnose deep venous thrombosis in total hip replacement. The primary aim was to assess the accuracy of the blood tests, D-dimer, thrombin-antithrombin III complex and prothrombin fragments in diagnosing DVT in high risk patients using venography as a control. The second aim was to determine which of these blood markers is more accurate in diagnosing thrombosis. Blood samples were taken from 16 patients, 4 males and 12 females, aged from 55-86 years, all of them were admitted for hip replacement. In 5 out of 16 patients venography showed a positive DVT. Out of 16 patients only one had a clinically suspected DVT which was confirmed by venogram. The results showed significant differences for D-dimer when comparing pre-operative with post-operative levels in patients with proven DVT by venography. TAT results showed significant differences between pre-operative and post-operative results both in DVT positive and negative patients, and F 1 + 2 results were not significantly different between DVT positive and DVT negative patients. D-Dimer might be considered to be the most significant parameter among the three tests investigated which might be used as a screening test for DVT.

### **The use of plethysmography for deep venous thrombosis (DVT) detection in total hip replacement a different experience.**

Barouni, I.M.; El Sallakh, S.A.; Rowley, D.  
Ninewells Hospital Orthopaedic department, Dundee, Scotland, UK

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 75-77 (6 ref.)

**Keywords:** Venous Thrombosis-Diagnosis; Plethysmography-Adverse Effects; Phlebography

**Abstract:** The value of Plethysmography as a non-invasive technique to diagnose DVT compared to venography in joint replacement surgery was investigated. In the early post operative period most patients found plethysmography very painful to perform since the procedure involves hip and knee flexion up to 90 degree,s which is difficult in the early post operative days. Plethysmography is not suitable in early post-operative days in hip replacement surgery.

## Ascites

### **Surgery**

#### **Saphenoperitoneal shunt for intractable ascites.**

Elsharawy, Mohamed A.; Al Quorain, Abdulaziz A.

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King Faisal University - College of Medicine - Department of Surgery

**Saudi Medical Journal** 2006; 27 (2): 191-193 (19 ref.)

**Keywords:** Peritoneum-Surgery; Anastomosis, Surgical; Saphenous Vein-Surgery; Treatment Outcome; Prospective Studies

**Abstract:** Ascites usually complicates chronic liver disease, and some patients with ascites are refractory to medical treatment. Recently, saphenoperitoneal shunt [SPS] was described to treat this condition. This procedure avoids the insertion of a foreign expensive shunt into the circulation. We present our experience with this procedure with some modification in the technique. We performed a prospective study on 11 patients with intractable ascites admitted to the Vascular Unit, Suez Canal University Hospital, Egypt from June 2001 to October 2003. We divided the long saphenous vein approximately at 15 cm distally. We turned the proximal cut end upwards and tunneled under the skin towards the midline in the suprapubic region where we anastomosed it to the peritoneum. One patient died from liver failure 8 days after the operation. Two patients died during follow-up, one at 3 months from liver failure, and the other at 4 months from variceal hemorrhage. We lost one patient to follow up. Seven patients remained alive with patent shunt up to 6 months follow up. The SPS is a safe and effective procedure in the management of intractable ascites.

## Asthma

### **Chemically Induced**

#### **The use of etoricoxib in patients with bronchial asthma associated with aspirin sensitivity.**

Nahar, Ibrahim K.; Muqim, Abdulaziz T.; Al Qhouthi, Bassamah I.; Al Herz, Adeeba A.; Shehab, Daa K.; Uppal, Singh S.; Khadadah, Mousa E.

**Saudi Medical Journal** 2006; 27 (1): 119-120 (6 ref.)

**Keywords:** Asthma-Prevention and Control; Bronchial Hyperreactivity; Aspirin-Adverse Effects; Analgesics-Adverse Effects; Cyclooxygenase Inhibitors-Adverse Effects

## Attitude of Health Personnel

#### **Attitude of community pharmacists in Saudi Arabia towards adverse drug reaction.**

Bawazir, Saleh A.

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King Saud University - College of Pharmacy - Department of Clinical Pharmacy

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 75-83 (27 ref.)

**Keywords:** Drug Therapy-Adverse Effects; Health Knowledge, Attitudes, Practice; Physician's Practice Patterns; Questionnaires; Adverse Drug Reaction Reporting Systems; Pharmacists-Trends

**Abstract:** To assess the attitude and behavior of community pharmacists in Saudi Arabia regarding the reporting of adverse drug reactions [ADR]. A self-administered questionnaire was delivered to a stratified random sample of 240 community pharmacies in Riyadh city. The questionnaire comprised of 27 questions. The first twenty five questions covered pharmacists and pharmacy demographics, references available and continuing education activity, general questions aimed at establishing the extent of the respondent's knowledge about the Saudi ADR reporting system and pharmacists' behavior. One question consisted of twenty-seven item exploring the pharmacist's attitude to reporting and the factors that either positively or negatively, affecting his attitude. The total response rate was 71.7% [172/240]. Most of the respondents were expatriate employees [99.4%] with the remainder Saudi pharmacy owners. Only 21 pharmacists [13.2%] were aware of the ADR reporting program in Saudi Arabia. Ninety-seven percent of the respondents considered the reporting of ADRs to be an integral part of their professional duties and all respondents acknowledged the importance of reporting. Four percent of pharmacists surveyed claimed that they had submitted ADR report to the Ministry of Health [MOH] and 6.3% of pharmacists claimed that they submitted ADR report to the pharmaceutical company. Several barriers identified, that prevent pharmacists from reporting ADR include, unknown

address [68%], reporting form not available [62.8%], do not know how to report [41.7%] and uncertainty concerning causal relationship between ADR and the drug [30.1%]. Eighty four percent of respondents mentioned receiving a feedback from the program would encourage them to report and 83.7% of respondents indicated that publication of ADR bulletin will be important to stimulate reporting. In addition, Twenty nine percent of the suggestions mentioned educating and training of the pharmacist about the program as an important element that will improve pharmacists' participation in reporting ADR. The majority of pharmacists surveyed [86.8%] were not aware of the ADRs reporting program in Saudi Arabia and only twenty-nine percent of pharmacists were aware that pharmacists in Saudi Arabia could report an ADR to MOH. The results emphasized the importance of establishing continuing efforts to promote ADR reporting program and to overcome the barriers identified by the study.

## Babesia

### immunology

#### **Development of an ELISA technique for the detection of babesia ovis and serological survey of the parasite in Khouzestan province, Southern Iran.**

Hashemzadeh Farhang, H.; Nabavi, L.; Seyfiabad Shapouri, M.R.; Rahbari, S.; Azizi, F.

Islamic Azad University of Tabriz - Faculty of Veterinary Medicine - Department of Parasitology

**Iranian Journal of Veterinary Research** 2006; 7 (2): 53-58 (21 ref.)

**Keywords:** Babesia-pathogenicity; Enzyme-Linked Immunosorbent Assay; Seroepidemiologic Studies

**Abstract:** To develop an ELISA technique for the detection of antibodies against Babesia ovis, the infected erythrocytes were lysed and the supernatant soluble antigen, after sonication and ultracentrifugation of the lysate was used as antigen. Optimal dilution of the antigen was determined by checkerboard titrations, using positive and negative control sera. A correlation of 85% was observed between the results of the developed ELISA and IFA techniques. To study the seroprevalence of Babesia ovis in Khouzestan province, south of Iran, a total of 1000 sheep sera were collected from different areas of the province and tested against Babesia ovis using the ELISA technique developed. The results showed an average seroprevalence of 47.5% in the province. Our results indicated a significant increase of the seroprevalence by advancement of age of the animals. There was no significant difference between the seroprevalence of female and male sheep.

## Barvovirus B19, Human

#### **Prevalence of parvovirus B19 infection in successful and unsuccessful pregnancy in Zahedan, Southeast of Iran.**

Keikha, Fatemeh; Miri Moghaddam, Ebrahim; Sharifi Mood, Batool

Zahedan University of Medical Sciences - Department of Obs. and Gynecology

**Journal of Medical Sciences** 2006; 6 (3): 495-497 (12 ref.)

**Keywords:** Pregnancy; Prevalence; Enzyme-Linked Immunosorbent Assay; Abortion, Spontaneous; Prospective Studies; Immunoglobulin M

**Abstract:** To determine the seroprevalence of PVB19 infection in obstetric population, present research was conducted in Zahedan at the southeast of Iran from 2001-2002. In this case-control study, we assayed both virus specific anti-IgG and anti-IgM antibodies among 168 women with term pregnancy [controls] and 156 women with pregnancy loss at first and second trimester [cases] by ELISA method. PVB19Anti-IgG positive rate was 21.8% in pregnancy loss [case] and 20.8% in term pregnancy [control]. Parvovirus B19 IgM antibody was detected in 10.3% of case and 6.5% in control. Although specific Parvovirus B19 IgG and IgM antibodies had no statistically significant difference between two groups by the age and parity, but our study showed that the prevalence of parvovirus B19 IgM antibody was higher in women with unsuccessful pregnancy. It is considerable, that high levels of IgM antibody probably support the association between PVB19 infection and unsuccess-pregnancy.

## Basal Cell Nevus Syndrome

### diagnosis

#### **Gorlin syndrome : single case report and review.**

Bashir, Adil H.H.; MAR, Abdel Rahman; Nadia, H.A.; Mahmoud, A.H.; Usama, A.M.

**Sudanese Journal of Dermatology** 2006; 4 (1): 40-48 (29 ref.)

**Keywords:** Rare Diseases; Aminoquinolines-therapeutic use; Basal Cell Nevus Syndrome-radio therapy; Basal Cell Nevus Syndrome-surgery; Phototherapy; Biopsy

**Abstract:** We report a 25 year old Sudanese male patient, Hawaer tribe. He presented with multiple naevoid basal cell carcinomas in the face [14 in number], and multiple mandibular odontogenic keratocysts. This is considered as the first case record from Sudan, as Gorlin syndrome is known to be a rare presentation in Africans.

## Beta-Thalassemia

**Epidemiology****Prevalence of beta-thalassemia trait in premarital screening in Al-Hassa, Saudi Arabiaa.**

Al Suliman, Ahmad

[suliman2000ww@yahoo.com](mailto:suliman2000ww@yahoo.com)

King Fahad Hospital - Medical Department

**Annals of Saudi Medicine** 2006; 26 (1): 14-16 (11 ref.)**Keywords:** beta-Thalassemia-Blood; Mass Screening; Premarital Examinations; Family Health; Prevalence; beta-Thalassemia-Diagnosis

## Biomphalaria

**Drug Effects****Effect of commiphora molmol on adults, egg masses and egg-deposition of biomphalaria arabica under laboratory conditions.**

Al Mathal, Ebtesam Mohammad; Fouad, Mohmoud Ali Hassan

College of Science for Girls, Dammam - Department of Zoology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 305-314 (51 ref.)**Keywords:** Commiphora; Molluscacides; Snails; Safety**Abstract:** Commiphora molmol [Myrrh] has molluscicidal effect on Biomphalaria arabica snails at low concentration [40 ppm] after 48 hours exposure. The number of dead-snails increased with increasing the time of exposure. One day-old egg masses were more susceptible [death 100% with 80 ppm] to the ovicidal effect of C. molmol than the five-day old ones [Death 95% with 80 ppm]. However, the eggs were more resistant to the C. molmol effect than the adult snails, embryogenesis began to stop at 20 ppm and eggs were all killed at 60 and 80 ppm. B. arabica fecundity decreased at 1 ppm. Based on safety to man and animals, C. molmol is recommended as a safe molluscicide.

## Blood Donors

**A motivation survey of blood donation in Shiraz blood transfusion center.**

Kasraian, L.; Jahromi, S.A. Torab

Iranian Blood Transfusion Organization - Research Center

**Blood** 2006; 2 (6): 259-267 (27 ref.)**Keywords:** Attitude; Blood Transfusion; Cross-Sectional Studies; Motivation; Health Surveys**Abstract:** To prepare safe and adequate blood supply to meet patients' needs and ensure a sufficient number of regular blood donors, knowledge about factors encouraging people to donate blood regularly is essential. Considering its importance, we aimed to survey positive and negative motivation for blood donation. This survey was a cross-sectional research with a multiple questionnaire to study the positive and negative motivation toward blood donation in the first half of 13 83 [according to Iranian calendar] in Shiraz Blood Transfusion Center. This survey was conducted on subjects with positive motivation who referred to blood transfusion center at the mean age of 32.73 +/- 9.6. 92.1% of the subjects were male, and 7.9% female, and 74.3% married. Positive motivation for blood donation included altruistic causes [65.3%], check-up purposes [12.9%], income-earning goals [8.9%], the positive impact of donation on health [8.9%], and curiosity about blood donation [4%]. The mean age of the subjects with negative motivation was 25.22 +/- 7.54. 22.7% were male, 77.3% female, and 67.7% single. The most important negative motivation was dizziness and faint [45.5%], and lack of time [4.5%]. Negative motivation in women was statistically more significant than men [p0.05]. In this study, the main positive motivation for blood donation came out of altruistic reasons, which are considered to be very positive. 12.9% of people just donated for check up that can endanger blood safety. The most important negative motivation was fear of dizziness and faint or disease as a result of donation. This can be removed through holding educational programs and providing sufficient care for donors.**The study of effect of short-term, temporary deferral on blood donor return rate.**

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Iranian Blood Transfusion Organization - Research Center - Virology Department

**Blood** 2006; 2 (6): 247-252 (10 ref.)**Keywords:** Blood Banks; Blood Transfusion; Cohort Studies**Abstract:** Blood donors are deferred for numerous reasons. Some reasons for permanent deferral are intravenous drug use, male homosexual contact or certain positive test results. However, the majority of donor deferrals are short-term temporary deferrals [STTDs] that are resolved in a matter of days, weeks or months, thereafter donors would be considered again as eligible blood donors. The effect of STTDs on blood donor return rates and subsequent blood donations is studied. The present study was historical cohort. Donors facing STTDs during the 15 Dec 1999 to 15 Mar 2000 were randomly computer-matched with non-deferred donors on the basis of donation date [case group: 804 donors; control group: 295 donors]. Computer records were evaluated during the 3 years that followed [2 1 Mar 2000 to 2 1 Mar 2003] to determine donor return rates. Chi-square analysis was used for comparison. The most common



reasons for STTDs were elevated blood pressure, certain medication, bacterial infection, cold, and sore throat. Blood donor return rates were 32.4% [in the case of those deferred for cold /sore throat], 42% [those deferred for medication], 29.3% [those with hypertension], and 37.3% [for bacterial infection] over the 3 years that followed. Non deferred donors were a little more likely than donors with STTDs to return over these 3 years [36.6% vs. 34.8%;  $p=0.57$ ], and non-deferred donors donated more whole blood units. Donors with STTDs have a negative impact on blood donor return rates. The blood center's goal should be to keep donors in the donor pool. Measures to alleviate negative effects on donors with STTDs should be also taken.

## Blood Transfusion

### Evaluation of bacterial contamination of platelet concentrates collected at Tehran regional blood center.

Ahmadi, J.; Gholizadeh, H.R.; Farseh, R.; Sharifi, Sh.

Arab Hospital

**Blood** 2006; 2 (6): 233-237 (16 ref.)

**Keywords:** Platelet Transfusion; Blood Banks; Blood Preservation-adverse effects; Blood Preservation-microbiology

**Abstract:** In spite of major advances in the field of quality assurance in the process of collection, preparation and storage of platelets, bacterial infection following platelet transfusion remains a major problem in transfusion medicine. The present study was carried out in order to evaluate bacterial contamination of platelet concentrates collected at Tehran Regional Educational Blood Transfusion Center. Bacterial growth of samples of platelet concentrates was studied in blood agar, EMB and thioglycollate broth after 48 hours at 37°C. The use of differentiation tests was made when any bacterial growth was observed. Simultaneously, the samples were also cultured in thioglycollate broth and studied for any turbidity or color change within 7 days. Any changes made the samples to be cultured in blood agar and EMB. Finally, the contamination rate and the ratio of contaminating bacteria were determined. Out of 7700 samples, three fourth [5775 samples] were taken from the cord and one fourth [1925] from both the bag and the cord. Out of 7700 samples of platelet concentrates studied, 14 [0. 18%] were found positive for bacterial contamination. The contamination rate was estimated to be one in every 550 tested platelets [0. 18%]. Since in cases of blood bag contamination, the cord had been contaminated as well, there was then no difference on whether the sample was taken from the bag or cord. The bacteria identified were as follows: Staph. epidermidis [n=4], Staph. saprophyticus [n=2], Acinetobacter [n=5], Bacillus sp. [n=3]. The results show that screening platelet concentrates for bacterial contamination is necessary for blood transfusion centers and hospital blood banks.

### The prevalence of hepatitis C and its related factors among blood donors of Kerman blood center.

Delavari, M.; Tabatabaie, S.M.; Bardsiri, H. Sheikh; Maarefdust, Z.; Zandieh, T.

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**Blood** 2006; 2 (6): 269-271 (8 ref.)

**Keywords:** Blood Banks; Blood Donors; Prevalence; Hepacivirus; Hepatitis C

## adverse effects

### Blood transfusion acute reactions in patients of Shahid Ghazi Hospital.

Asvadi Kermani, I; Evazie, Ziaeei, J.; Nikarfar, A.R.; Maljaie, H.; Golchin, M.; Berahmani, G.; Dolatkhah, R.; Mahmoudpour, A.; Dehkhoda, R.; Moghaddam, A.; Torabi, S.; Hossienpour Panahi; Rajab, Zadeh A.; Soleimani, F.; Heidari, S.; Ardabilzadeh, Sh.

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**Blood** 2006; 2 (6): 215-221 (19 ref.)

**Keywords:** Risk Factors; HyperSensitivity; Fever-etiology; Incidence; Neoplasms-complications

**Abstract:** Cancer patients due to bone marrow suppression, sepsis, and other relevant complications require appropriate blood components for transfusion. However, there are risks of transfusion reactions. These reactions are influenced by many factors varying across different geographic regions and medical centers. This study was performed to determine incidence of early transfusion reactions and their clinical symptoms and signs in cancer patients, and to calculate the correlation of these adverse reactions with some demographic data and some specifications of blood components. In this descriptive study, 39 reactions from 4023 blood transfusion attempts were assessed. Patients were monitored for symptoms and changes in vital signs within 24 hours following transfusion. Data analysis was performed by descriptive and inferential statistics [X. and ANOVA]. The majority of reactions belonged to platelets [56.43%] and packed cells [43.58%]. The most common symptoms were shown to be rigors [2.72%], and fever [2.33%]. The incidence rate was estimated to be 2.7% for FNHTR, and 2.1% for allergic reactions. Haptoglobin deficiency was found in 0.8% of FNHTR cases. A correlation was observed between sex and history of previous reactions [ $p=0.048$ ,  $p=0.04$ , respectively] with blood transfusion reactions. These findings indicated that incidence of blood transfusion reactions and clinical symptoms correlated with other studies. The incidence of reactions in women and individuals with previous history of repeated blood transfusions was shown to be greater. Transfusion of packed cell was associated with allergic reactions [ $p=0.04$ ], and high platelet lifetime associated with pulmonary reactions [ $p=0.044$ ].

**Transfusion transmitted virus in screened united Arab Emirates blood donors.**

Alfaresi, Mubarak S.; Alnazer, Ayat M.; Alzaabi, Azza S.; Elkoush, Abida A.; Islam, Adeel A.

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Zayed Military Hospital - Department of Microbiology

**Saudi Medical Journal** 2006; 27 (1): 58-62 (33 ref.)**Keywords:** Blood Donors; DNA Virus Infections-Transmission; Hepatitis, Viral, Human-Transmission; Polymerase Chain Reaction; Prevalence; Risk Factors**Abstract:** To investigate the rate of infection caused by Torque teno virus [TTV] in United Arab Emirates [UAEs] healthy population as a pilot study in detecting TTV DNA in 100 healthy blood donors. We randomly choose a total of 100 healthy blood donors who attended Zayed Military Hospital, Abu Dhabi, UAE from January 20 to May 30, 2005. We carried out a real-time polymerase chain reaction [PCR] test to detect TTV DNA. Real-time for TTV was positive in 75 [75%] donors. Eight [73%] non-UAE donors were TTV positive while 67 [75%] were UAEs. Among these donors, 72 [77%] were males and 3 [50%] were females. Our results demonstrated a high prevalence of TTV in UAE.

## Blood Transfusion, Autologous

**A report of a bombay phenotype case [oh] in challus blood transfusion center.**

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Iranian Blood Transfusion Organization - Research Center

**Blood** 2006; 2 (6): 273-276 (5 ref.)**Keywords:** Blood Banks; Blood Donors; Phenotype; ABO Blood-Group System**Abstract:** Bombay phenotype donors do not have H Antigen on the surface of their red blood cells and have hemolytic anti-H in their sera; so, this group should receive autologous blood and donation of their blood as O blood group can lead to severe hemolysis in recipients. Therefore, it is important to detect them. A 46-year-old man living in Bushehr for many years has been recognized as O blood group. Preliminary diagnosis was made by the use of antibody screening agglutination test. In serologic studies, we detected high level of anti-H, anti-A, and anti-B. Direct coombs was also negative. Definite diagnosis was made with no red cell agglutination in the presence of anti-H. Complementary serologic studies showed that Kelly antigen was negative and Rh genotype was CD/cde. This case increased the number of Bombay phenotypes in the world to 13 1 and in Iran to 11. It seems that this latter number is higher than official estimations of its prevalence [10. 6]. Therefore, the use of antibody screening test should be considered in screening blood donations.

## Blood Vessels

## injuries

**The royal medical services experience in vascular injuries during the Palestinian uprising.**

Jaber, Saad F.; Allaham, Adnan; Husban, Salem; Oubaidat, Ali; Iqab, Tayel

King Hussein Medical Center - Queen Alia Heart Institute

**Jordan Medical Journal** 2006; 40 (1): 35-39 (13 ref.)**Keywords:** Blood Vessels-surgery; War; Retrospective Studies**Abstract:** This report summarizes the experience of two vascular surgeons in dealing with vascular injuries at Rafidia surgical hospital- Nablus during the bloody conflict between the Palestinians and Israel. Between January 2000 and June 2001 thirty-nine Palestinians with vascular injuries were received alive at Rafidia Hospital in the city of Nablus. All patients were received in profound shock and underwent emergency surgery. Massive blood transfusion was given almost to all patients. We retrospectively evaluated the outcome and the surgical results. There was one operative death in a patient with injury to the vertebral artery. There were serious complications in 14 patients related to other injuries but all of them were discharged alive from Hospital with no limb loss. War vascular injuries are lethal. However, the presence of an experienced vascular surgeon and anesthesiologist, unlimited supply of blood and blood products combined with the young age of patients who tolerate the state of shock better can tremendously improve the outcome.

## Brain

## Abnormalities

**Pattern of congenital brain malformations at a referral hospital in Saudi Arabia: an MRI study.**

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**Annals of Saudi Medicine** 2006; 26 (1): 28-37 (22 ref.)**Keywords:** Brain-Pathology; Brain Diseases-Pathology; Magnetic Resonance Imaging; Abnormalities, Multiple; Prognosis

## anatomy and histology

### Morphological and stereotaxic studies of Iranian native goat's brain.

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University of Shahrekord - School of Veterinary Medicine - Department of Basic Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 22-28 (10 ref.)

**Keywords:** Goats-anatomy and histology; Neuronavigation

**Abstract:** This study was conducted to find out the best outside points of skull to reach different areas of brain that are essential for neuroendocrinological studies. In this research 30 heads of Iranian native male goats aged between 2-3-year-old were collected from Shahrekord abattoir. After collecting whole heads, they were fixed in 10% formalin and then many holes were made on the dorsal surface of skull followed by median and transverse sectioning of the heads. Morphological characteristics of brain and distances from the bones of skull to different structures of brain were measured using caliper device and needle and the best points were determined. By this method the best points to reach the hypophysis and lateral ventricle with 90° angle are in distances of 45.2 +/- 2.23 mm and 20.92 +/- 1.02 mm at bregma point.

## Metabolism

### Synthesis and investigation of novel shelf-stable, brain - specific chemical delivery system

Al Obaid, Abdularahman M.; Farag, Hassan A.; Khalil, Ashraf A.; Al Shabanah, Othman A.; Abdel Hamide, Sami G.; El Kashaf, Hassan A.; Ahmed, Hassan S.; Al Affif, Ahmed M.; Gadkariem, Elrashed A.; El Subbagh, Hussein I.

King Saud University - College of Pharmacy - Department of Pharmaceutical Chemistry

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 1-15 (20 ref.)

**Keywords:** Oxidation-Reduction; Blood-Brain Barrier; Biotransformation; Chemistry; Organ Specificity; Pyridines-Metabolism; Monoamine Oxidase Inhibitors; Drug Delivery Systems

**Abstract:** A 1,4-dihydropyridine - pyridinium salt type redox system is described as a general and flexible method for site-specific and sustained delivery of drugs into the brain. Monoamine oxidase inhibitors [MAOIs] were used as a model example to be delivered into the brain. Chemical and biological oxidations of these compounds were investigated. The prepared 1,4-dihydropyridines were subjected to various chemical and biological oxidation to evaluate their ability to cross blood brain barrier [BBB], and to be oxidized biologically into their corresponding quaternary compounds. 1-[Ethoxy-carbonylmethyl]-3,5-bis[N-[2-fluoro-benzylideneamino] carbamoyl]-1,4-dihydropyridine [31] proved to cross BBB in adequate rate and converted by the oxidizing enzymes into the corresponding quaternary salt N-[ethoxycarbonylmethyl]-3,5-bis [N-[2-fluorobenzylideneamino] carbamoyl] pyridinium bromide [20]. Stability studies of the synthesized chemical delivery systems [CDSs] at various pH values and temperatures showed that the shelf life time of a solution containing compound 31 is 20.53 days at 5°C, which recommend a lower storage temperature for such solutions. The prepared CDSs proved to be fairly stable for powder form storage. The stability of the prepared compounds is attributed to the conjugation of the two carboxylic functions at C3 and C5 of the pyridine ring with their adjacent double bonds. These results are in consistency with the original rationale design.

## Breast Feeding

### Breast feeding and diabetes.

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Islamic Hospital

**Jordan Medical Journal** 2006; 40 (1): 70-71 (3 ref.)

**Keywords:** Lactation; Diabetes Mellitus

**Abstract:** The causative relationship between breast feeding and diabetes mellitus received the attention of researchers for many years. Some studies discussed the incidence of type 2 diabetes in lactating mothers. Other studies explored the effects of breast feeding on the incidence of diabetes in children and adolescents. The most significant study was reported in the Journal of the American Medical Association in November 2005. It was conducted on two large phases, both included tens of thousands of registered nurses in the United States. The first phase, the Nurses' Health Study [NHS], was initiated in 1976, and enrolled 121,700 women from 11 states. The second study, the Nurses' Health Study II [NHS II] began in 1989, and enrolled 116,671 women from 14 states. The final analysis of data was undertaken in 2003. Both studies compared women who never breastfed their babies, with women who breastfed for variable periods, extending during their life time, from 3-23 months.

## Breast Neoplasms

## Genetics

### Molecular basic of breast cancer.

Al Mansouri, Layla J.; Alokail, Majed S.

King Saud University - College of Science - Department of Biochemistry

**Saudi Medical Journal** 2006; 27 (1): 9-16 (87 ref.)

**Keywords:** Breast Neoplasms-Diagnosis; Genetic Screening; Genes, Tumor Suppressor; Genetic Markers; Molecular Biology; Mutation; Risk Assessment; Oncogenes

**Abstract:** Breast cancer is the most frequent cancer in women and represents the second leading cause of cancer death among women after lung cancer. A common phenotypic abnormality of breast cancer cells is dysregulation of cell cycle control. The transformation of normal cell to a cancer cell appears to depend on mutation in genes that normally control cell cycle progression, thus leading to loss of the regulatory cell growth. We summarize here the molecular regulation of mammary carcinoma with regards to the most prominent oncogenes and tumor suppressor genes and their outcome in terms of cellular prognosis, and tumor development.

## Brucellosis

### diagnosis

#### A 35 year old man with fever, weight loss and splenomegaly.

Panahi, M.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 443, 453-455 (6 ref.)

**Keywords:** Brucellosis-microbiology; Fever; Splenomegaly; Polymerase Chain Reaction

**Abstract:** A 35 year - old man was referred to an infectious disease specialist because of two weeks; fever, fatigue, 4kg weight loss and an obscure pain of whole body. He had otherwise been well until 15 days before. 10 days before; treatment with Procaine Penicillin [800,000 U per 12 hours] and Amoxicillin by a G.P was begun. 5 days later a physician sent him to a lab for routine blood examination and febrile agglutination tests. His physician on physical examination of patient found a palpable spleen and his temperature was 38c, CRP+ + and ESR was 45 mm per h our. In auscultation, heart and lungs were normal. A urine culture was negative .Blood sugar, Creatinine, Cholesterol and Triglycerides were normal. Hematologic lab values were: Hct %40, MCV 82, WBC [Per mm3] 9 100, dif count N=35, L=55, E=O, M=8, B=2, PLT250 000, Blood \*chemical \*values Creatinine 0.9, Sugar 95, Calcium normal, Liver enzymes; ALT=50, AST=48. And Tuberculin Test positive with 12 mm indurations. The patients' weight had dropped from 75 to 71 Kg. The temperature was 38 c .The pulse rate was 75, respiration rate was 22. The blood pressure was 1 10/70. The urine was positive [++] for protein, Urea Nitrogen 33 mg/dl, Creatinine 1.2mg/dl. Na 139 mmol; K, 4.5mmol/lit; Glucose 119 mg/dl; Bilirubin total 1.7 and direct 0.6; and normal liver enzymes, EKG showed sinusual tachycardia; the other findings were otherwise normal. Chest X-Ray showed no abnormality. Sample of blood was obtained for culture. Temperature was controlled each day and it was maximum 38.3 centigrade. On the next clinical visit of patient ,three days later, serum sample obtained on the seventh day of illness was negative for Salmonellosis and Brucellosis and first report of blood culture was negative too. A CT-Scan of lumbo-saccreal portion and Chest x Ray gave no diagnostic information A diagnostic procedure was performed.

## Buffaloes

#### Seasonal variation in the characteristics of the Azarbaijani buffalo [bubalus bubalis] semen.

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**Iranian Journal of Veterinary Research** 2006; 7 (1): 49-54 (15 ref.)

**Keywords:** Cattle; Semen; Seasons

**Abstract:** To study the seasonal variation in the characteristics of the Azarbaijani buffalo semen, three 2-4-year-old bulls of Azarbaijani water buffaloes, kept in the Buffalo Breeding Center, in Urmia, northwest of Iran, were selected. Semen samples were collected once a week for a period of one year using artificial vagina and a buffalo cow as a dummy. Semen volume, colour, pH and motility and spermatozoa motility, viability, morphology and concentration were examined. During one calendar year, 129 semen samples were examined. The mean values were plotted and a curve was drawn for the annual variations in each parameter. The comparison of the mean values in each sampling and in different seasons and the correlation between these variations and ecological factors, such as temperature, rainfall and day length were also studied. Semen was characterized by a mean [±SEM] ejaculation volume of 4 ± 0.14 ml, semen colour density score of 3.75 ± 0.07, pH of 6.97 ± 0.03 and motility score of 2.89 ± 0.05. The sperm motility of 75.85% ± 1.59% and sperm viability of 73.2% ± 1.56% were observed; 11.55% ± 0.42% of spermatozoa had abnormal morphology. The mean [±SEM] sperm concentration was 1239.9 ± 34.11 x 10. cells/ml. All of the studied parameters showed fluctuations throughout the year but these variations were statistically significant only in some occasions and were mostly correlated with length of the day. Semen of better quality was collected in summer and autumn.

## Burns

### epidemiology

#### The epidemiology of burn wound infections in patients hospitalized in burn center of Hamedan, Western Iran.

Yousefi Mashouf, Rasoul; Hashemi, Seyyed Hamid

Hamedan University of Medical Sciences - Faculty of Science - Department of Medical Microbiology

**Journal of Medical Sciences** 2006; 6 (3): 426-431 (26 ref.)

**Keywords:** Burns-microbiology; Wound Infection-complications; Wound Infection-therapy; Drug Resistance; Burns-etiology

**Abstract:** A total of 465 burned patients with wound infections who admitted to referral burns center of Hamedan Imam Khomeiny hospital from July 1998 to June 2001 were retrospectively studied. The required data including age, sex, season, causes of burns, burn size of wounds and types of organisms isolated from patients [wounds and blood], was recorded in a questionnaire. The susceptibility of the isolates to eight routine antibiotics was tested by disc diffusion method. The data was analyzed by SPSS and EP16 software package. Out of 465 burn wound infections 73.1% of isolates were Gram-negative bacilli and 26.9% were Gram-positive cocci. *Pseudomonas aeruginosa* [32.7%], *Klebsiella pneumoniae* [21.8%] and *Staphylococcus aureus* [21.2%] were the most common isolates. In 28.7% of patients, blood culture became positive, *Klebsiella pneumoniae* [30.4%], *Pseudomonas aeruginosa* [26.9%], were predominant isolates. 57.3% of patients were males and the most frequency of burn patients belonged to age group 0-9 years old [28.6%], most of the burns occurred during summer. Boiled water, fuel oil flames and firewood flames were the commonest causative agent for burns, respectively. The most effective antibiotics against isolates were ciprofloxacin, ceftizoxime, amikacin and gentamicin, while most of isolates showed high resistance to ampicillin, tetracycline and carbenicillin. Present results indicated that *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* and *Staphylococcus aureus* were predominant isolates with high resistance to tested antibiotics. These data can be used to evaluate the effects of changes in burn treatment and antimicrobial resistance development in relation to antibiotic usage.

## Calcaneus

### Injuries

#### Results of surgery of 108 displaced intraarticular calcaneal fractures New method of reconstruction evaluation.

Al Akkad, Mustafa Taha; Khallaf, Fathy Gaber; Abdu Al Kussairy, Ibrahim  
Al-Jahra Hospital, Ministry of Health, Kuwait - Orthopedic Department

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 38-46 (33 ref.)

**Keywords:** Fractures-Surgery; Reconstructive Surgical Procedures; Bone Wires; Follow-Up Studies; Fracture Fixation, Internal; Postoperative Complications

**Abstract:** One hundred and eight displaced intra-articular fractures of the os calcis in 89 patients were treated by open reduction and internal fixation in Al-Razi and Al-Jahra Hospitals, Kuwait from November 1994 to January 2001, and their clinical and radiological results were analyzed retrospectively. The mean period of follow-up was 4 years and the range was 3-6 years. Anatomical or near anatomical reduction was achieved in 82 fracture [76%]. Superficial infection and wound edge necrosis occurred in 12 fractures [11%]. Late complications of subtalar osteoarthritis occurred in 20 fractures [18.5%] and chronic osteomyelitis in one diabetic patient [0.9%]. Based on modified Maryland foot score, the clinical outcome was excellent in 70 fractures [65%], good in 25 [23%] and fair in 13 [12%]. Fractures with excellent clinical results have anatomical or near anatomical reduction of the posterior facet fragments and restoration of fractured os calcis morphology. We used a new method of post-operative radiological assessment. We conclude that open reduction and internal fixation of displaced articular fractures of os calcis is the treatment of choice for these difficult injuries and our method of radiological assessment of reduction is reliable.

## Calcinosis

### Etiology

#### Calcinosis cutis: a rare complication of chronic myeloid Leukemia.

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**Annals of Saudi Medicine** 2006; 26 (1): 62-64 (6 ref.)

**Keywords:** Calcinosis-Pathology; Calcinosis-Complications; Skin Diseases-Diagnosis; Leukemia, Monocytic, Chronic-Complications

## Candidiasis

### Drug Therapy

#### Effect of cyclophosphamide on the course of candida albicans infection in normal and vaccinated mice.

Japoni, Aziz; Mehrabani, Davood; Alborzi, Abdolvahab; Farshad, Shohreh; Hayati, Masumeh; Dehyadegari, Mohammad A.

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Shiraz University of Medical Sciences - Department of Clinical Microbiology Research Center

**Saudi Medical Journal** 2006; 27 (1): 46-51 (30 ref.)

**Keywords:** Candidiasis-Microbiology; Cyclophosphamide; Mice; Candida-Growth and Development; Immunosuppression; Disease Susceptibility; Candida Albicans-Drug Effects

**Abstract:** To evaluate the immunomodulating effect of cyclophosphamide [Cy] on the course of *Candida albicans* [C. albicans]. We performed this study in the Shiraz Medical School, Shiraz, Iran during April to November 2003. Five groups of 10 mice [vaccinated group] were immunized by 5 equal injections of  $2 \times 10^5$ ,  $2.5 \times 10^5$  and  $3 \times 10^5$  of the organism intraperitoneally. Then, the group received Cy on day zero and was challenged with lethal doses of C. albicans [ $7.74 \times 10^5$  colony forming unit] on days zero, one, 3, 6 and 12 post-Cy injection. Another 5 equal groups of 10 mice [non-vaccinated group] received Cy on day zero and similar to vaccinated ones were challenged with lethal doses of the organism too. The control groups received just Cy on day zero and were sacrificed on days zero, one, 3, 6 and 12 days post-Cy injection. We performed the hemogram and the spleen and studied the renal tissues microscopically and macroscopically. In vaccinated group, we observed an increase in survival time and in spleen and renal weights were visible while in non-vaccinated ones, a significant decrease was also observed on days one and 3 and an increased on days 6 and 12 post-Cy injection. We observed atrophy and necrosis in the spleen while inflammation and necrosis were also observed in the kidneys on days one and 3. We noticed a significant hyperplasia in the white pulp on days 6 and 12 post-Cy injection. We conclude that hyperplasia in the white pulp of spleen and the increase in peripheral polymorphonuclears due to selective effects of Cy could effectively protect the animal against C. albicans infection.

## Carcinoma, Basal Cell

### **Vulvar basal cell carcinoma misdiagnosed for 4 years.**

Bukhari, Iqbal A.; Khalid, Amina J.

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King Faisal University - College of Medicine - Department of Dermatology

**Saudi Medical Journal** 2006; 27 (1): 93-94 (10 ref.)

**Keywords:** Vulvar Neoplasms-Pathology; Valva-Pathology; Neoplasm Invasiveness; Skin Neoplasms

**Abstract:** Vulvar basal cell carcinoma is a rare cutaneous neoplasm occurring mainly in white postmenopausal females. It can be misdiagnosed due to its nonspecific physical appearance. Here, we report a 59-year-old white female who had vulvar basal cell carcinoma misdiagnosed for 4 years.

## Carcinoma, Hepatocellular

### **Blood**

### **Clinical significance of aflatoxin, mutant P53 gene and sIL-2 receptor in liver cirrhosis and hepatocellular carcinoma.**

El Shananwani, Faten M.; Abdel Hadi, Afaf A.; Abu Zikri, Nadia B.; Imail, Alaa; El Ansary, Mahmoud; El Raai, Ahmed Theodore Bilharz Research Institute, Imbaba - Department of Clinical Chemistry

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 221-239 (35 ref.)

**Keywords:** Liver Cirrhosis; Hepatitis B, Chronic; Aflatoxins; Genes, p53; Interleukin-2; Hepatitis C, Chronic; Liver Function Tests; alpha-Fetoproteins; Liver Neoplasms

**Abstract:** The incidence of hepatocellular carcinoma [HCC] varies widely worldwide. Chronic infection with hepatitis B virus [HBV] and exposure to aflatoxins in foodstuffs are the main risk factors. AAG to AGT transversion at codon 249 of the P53 gene arg-ser [249 ser] has been identified as a hot spot, reflecting DNA damage caused by aflatoxin B1 metabolites in HCC. Because HBV infection is often endemic in high aflatoxin exposure areas, it is still not clear whether HBV acts as a co-founder or as a synergistic partner in the development of the 249 ser P53 mutation. Serum levels of soluble interleukin 2 receptor [sIL-2R] correlated with the progression of liver cirrhosis independently of its etiology. This fact may reflect the stimulation of T-lymphocytes, monocytes and macrophages in liver cirrhosis. The inter-relationship among aflatoxin exposure, HBV and HCV infections, P53 and sIL-2R in patients with liver cirrhosis and hepatocellular carcinoma was studied. The results revealed significant increase in serum levels of mutant P53, sIL-2R and aflatoxin B1 in patients with cirrhosis and those with HCC compared to the controls. HCC patients showed levels of all the three parameters significantly higher than both cirrhotics and controls [P 0.001]. Correlations were found between serum aflatoxin B1, mutant P53 and sIL-2R in HCC group. The results were discussed.

## Carcinoma, Signet Ring Cell

### **Pathology**

### **Gastric metastasis of signet ring cell carcinoma of the breast.**

Cetintas, Sibel K.; Kurt, Meral; Ozkan, Lutfi; Yerci, Omer; Zorluoglu, Abdullah; Turan Ozdemir, Senem; Engin, Kayihan; Gurel, Selim

**Saudi Medical Journal** 2006; 27 (2): 259-261 (10 ref.)

**Keywords:** Carcinoma, Signet Ring Cell-Secondary; Breast Neoplasms-Pathology; Stomach Neoplasms-Secondary; Neoplasm Metastasis

## Cardiovascular Diseases

### etiology

#### **Independent, non-traditional risk factors for cardiovascular events and atherothrombosis in chronic kidney disease and in hemodialysis-dependent patients.**

Madkour, Mona Ezzat; Bekheet, Iman William; Abdel Ghaffar, Nagwa; Waked, Emam; Younes, Khaled  
Theodor Bilharz Research Institute - Nephrology Department

**Journal of Medical Sciences** 2006; 6 (3): 484-491 (48 ref.)

**Keywords:** Risk Factors; Kidney Failure, Chronic; Renal Dialysis; Embolism and Thrombosis; Homocysteine; C-Reactive Protein

**Abstract:** This study aimed at evaluating the role of the emerging non-traditional risk factors, their impact on Cardiovascular Disease [CVD] prediction-together with traditional RFs-in Chronic Kidney Disease [CKD] and end-stage renal disease [ESRD] patients. Total homocysteine [tHcy], plasma fibrinogen [Fbg], plasma factor VII activity [FVIIc], anaemia [HCT] and C-reactive protein [CRP], were studied in 37 Egyptian patients classified into chronic kidney disease group [10 cases] and hemodialysis [HD] group [27 cases] in addition to 10 healthy age and sex-matched controls. This study showed that tHcy, fbg CRP and FVIIc demonstrated highly significant increase in the total patient group and in the HD group compared to the normal controls. These values showed a progressive increase with the disease approaching hemodialysis dependence. Among the 37 patients, 21 showed evidence of ischemic heart disease [IHD]. A statistically significant elevation of the previous factors was found in IHD when compared to non-ischemic group of patients. Multivariate analysis showed CRP as the most predictive risk factor for CVE in CKD and ESRD patients. Therefore, it was concluded that the emerging non-traditional factors studied could explain to a great extent-together with traditional RFs- the high rate of CVD in these patients and that CRP is the most fulfilling for being recommended in clinical practice. Alterations of these factors will aid prevention of coronary heart disease [CHD], thus benefiting the patient from risk factor modification.

## Carnitine

### Therapeutic Use

#### **L-Carnitine ameliorates immunological-induced hepatitis in rats.**

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**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 59-68 (53 ref.)

**Keywords:** Carnitine-Pharmacology; Hepatitis-etiology; Hepatitis-Therapy; Rats; Lipopolysaccharides-Adverse Effects; Liver-Metabolism

**Abstract:** Immunological mediated hepatitis can be initiated by bacterial product: Lipopolysaccharide [LPS]. The later is increased during severe infection, bacterial overgrowth or translocation. LPS stimulates Kupffer cells. Activation of the kupffer cells contributes to the onset of liver injuries by producing and releasing cytotoxic agents, inflammatory cytokines and reactive oxygen species. In the present study, L-carnitine, a natural antioxidant and immunoprotective agent, is used to protect against LPS-induced hepatitis. Liver content of glutathione [GSH], malondialdehyde [MDA], nitric oxide [NO] and the DNA adduct S-hydroxydeoxyguanosine [8-HDG] are estimated. Serum activity of liver enzymes ALT, AST, and Gamma-GT, in addition to IL2 level are also estimated. Moreover, liver histopathological changes are determined. Results revealed that LPS [5mg/kg once i.p] significantly increased 8-HDG, MDA, NO and depleted GSH in the liver of the treated rats. It also, increased serum IL2 and activity of all the estimated liver enzyme markers indicating massive hepatic cellular damage as also shown as a necrotic damage in liver histological sections. LCR administered [500 mg/kg] 3h before LPS protected against LPS-induced lethality by 100%. LCR also prevented the increase in liver content of 8-HDG, MDA and NO. It rescued the depleted GSH and prevented the necrotic damage in the liver tissue as shown by normalization of ALT, AST and Gamma-GT as well as IL2 and a remarkable improvement in liver histology. These data suggest that LCR could be used as an adjuvant therapy in severely infected and septic patients to counteract LPS-induced liver hepatitis.

## Cats

### anatomy and histology

#### **Computed tomographic anatomy of the abdominal region of cat.**

Shojaei, B.; Vajhi, A.; Rostami, A.; Molaei, M.M.; Arshian, I.; Hashemnia, Sh.

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**Iranian Journal of Veterinary Research** 2006; 7 (2): 45-52 (27 ref.)

**Keywords:** Tomography, X-Ray Computed; Abdomen; Abdominal Cavity-radiography; Abdominal Cavity-anatomy and histology

**Abstract:** The purpose of this study was to identify the anatomic structures of the abdominal region of cat through computed tomography [CT] to be used by veterinary radiologists, clinicians and surgeons. The abdominal region of

four cats were scanned twice, with and without using contrast medium in a same position, using high-resolution imaging protocol. Slice intervals were 11 mm and were adjusted so that each vertebra was sectioned at least once. CT cuts taken with and without contrast were compared for accurate identification of specific anatomic structures. Two animals were fixed by routine anatomical method and dissected for use as reference models. Finally, important structures and landmarks were identified and labeled on the CT images.

## Cauda Equina

### pathology

#### **Surgical evaluation of patients with cauda equina syndrome.**

Faraji, M.; Samini, F.; Aryanmanesh, A.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 367-372 (23 ref.)

**Keywords:** Cauda Equina-surgery; Syndrome; Paraplegia; Retrospective Studies

**Abstract:** Cauda equina syndrome is one of the neurosurgical disorders and it must be handled urgently and seriously. The aim of this study is to evaluate surgical results and the relationship between timing of surgery and outcome in 87 patients. This is a descriptive retrospective study since 1987 to 2004. 87 patients with cauda equina syndrome were admitted in Qaem hospital. The evaluation of clinical and paraclinical signs and symptoms and surgical results were done. to assessment of outcome, the patients were divided to four grades: excellent, good, moderate and without change. From 87 patients, 67 patients were male and 26 were female. the age of patients were 26 to 64 years, the more common level of disc hemiation was L4- L5 [%39],less common L2- L3 [%9/1]. The surgical result was excellent in %37/9 and without changed in %8/1. Cauda equina syndrome is one of the emergent problems in neurosurgery and if operated in 48 hour of beginning of clinical symptoms, especially in patients with incomplete clinical findings, the surgical results are excellent.

## Cerebellar Ataxia

### Etiology

#### **Antimony-induced cerebellar ataxia.**

Khalil, Eltahir Awad G.; Ahmed, Ammar E.; Musa, Ahmed M.; Hussein, Muna H.

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Tropical Diseases Hospital - Department of Clinical Pathology and Immunology

**Saudi Medical Journal** 2006; 27 (1): 90-92 (10 ref.)

**Keywords:** Antimony Sodium Gluconate-Adverse Effects; Leishmaniasis, Visceral

**Abstract:** Visceral leishmaniasis VL, caused by Leishmania donovani is endemic over several parts of Sudan. The disease is fatal if not treated. Although sodium stibogluconate Pentostam, a pentavalent antimonial is not free from toxicity, it has been in use for treatment of VL for the last 50 years. Like other infectious diseases, neurological manifestations of VL and sodium stibogluconate have been documented. In this report, we present 2 cases of cerebellar ataxia most likely induced by Pentostam, and explain the probable cause.

## Cerebrovascular Accident

### physiopathology

#### **The effect of strengthening exercises on exaggerated muscle tonicity in chronic hemiparesis following stroke.**

Akbari, Asghar; Karimi, Hossein

Zahedan University of Medical Science - Paramedical School - Department of Physical Therapy

**Journal of Medical Sciences** 2006; 6 (3): 382-388 (30 ref.)

**Keywords:** Paresis-physiopathology; Exercise; Clinical Trials

**Abstract:** The purpose of this study was to determine quadriceps and gastrosoleous muscles tonicity problems in hemiparetic patients and the effects of strengthening exercises protocol in treatment of these impairments. In 2004, a clinical randomized trial was conducted in Tehran province, Iran. Thirty four-hemiparetic patients secondary to stroke aging 49.05 +/- 6.19 years participated in this trial. Patients were assigned randomly to either an experimental group or a control group and muscle strength [kg] were measured using hand held dynamometer and their muscle tone [ordinal] was graded on the Modified Ashworth Scale [MAS] before and after 12 sessions of intervention. The experimental group received functional, balance and strengthening exercises protocol. The control group received functional and balance exercises protocol. In experimental group measure of quadriceps and gastrosoleous tonicity decreased from 1.88 +/- 1.05 to 0.82 +/- 0.88 and 3.06 +/-1.43 to 1.65 +/- 1.11, respectively [p0.0001]. Treatment was reduced gastrosoleous tone from 3.23 +/- 1.15 to 3 +/- 1 in the control group [p.



## Cervix Uteri

**Ultrasonography****Random 2 dimensional ultrasonic evaluation of uterine cervix in pregnancy.**

Marchie, Tobechukwu T.; Otoibhi, Oisaremen E.; Ogbeide, Ehimwenma; Irabor, Pamela Faith I.; Ogoinja, Stanley Z.

**Saudi Medical Journal** 2006; 27 (2): 269-271 (6 ref.)

**Keywords:** Pregnancy; Randomized Controlled Trials

## Cesarean Section, Repeat

**Adverse Effects****Multiple cesarean section. The impact on maternal and fetal outcome.**

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Prince Rashed Hospital - Department of Obstetrics and Gynecology

**Saudi Medical Journal** 2006; 27 (2): 210-214 (17 ref.)

**Keywords:** Pregnancy; Pregnancy Outcome; Retrospective Studies

**Abstract:** To evaluate the complications, and to determine maternal and fetal risks in women who undergo 3 or more cesarean sections [CS], compared to those with one or 2 cesarean deliveries. A retrospective analysis of 2276 CS performed between 1 January 2003 and 31 April 2005. We divided patients into 3 groups: Group 1 = with 1 previous CS [n=1183]; Group 2 = 2 previous CS [n=781]; and Group 3 = 3 previous CS [n=312]. Compared to women with one or 2 cesarean deliveries, women who had 3 CS show significant increase in terms of prolonged operative time, uterine scar dehiscence, uterine rupture, placenta previa, placental adherence, and mild adhesion formation. We found no significant differences between the 3 study groups in terms of injury to surrounding structures, need for blood transfusion, anesthesia complications, hematoma formation, thromboembolism, and incisional hernia. Apgar score 7 at one and 5 minutes, neonatal intensive care unit, multiple pregnancy rate, premature delivery rate and perinatal death rate, all were similar in the 3 groups. Women with multiple CS [3] are significantly prone to have uterine scar rupture and abnormal placentation in the subsequent pregnancies compared to those with one or 2 previous cesarean deliveries. Despite that, maternal and neonatal outcome did differ from patients with lower-order cesarean sections.

## Child Health Services

**Maternal satisfaction and awareness regarding pediatric services at a tertiary hospital in Southwestern Saudi Arabia.**

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King Khalid University - College of Medicine - Department of Pediatric

**Saudi Medical Journal** 2006; 27 (2): 235-237 (17 ref.)

**Keywords:** Consumer Satisfaction; Mothers-Psychology; Questionnaires; Pediatrics; Hospitals

**Abstract:** Satisfaction of health service user is the most important aim for health provider. We observed and heard many dissatisfactory comments among people utilizing health services in Aseer Central Hospital, Saudi Arabia which led us to conduct this study to verify these comments. During a 12-month period [April 2001 - March 2002] we undertook a systematic sample collection on every 7th mother upon discharge through an Arabic speaking nurse. Participants answered questionnaires; and we encoded and analyzed the result using SPSS software package. One hundred ninety-seven mothers completed the study. There were 93 female and 104 male patients. Mothers rated the satisfaction regarding health services at the Pediatric Department as excellent [71.6%], very good [20.3%] and bad [1%]. Ninety-seven percent of mothers feel that the treating physician was in close contact with them, and the nature of disease was explained to them by the treating physician in 78.7% of the cases. Other parameters were tested including using the hospital as training facilities for the student as well as cleanliness and food services. All of which received satisfactory rating. This study confirms mother's satisfaction regarding health services provided to them which is contrary to the belief of the community. It also supports the fact that using hospital for teaching purposes does not affect the mother's satisfaction.

## Cholera

**etiology****Is cholera outbreak related to climate factors? report of seven year study from 21th March 1998-to 21th March 2004 in Iran.**

Tavana, Mehrabi A.; Fallah, Z.; Ataee, R.A.

Baqiyatallah [a.s] University of Medical Sciences - Health Research Center

**Journal of Medical Sciences** 2006; 6 (3): 480-483 (14 ref.)

**Keywords:** Cholera-epidemiology; Cholera-transmission; Cross-Sectional Studies; Disease Outbreak; Climate; Risk Factors

**Abstract:** Cholera is a main food and water borne diseases world wide. This study was conducted in order to find out is there any relation between Cholera outbreak and climate factors. The number of cholera infection during seven years [1998-2004] compared with the same year climate data. In addition the epidemiology of infection was surveyed in order to find out the possible link. The results of this study indicated that with decreasing or increasing from minimum or maximum range of temperature the outbreaks is dropped down sharply. The humidity around 50% is also prepared the best condition for the outbreak too. Cholera outbreaks could be related with many climate factors. Some factors including moderate temperature [25°C] and humidity increase the risk of epidemic conditions. However the rainfall above 294 mm in the rain seasons and high temperature above 49.6 in hot seasons are the major factors which could be related to cholera epidemic.

## Chorionic Villi

### Pathology

#### **Morphologic alterations and immunohistochemical analysis of alpha-fetoprotein and CD34 in chorionic villi of anembryonic pregnancy.**

Aydin, Sevin; Ozeren, Mehmet; Yenilmez, Engin; Yulkug, Esin; Cobanoglu, Umit; Arvas, Haluk  
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**Saudi Medical Journal** 2006; 27 (2): 154-160 (26 ref.)

**Keywords:** Chorionic Villi-Chemistry; Antigens, CD34-Analysis; Embryo Loss; Immunohistochemistry; Pregnancy; alpha-Fetoproteins-Analysis

**Abstract:** To investigate the morphology of chorionic villi using light and electron microscopy, especially the expression of alpha-fetoprotein [AFP] in trophoblastic cells and the process of maturation and margination vasculogenesis proper using CD34 immunohistochemistry in tissues from the first trimester of pregnancy loss due to anembryonic pregnancy in comparison with embryonic pregnancy. The study consisted of 2 groups: 9 patients with anembryonic pregnancies and 9 patients with embryonic pregnancies between 6 and 10 weeks of gestational age registered at the Department of Gynecology and Obstetrics, University Hospital of Karadeniz Technical University, Turkey, from March 2003 to December 2004. We examined the chorionic villi using light and electron microscopy. For immunohistochemical staining, we used AFP and CD34. Microscopically, pathologic changes were shown in syncytiotrophoblast cells of anembryonic pregnancies and AFP was strongly expressed by villous trophoblastic cells compared to embryonic pregnancies. We determined the CD34 positivity in both groups. In anembryonic pregnancies, vascular elements were much fewer in number compared with embryonic pregnancies [p0.001] and were located in the formed of hemangioblastic cords. Placental vasculogenesis is a basic feature in all types of pregnancy and a relationship exists between trophoblast cells and vessels in the chorionic villi with the potential to influence each other's functions. Defective chorionic villus vascularization is associated with embryonic death. This study may support the hypothesis, as suggested by previous studies, that anembryonic pregnancy results from early embryonic death and subsequent reabsorption rather than from the nondevelopment of an embryo.

## Chromium

### adverse effects

#### **Worker's exposure to hexavalent chromium in Isfahan electroplating factories.**

Kalantari, A.; Farokhi, Z.

**Journal of Hygiene and Health** 2006; 2 (1): 53-56 (9 ref.)

**Keywords:** Environmental Exposure; Air pollution, Environmental; Electroplating-adverse effects

## Circumcision

#### **Circumcision for the prevention of urinary tract infection in preschool boys.**

Esmaeili, M.; Ahmadnia, H.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 417-427 (26 ref.)

**Keywords:** Urinary Tract Infections; Urinalysis; Prospective Studies

**Abstract:** Urinary tract infection [UTI] is common in childhood with serious sequela. Among infants, boys are more likely to develop UTI. The aim of this study was to determine circumcision effects in decreasing UTI incidence. During a 7.5 years period prospective study 166 boys less than 6 years old with UTI allocated into 2 groups. They had not any urinary tract abnormalities. In the first group 79 boys ranging in age from 2 months to 5.5 years [mean 11.3 +/- 3.1 mo] were circumcised after UTI treatment and then observed for 6 month period with taking urinalysis [U/A] and urine culture [U/C] 1-2 monthly. The second group as control subjects 87 boys aged 40 days to 5.5 years [mean 12.1 +/- 3.4] after treatment of UTI were followed for 6 month period with taking U/A and U/C then circumcised and followed for another 6 months period. Incidence of UTI in first group [circumcised] and second [uncircumcised period] was compared with use of Chi-square test. For comparing the incidence of UTI in second group [6 months before and 6

months after circumcision] we use Mc nemar method. UTI is more common in boys aged 11.7+/-3.2mo. In the first 6 months follow-up period, UTI occurred in 2 cases of circumcised group whereas in 12 on uncircumcised group. In a 6 months period after circumcision in second group, UTI occurred only in one case. There was significant difference [P=0.009] in occurring of UTI between first and second group. There was also significant difference [P=.00 1 ] in incidence of UTI in 6 month period before and after the circumcision in second group patients. The present study indicated that circumcision decreases the risk of UTI in boys, independent of the age. Therefore circumcision should be considered in newborn period and any patient with UTI or urinary tract abnormalities. Routinely performing ultrasonography and cystourethrography in boys with first attack of UTI is recommended. In this study there were not abnormal VCUG in the cases without urinary tract abnormalities [proven by history, physical examination and sonography].

## Cobalt

### deficiency

#### The status of cobalt in soil, plants and sheep in shahrekord district, Iran.

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*Iranian Journal of Veterinary Research* 2006; 7 (1): 66-69 (18 ref.)

**Keywords:** Soil; Cattle; Sheep; Plants; Minerals

**Abstract:** Cobalt [Co] deficiency occurs in many parts of world especially in tropical and subtropical countries. Primary Co deficiency occurs only in places where the soil is deficient in Co. The type of soil and the presence of other substances like manganese and lime influence the absorption of Co [secondary Co deficiency]. To determine the Co status in Shahrekord district, Iran, several important farms were selected and the Co concentration of 80 different soils [before cultivation] under cultivation of alfalfa, clover, barley and wheat and their cultivated plants [after full vegetative growing] were measured by atomic absorption spectroscopy. Moreover, blood samples were taken from 100 sheep fed the grown plants on those areas. The mean +/- SD Co concentration in the soil of alfalfa, clover, barley and wheat farms were 0.14 +/- 0.04, 0.16 +/- 0.06, 0.10 +/- 0.03 and 0.11 +/- 0.05 mg/kg, respectively and the corresponding concentrations in plants were 1.32 +/- 1.01, 2.2 +/- 0.08, 1.2 +/- 0.76 and 1.37 +/- 0.88 mg/kg dry matter [DM], respectively. The mean +/- SD Co concentration in sheep serum was 1.45 +/- 0.41 micro g/dl at various physiological conditions. Results indicated that in all studied areas, Co concentration in soil was lower than the normal range and primary Co deficiency was noticeable. On the other hand, Co concentration in different plants and ration was higher than animal demands, but serum Co was at marginal level and probably interfered with animal health. This study showed that the soils of lands under cultivation of clover and alfalfa and its related plants contained more Co than that of determined for barley [P0.05]. Furthermore, clover soil had higher amount of Co than wheat soil [P0.05]. There was a negative correlation between the amount of lead in soil of lands under cultivation of alfalfa and the concentration of Co in plants. Such a negative correlation was also detected between the amount of molybdenum and lead in soil and the concentration of Co in plants [P0.05]. Presence of some interfering factors in ration such as nitrogen [1.24 +/- 0.3%], phosphorus [0.47 +/- 0.18%], lead [2.87 +/- 1.58 mg/kg DM] and molybdenum [0.1 +/- 0.14 mg/kg DM] were negatively affected the uptake of Co and decreased serum Co concentration via secondary Co deficiency.

## Colchicine

### isolation and purification

#### Antimitotic effect of colchicine from six different species of gloriosa in onion roots [allium cepa].

Bharathi, P.; Philomina, D.; Chakkaravarthi, S.

Deemed University Vellore Institute of Technology - School of Biotechnology and Chemical Engineering - Department of Biotechnology

*Journal of Medical Sciences* 2006; 6 (3): 420-425 (22 ref.)

**Keywords:** Colchicine-pharmacology; Plant Roots; Onions; Mitosis; Allium

**Abstract:** Colchicine, a chief alkaloid was determined in six different species of Gloriosa. Solvent extraction of colchicine with petroleum ether and dichloromethane and quantification through High Performance Liquid Chromatography showed high level of colchicine [0.342 mg g . 1] in Gloriosa plants amongst the species selected for the study. The mitotic inhibition of colchicine in onion root was standardized using standard colchicine. The effect of colchicine extracted from Gloriosa species was studied in onion root tips treated with 30 mg L . 1 colchicine for 2 h. Mitotic abnormalities have been observed and reported for the extracts from different species of Gloriosa under study.

## Cold

#### The effect of vitamine E, L-arginine, N-nitro L-arginine methyle ester and forskolin on endocrine and metabolic changes of rats exposed to acute cold stress.

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**Saudi Medical Journal** 2006; 27 (1): 17-22 (40 ref.)

**Keywords:** Stress; Rats; Pituitary-Adrenal System; Hypothalamo-Hypophyseal System; Vitamin E-Pharmacology; Forskolin-Pharmacology; Arginine; NG-Nitroarginine Methyl Ester

**Abstract:** It is a well documented fact that under stress conditions the hypothalamic-pituitary-adrenal axis [HPA] and the sympathetic nervous system [SNS] are stimulated. This results in a series of neural and endocrine adaptations known as the stress response. The current study assessed the effects of acute cold stress on adrenomedullin [ADM] levels in plasma and peripheral tissues [kidneys and heart] of rats, as well as on blood glucose, cholesterol, triglycerides [TG], total proteins both before and after intraperitoneal administration of each of the following: vitamin-E, L-arginine, forskolin and L-NAME. Methods:The current study was conducted in the Department of Physiology, Faculty of Medicine, King Saud University, Saudi Arabia, between September 2003 and March 2004. We observed 6 groups of Wistar rats for their plasma ADM, tissue plasminogen activator [t-PA], total protein, glucose and cholesterol levels. Following exposure to cold stress [-10 degree celcius for 3 hours].Results:Acute cold stress produced a significant increase in ADM levels in plasma, heart and kidney tissues of rats. Furthermore, acute cold stress produced a reduction in cholesterol and plasma protein levels. On the other hand, acute cold stress caused an increase in TG, glucose plasma levels and tissue plasminogen activator [t-PA]. We found hormonal and metabolic changes caused by cold exposure to be decreased or even prevented after vitamin E treatment or after changing nitric oxide [NO] level by L-arginine or L-NAME treatment.Conclusion:The results suggest a regulatory or protective role for ADM in counteracting HPA activation following a variety of physiological and psychological stressors. Oxidative stress or changes in intracellular signals as NO, cyclic-AMP may play a role in explaining some of the metabolic and hormonal changes occurring during acute cold stress.

## Colitis

### **Alternative methods for assessing experimental colitis in vivo and ex vivo.**

Yanez, Jaime A.; Teng, Xiao Wei; Roupe, Kathryn A.; Davies, Neal M.

Washington State University - College of Pharmacy - Department of Pharmaceutical Sciences and Pharmacology and Toxicology

**Journal of Medical Sciences** 2006; 6 (3): 338-347 (33 ref.)

**Keywords:** Permeability; Phenolsulfonphthalein; Rats; Oxidative Stress

**Abstract:** To develop and validate methods for the assessment of colonic damage in the rat that are rapid, simple to perform and quantitative. Rats [Sprague Dawley, male, N = 52] were administered 0.5 mL of 2,4,6-trinitrobenzenesulfonic acid [TNBS, 60 mg mL<sup>-1</sup> in 50% ethanol] intracolonicly to induce reproducible experimental colitis. The rats were administered either orally or intracolonicly 1 g of the non-absorbable permeability marker phenol red in 0.5 mL of water 24-72 h post-colitis induction. Urine was collected for the next 24 h and analyzed for phenol red at 559 nm using a spectrophotometer. In separate studies, colonic tissue was excised 24-72 h post-colitis induction for mitochondrial DNA damage determination. Baseline permeability indicated that 4% of phenol red dose was excreted in urine after oral or intracolonic administration to vehicle control rats. A ~3-4 fold increase in colonic permeability was apparent in colitic rats 48 h post TNBS, which correlated with gross macroscopic ulceration in the large bowel and colonic mitochondrial damage. Administration of dexamethasone 2 mg kg<sup>-1</sup>, or 5-aminosalicylic acid [5-ASA] 100 mg kg<sup>-1</sup> resulted in significant gross macroscopic protection and reduction of colonic permeability and mitochondrial damage. In a group of rats TNBS was administered and then allowed to recover for 6 weeks. Subsequent tail vein administration of TNBS 5 mg kg<sup>-1</sup> for 3 days reactivated the disease, which was also detected by an increase in colonic permeability of phenol red and oxidative mitochondrial damage. Several non-steroidal anti-inflammatory drugs administered in this model also appeared to exacerbate this disease and increase colonic permeability and mitochondrial damage. Oral or rectal administration of phenol red in experimental colitis can reproducibly detect colonic damage. This marker can also be used to non-invasively evaluate potential treatments for experimental colitis as well as its reactivation. Mitochondrial damage to colonic tissue parallels the increase in colonic permeability and appears to be a sensitive marker of disease activity in experimental colitis.

## Colles' Fracture

### **Surgery**

#### **Dome - shaped osteotomy for correction of malunited Colles' fractures.**

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**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 60-64 (20 ref.)

**Keywords:** Fractures, Malunited; Osteotomy; Postoperative Complications; Follow-Up Studies; Treatment Outcome; Range of Motion, Articular

**Abstract:** Aim: the aim of this work is to study the effectiveness of the dome- shaped osteotomy in correcting the different components of the deformity of the lower end of the radius after malunited Colles, fractures. Material and methods: the study included 28 patients with malunited Colles, fractures. The age of patients ranged 18-58 years [mean = 40.10 + 11.90].Fourteen were males [50%], the left side was affected in 71.4% [20 patients] and the dominant side was affected in 42.86% [12 patients]. Half of the patients [14] were manual workers, 8 [28.57%] were housewives and 6[21.43%] were employees. The fracture was caused by fall on the outstretched hand in 27 patients [96.43%] and by direct trauma to the wrist in one patient [3.57%]. All patients were treated by dome shaped osteotomy done through a dorsal approach. An iliac graft was put in the osteotomy site. The osteotomy was fixed by 2 Kirschner wires. full correction was achieved in 20patient [71.43%] while 8 patients [28.57%] had residual deformities, 5 of them had

residual dorsal tilt of the distal radial articular surface and 3 had residual prominence of the ulnar styloid process. The radial shortening was also corrected from 6.30+ 3.15 mm to 1.13 + 1.48. The range of motion in the wrist region improved significantly after operation except for the range of pronation which showed an insignificant improvement. After correction, 5 patients [17.86%] only had mild pain. dome shaped osteotomy is effective in correcting malunited Colles' fractures with appreciable improvement in the range of motion of the wrist and forearm. Marked improvement of pain also occurred.

## Colorectal Neoplasms

### Genetics

#### **Association of serum lipids and apolipoprotein E gene polymorphism with the risk of colorectal adenomas.**

Zhongyin, Zhou; Hesheng, Luo; Jun, Liu; Jihong, Chen  
Wuhan University - Renmin Hospital - Department of Gastroenterology  
**Saudi Medical Journal** 2006; 27 (2): 161-164 (14 ref.)

**Keywords:** Colorectal Neoplasms-Blood; Lipids-Blood; Polymorphism, Genetic; Adenoma-Genetics; Adenoma-Blood; Cholesterol-Blood; Apolipoproteins E-Genetics

**Abstract:** To investigate the relationship of serum lipids and apolipoprotein [apoE] gene polymorphism to colorectal adenomas. This study took place in the Department of Gastroenterology, Renmin Hospital of Wuhan University, PR China from June 2003 to March 2005. Ninety-eight patients with colorectal adenomas and 40 healthy subjects were enrolled, and their serum levels of triglyceride [TG], total cholesterol [TC], high density lipoprotein cholesterol [HDL-C], and low density lipoprotein cholesterol [LDL-C] were determined. The apoE gene polymorphism was identified by polymerase chain reaction-restriction fragment length polymorphism [PCR-RFLP]. Serum TC levels of colorectal adenomas group [5.32 +/- 0.85 mmol/L], distal colorectal adenomas group [5.58 +/- 0.63 mmol/L], and villous adenoma group [5.49 +/- 0.69 mmol/L] were higher than the control group [4.28 +/- 0.62 mmol/L, p=0.016], proximal colorectal adenomas group [4.82 +/- 0.58 mmol/L, p=0.038] and non-villous adenoma group [4.76 +/- 0.58 mmol/L, p=0.03]. Serum HDL-C levels of colorectal adenomas group [1.39 +/- 0.25 mmol/L] were lower than the control group [1.51 +/- 0.29 mmol/L] [p=0.035]. Serum lipids levels of each genotype in colorectal adenomas group were not statistically significant. Apolipoprotein E3/E4 genotypic frequency in colorectal adenomas group [7.1%] was lower than the control group [17.5%] [p=0.012]. The findings suggest that altered lipid metabolism may be differentially associated with colorectal adenomas and the persons with apoE E3/E4 genotype have lower risk suffering from colorectal adenomas than those with other genotypes.

## Congresses

#### **XVII eme congrès national de pédiatrie. 3, 4 et 5 Mars 2006 : Hotel el Mechtel, Tunis.**

**Revue Maghrébine de Pédiatrie [La]** 2006; 16 (1): 12-71

**Keywords:** Pediatrics

## Cornea

### Microbiology

#### **A study of bacterial isolated from corneal specimens and their antibiotic resistance profile.**

Begum, Nurun N.; Al Khattaf, Abdulaziz S.; Al Mansouri, Samir M.; Yeboah, Edward A.; Kambal, Abdel Mageed M.  
King Saud University - College of Medicine - Department of Microbiology

**Saudi Medical Journal** 2006; 27 (1): 41-45 (19 ref.)

**Keywords:** Cornea-Pathology; Microbial Sensitivity Tests; Drug Resistance; Anti-Bacterial Agents-Pharmacology; Fluoroquinolones; Administration, Topical

**Abstract:** We aim to examine the spectrum of bacteria causing corneal infections and their antibiotic susceptibility patterns. This will serve as a guideline for empiric therapy of corneal infections. We conducted the study over a period of 18 months from March 2001 through December 2002 in King Abdul-Aziz University Hospital, Riyadh, Kingdom of Saudi Arabia. Corneal specimens taken from 200 patients were inoculated directly onto different types of media. The isolates were identified and then tested against the appropriate topical or systemic antibiotics. Sixty-seven [33.5%] of the total specimens were culture positive and 133 [66.5%] were culture negative. Fourteen [7%] of these showed organisms in the Gram stained smears and correlated well with the culture reports. Of the 67 positive cultures, 53 [79.1%] were Gram-positive bacteria mostly coagulase-negative Staphylococci 29 [43.3%] followed by Streptococcus pneumoniae [S. pneumoniae] 13 [19.4%]. Among Gram-negative bacteria 14 [20.9%], Pseudomonas aeruginosa [P. aeruginosa] 10 [14.9%] was the predominant isolate. All the isolates were sensitive to ofloxacin and the commonly used ocular antibiotics. All the isolated bacteria were sensitive to ofloxacin, a fluoroquinolone. Having marked potency for broad-spectrum activity against both Gram-positive and Gram-negative bacteria, make the fluoroquinolones especially the newer generations, a potential single drug therapy for corneal infections.

## Coronary Disease

### Diagnosis

#### Overview of exercise stress testing.

Kharabshah, Suleiman M.; Al Sugair, Abdulaziz; Al Buraiki, Jehad; Al Farhan, Juman  
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**Annals of Saudi Medicine** 2006; 26 (1): 1-6 (40 ref.)

**Keywords:** Exercise Test; Electrocardiography; Coronary Circulation; Risk Assessment; Angina Pectoris-Diagnosis; Thallium-Diagnostic Use; Myocardial Infarction

## Craniocerebral Trauma

### Changes in coagulation factors and their correlation with the clinical course of trauma patients.

Taghikhani, A.; Amirjamshidi, A.  
 Tehran University of Medical Sciences - Sina Hospital

**Blood** 2006; 2 (6): 239-246 (34 ref.)

**Keywords:** Head Injuries, Closed; Tomography, X-Ray Computed; Prognosis; Blood Coagulation Tests; Blood Coagulation Factors

**Abstract:** Appropriate diagnosis and proper treatment of the complications of head injury are the most common procedures encountered by neurosurgeons. Good management of the factors effective in the outcome of these cases, among which the derangements in the coagulation factors are one of the most common changes, can be one of the essential milestones in treatment of such victims. The objectives of this study have been to find the derangements in the blood coagulating factors in the cases referred to the head trauma emergency care unit of Sina Hospital as a hospital-based study. We try to see if there is any correlation between these coagulopathies and the extent of damages, brain damages in the CT-scans, and patients' outcome. To our idea, it is for the first time that such a prospective study has been undertaken in Iran. All the information are taken from the questionnaires addressed to 300 cases admitted to the emergency head trauma unit of Sina Hospital. Prothrombin time [PT], Thromboplastin time [PTT] and platelet counts, level of consciousness [GCS], associated extremities' or visceral injuries, and findings in the X-ray films and CT scans, all have been included in this questionnaire. The coagulopathies are much more prevalent in cases with severe head injury. The coagulopathies are also more prevalent in cases with remarkable brain damages in their imaging studies. They are much more prevalent in cases who are going to reach a bad outcome.

### The evaluation of correlation between decompressive craniectomy and hydrocephaly.

Ebrahiminejad, A.; Jangiaghdam, H.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 363-366 (16 ref.)

**Keywords:** Decompression, Surgical; Hydrocephalus; Glasgow Coma Scale; Craniotomy; Treatment Outcome

**Abstract:** Post-traumatic hydrocephalus [PTH], is one of the relatively rare complication after severe head injury. Incidence of hydrocephaly in patient who underwent decompressive craniectomy surgery seems to be high. Aim of this research is to evaluate incidence of hydrocephaly in these patients. This study was done on 36 patients who underwent decompressive craniectomy after severe head injury. We evaluated incidence rate of hydrocephalus at them, also age and consciousness level were studied. Of 36 patients with decompressive craniectomy 33 patients [91.7%] were male and 3 patients [8.3%] were female, mean age was 33.5 +18.36 and mean Glasgow Coma Scale [GCS] was 6.58 + 2.42. The most common underlying cause for decompressive craniectomy operation was subdural hematoma with edema in 22 patients [61.1%] and next cause was contusion and edema in 5 patients [13.9%]. From all 36 patients 15 cases [41.7%] developed to true hydrocephaly that 12 patients [33.3%] need shunt operation. Regarding to high incidence rate of hydrocephaly in patients with decompressive craniectomy, this matter must be considered as a complication in these patients, that requires early diagnosis and treatment.

## Cross Infection

### Epidemiology

#### Prevalence of extended-spectrum beta-lactamases among enterobacteriaceae isolated from blood culture in a tertiary care hospital.

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Armed Forces Hospital

**Saudi Medical Journal** 2006; 27 (1): 37-40 (29 ref.)

**Keywords:** Cross Infection-Drug Therapy; Enterobacteriaceae-Isolation and Purification; Enterobacteriaceae-Drug Effects; Enterobacteriaceae Infections; Prevalence; Microbial Sensitivity Tests; beta-Lactam Resistance; Hospitals

**Abstract:** To determine the prevalence of extended spectrum beta-lactamase among Enterobacteriaceae isolated from blood culture in a tertiary care hospital. We carried out this study at the Armed Forces Hospital, Riyadh, Kingdom

of Saudi Arabia during the period between January 2003 - December 2004. We tested a total of 601 isolates of the family Enterobacteriaceae from blood culture for the prevalence of extended spectrum beta-lactamase [ESBL] production by the standardized disc diffusion method and confirmed by the ESBL E test strips. Ninety-five [15.8%] of the isolates were ESBL producers. Among these, 48.4% were *Klebsiella pneumoniae* [*K. pneumoniae*] followed by 15.8% of both *Escherichia coli* [*E. coli*] and *Enterobacter cloacae* [*Ent. cloacae*]. Other isolates produced ESBL in low numbers. *Klebsiella pneumoniae* produced ESBL in significant numbers. Extended spectrum beta-lactamase gram-negative bacilli present significant diagnostic and therapeutic challenges to the management of infections due to these organisms. Microbiology laboratories should start reporting ESBL producing Enterobacteriaceae organism due to their importance in respect to antibiotic therapy and infection control aspects.

## Cryptosporidiosis

### Epidemiology

#### **Cryptosporidiosis among children in Tripoli.**

Kara, Wafa Mohamed; El Haggiagi, M. B.; Shaban, A. O.

Al-Fatah University, Tripoli, Libya - Faculty of Medicine - Department of Medical Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 107-112 (17 ref.)

**Keywords:** Child; *Cryptosporidium parvum*; Diarrhea; Immunocompetence; Immunocompromised Host; Questionnaires; Feces-Parasitology; Prevalence

## Cryptosporidium

#### **Prevalence of cryptosporidium spp. oocysts in dairy calves in Kerman, Southeastern Iran.**

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**Iranian Journal of Veterinary Research** 2006; 7 (2): 81-84 (27 ref.)

**Keywords:** Cattle; Prevalence; Diarrhea-etiology; Feces-parasitology

**Abstract:** Faecal samples from 291 dairy calves from 10 dairy herds in Kerman were examined to investigate the prevalence of *Cryptosporidium* infection. *Cryptosporidium* spp. oocysts were identified by using the modified Ziehl-Neelsen staining technique in 63 [21.63%] calves. Calves were grouped according to their age as follows: 3 months, 3-6 months and 6-9 months. *Cryptosporidium* infection was detected in 28.2, 20.6 and 13.09%, of the calves in the respective age groups. A significant age-associated decrease in the detection rate of *Cryptosporidium* infection [P0.05] was found. *Cryptosporidium* infection was detected in 11 of the 30 [36.66%] diarrhoeic and 52 of the 261 [19.92%] non-diarrhoeic calves. There was a significantly [P0.05] higher prevalence of *Cryptosporidium* infection in diarrhoeic than in non-diarrhoeic calves.

## Crystallins

#### **Comparison of optic lens proteins among animals at different stages of development.**

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University of Shiraz - School of Veterinary Medicine - Department of Biochemistry

**Iranian Journal of Veterinary Research** 2006; 7 (1): 1-7 (33 ref.)

**Keywords:** Animals, Domestic; Growth and Development; Age Factors

**Abstract:** The purpose of this investigation was to study and compare the electrophoretic patterns of optic lens proteins of different species of domestic animals at pre- and post-natal ages. Optic lenses were removed from the embryo or adult sheep, cattle, goat, camel and chicken at the slaughter-house then homogenized and subjected to sodium dodecylsulfate polyacrylamide gel electrophoresis [SDS-PAGE]. In all animals, except chicken, majority of proteins had molecular weights of less than 33 kDa and their concentrations were not affected by the age of animals at pre- or post-natal stages. A 9 kDa protein which was present in adult sheep optic lens was absent in sheep fetal lenses at different age groups. Prominent differences were observed in camel and chicken. In camel, proteins with molecular weights of 30 and 38 kDa were present, the concentration of which was much lower in other animals. A protein of 57 kDa which constituted the major protein of chicken optic lens was absent in other species of animals. The concentration of proteins in the range of 25-30 kDa increased with the age of chicken embryos. These proteins were remarkably different from those of adult chicken lens proteins except the 57 kDa protein which was also the predominant protein in the embryo. The 38 kDa protein disappeared and a 20 kDa protein appeared in the chicken embryo lens as compared with adult chicken lens. These data indicate extensive differences in the lens proteins of animals and suggest different physiological functions of lens proteins in different animals at different stages of development.

## Culex

#### ***Culex neavei* theobald, as a possible transmitter of hepatozoon matruhensis to the Egyptian snake psammophis schokari.**

Rashdan, Nagwa A.; El Sebaei, Saud E.

Cairo University - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 1-6 (13 ref.)

**Keywords:** Snakes; Protozoan Infections; Survival Rate; Mortality

**Abstract:** Stained smears of *Culex neavei* females infected with *Hepatozoon matruhensis* from *Psainophis schokari* and kept at 20 +/- 1°C showed the complete developmental stage of the parasite. However, no detection of sporozoites was monitored when females were kept at 30 +/- 1°C. A successful infection of *P. schokari* was carried out in the laboratory by *C. neavei* bites. The effect of infection on the mosquito longevity was insignificant [p 0.05] under low temperature and highly significant [p 0.001] under high temperature. The mortality rate was slightly affected at 20 +/- 1°C, but greatly affected at 30 +/- 1°C.

**Laboratory studies on the possibility of culex (culex) pipiens L. to harbour and transmit hepatozoon matruhensis to the Egyptian snake psammophis schokari.**

Ebraheem, Mahmoud H.; Rashdan, Nagwa A.; Fayed, Hamed M.; Galal, Fatma H.

Cairo University, Giza, 12211, Egypt - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 241-250 (23 ref.)

**Keywords:** Protozoan Infections; Snakes; Survival Rate; Oviposition

**Abstract:** A successful experimental infection of *Psammophis schokari* snake with *Hepatozoon matruhensis* through *Culex* [*Culex*] *pipiens* bites was carried out under laboratory condition of 20 +/- 1°C and 60-70% R.H. The period monitored for gametocyte maturation ranged from 38 to 42 days while the recorded prepatent period ranged from 28 to 35 days. The effect of infection was nonsignificant on longevity, incubation period and percentage of egg hatching [P 0.05]. Meanwhile a significant increase [P 0.05] in the preoviposition period together with a significant reduction [P 0.001] in the number of eggs deposited of infected females were recorded.

**A preliminary pilot survey (culex pipiens), Sharkia governorate, Egypt.**

El Bashier, Zeinab M.; Hassan, Mostafa I.; Mangoud, Amal M.; Morsy, Tossou A.; Mohammad, Khairy A.

Zagazig University, Egypt - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 81-92 (42 ref.)

**Keywords:** Ecology; Prevalence; Rural Population; Urban Population; Seasons; Diptera

**Abstract:** Sixteen different ecological areas in Sharkia Governorate were surveyed for adult *Culex pipiens*. The prevalence was investigated among 160 houses of 2800 individuals and their surrounding outdoors. The collected adults were 41488 from October 2003 to November 2004. The collection rates were higher in the rural areas than urban ones. Mosquitoes were common all the year round except January, February and March, with peaks in summer and autumn than in spring and winter. Larvae in descending order were *Cx. pipiens* the predominant larva followed by *Ae. caspius*, *Culiseta* sp. and then *Cx. pusillus*. *Cx. pipiens* was described as the most common larva.

**Studies on some biological aspects of culex pipiens and culex quinquefasciatus (Diptera: culicidae) infected with hepatozoon sp. harboured by the saudian lizard uromastix microlepis.**

Rashdan, Nagwa A.; El Sebaei, Saud E.; Al Khalifa, Khalifa S.

Cairo University, Giza, Egypt - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 251-258 (29 ref.)

**Keywords:** Diptera; Culicidae; Lizards; Oviposition; Reproduction

**Abstract:** Laboratory observations revealed that both *C. pipiens* and *C. quinquefasciatus* could harbour the parasitic *Hepatozoon*, while only *Cx. pipiens* succeeded to induce infection to the recipient lizard *Uromastix microlepis*. A significant reduction in egg production together with a significant increase in the pre-oviposition period of *C. pipiens* was recorded. Incubation period and percentage of egg hatching showed no significant changes. Infection had no effect on the reproductive fitness of *C. quinquefasciatus*. Haematin excretion was normally distributed for all both species. No size difference was recorded between infected and uninfected ones. Infection did not affect longevity.

Culicidae

**Influence of amphibian and reptile on the feeding preference, longevity and reproductive capacity of Egyptian culex (culex) pipiens linneaus (diptera-culicidae).**

Ebraheem, Mahmoud H.; Rashdan, Nagwa A.; Fayed, Hamed M.; Galal, Fatma H.

Cairo University, Giza 12211, Egypt - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 33-39 (16 ref.)

**Keywords:** Feeding Behavior; Life Expectancy; Reproduction; Oviposition

**Abstract:** Using *Bufo regularis* and ten reptile species as hosts for *Culex pipiens* under laboratory conditions revealed a great effect on feeding preference as a significant long feeding periods together with a significant reduction in the blood meal ratios were recorded. Female mosquitoes offered the experimental animals showed a short life span with different significant levels. A recognizable reduction in the reproductive fitness of *Cx. pipiens* females was recorded. Delayed oviposition and low ICI values was obtained. The percentage of egg hatching was not affected by the experimental animals.



## Curcuma

**Chemistry****Evidence that curcuma longa possesses an active hypolipidemic effects in rabbits.**

Khouri, Nabil A.

**Saudi Medical Journal** 2006; 27 (2): 264-266 (5 ref.)**Keywords:** Antilipemic Agents-Pharmacology; Plant Preparations-Pharmacology; Rabbits

## Depressive Disorder

**Falls and depression in the elderly population. Reply from the authors.**

Afifi, Mustafa; Kose, Nezire

Ministr of Health - Department of Research and Studies

**Saudi Medical Journal** 2006; 27 (1): 128-129 (6 ref.)**Keywords:** Accidental Falls; Geriatric Assessment; Activities of Daily Living; Risk Assessment; Risk Factors; Incidence; Depression; Aged

## Dermatomycoses

**therapy****In vitro antidermatophytic activity of diospyros crassiflora Hiern [Ebenaceae].**

Dzoyem, J.P.; Tangmouo, J.G.; Kechia, F.A.; Lontsi, D.; Etoa, F.X.; Lohoue, P.J.

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University of Yaounde - Faculty of Medicine and Biomedical Sciences - Department of Laboratory of Mycology

**Sudanese Journal of Dermatology** 2006; 4 (1): 10-15 (22 ref.)**Keywords:** Plants, Medicinal; Diospyros; Plant Extracts; Antifungal Agents; In Vitro

**Abstract:** Dermatophytoses constitute an important public health problem as yet unresolved. In most African countries, traditional phytomedicine is used to make faces at this disease. Plants from the genus *Diospyros* are known for their various biological activities, but *Diospyros crassiflora* has not been previously performed for antidermatophytic activity. To study the In vitro antidermatophytic activity of extract from the stem bark of *Diospyros crassiflora* and to isolate the active compound responsible for the activity observed. Clinical isolates of dermatophytes [*Trichophyton rubrum*, *Trichophyton soudanense*, *Microsporum canis*, *Microsporum langeronii*, *Microsporum gypseum*] were tested in vitro by cup-plate agar diffusion and broth macrodilution methods. Results The growth of all dermatophytes tested was inhibited by the extract and plumbagin. The diameter of inhibition zones varied from 9-13 mm and from 10-18 mm for the extract and plumbagin respectively. MIC's [Minimal inhibitory concentration] values ranged from 6.25-12.5 mg/ml for the extract and 3.12-6.25 micro g/ml for plumbagin. Extract showed fungicidal effect at a concentration of 12.5 mg/ml on *T. rubrum*. Plumbagin was fungicidal on all dermatophytes tested at 12.5 micro g/ml excepted *T. rubrum* [6.25 micro g/ml]. Extract from the stem bark of *Diospyros crassiflora* posses tremendous antidermatophytic activity, the active principle responsible for the activity is a naphtoquinone plumbagin. Compared to ketoconazole used as standard antifungal the compound isolate could be considered as a promising antidermatophytic agent.

## Diabetes Mellitus

**Physiopathology****Assessment of respiratory muscles endurance in diabetic patients.**

Mro, Sultan A.; Al Drees, Abdul Majeed; Arif, Muhammad; Shah, Fayaz A.; Al Rubean, Khalid

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King Khalid University Hospital - Department of Physiology

**Saudi Medical Journal** 2006; 27 (2): 223-226 (21 ref.)**Keywords:** Muscle Contraction-Physiology; Respiratory Muscles-Physiopathology

**Abstract:** Respiratory muscle endurance is of interest in pulmonary, critical care and many other areas of medicine. The maximal voluntary ventilation [MVV] test is an objective dynamic method for measuring the working capacity of respiratory muscles. Therefore, we designed the present study to determine the effect imposed by diabetes mellitus on respiratory muscle endurance in Saudi diabetic patients. We conducted this study in the Department of Physiology, College of Medicine, King Khalid University Hospital and Diabetic Centre, King Abdul-Aziz University Hospital, Riyadh, Saudi Arabia during the year 2002-2004. In this study, we recruited 39 male diabetic patients and equal number of control subjects and all participants were non-smokers with age range of 23-71 years. The subjects were matched for age, height and weight. We determined the respiratory muscles endurance by a direct MVV test during inspiratory and expiratory phases of respiration by using a MP-100 student Bio Pac system and compared the results using a paired t-test. In inspiratory and expiratory phases of respiration, diabetic patients showed a significant reduction in the mean values of direct MVV test [p0.001] relative to their matched controls. We conclude that in diabetic patients the respiratory muscles endurance is impaired by a decreased in MVV values. This decline in MVV further showed that the

diabetic patients have a reduced inhaled and exhaled volumes during consecutive breaths.

## Diabetes Mellitus, Type 1

### Effects of aerobic exercise on serum lipoprotein of IDDM men.

Hazaveei, S.M.; Nazem, F.; Sabetian, R.; Rahmnejhad, H.

**Journal of Hygiene and Health** 2006; 2 (1): 57-63 (16 ref.)

**Keywords:** Lipoproteins-blood; Exercise; Lipoproteins, LDL-blood; Lipoproteins, HDL-blood; Lipoproteins, VLDL-blood

## Drug Therapy

### Multiple daily insulin regimen using insulin glargine in type 1 diabetic Saudi children.

Bin Abbas, Bassam S.; Al Agha, Abdulmoein E.; Sakati, Nadia A.; Al Ashwal, Abdullah A.

**Saudi Medical Journal** 2006; 27 (2): 262-264 (7 ref.)

**Keywords:** Insulin-Analogs and Derivatives; Insulin-Administration and Dosage; Drug Administration Routes; Treatment Outcome; Child

## Diabetes Mellitus, Type 2

## Blood

### Ramadan fasting induces modifications of certain serum components in obese women with type 2 diabetes.

Khaled, Boumediene M.; Bendahmane, Malika; Belbraouet, Slimane  
Djillali Liabes University - Faculty of Sciences - Department of Biology

**Saudi Medical Journal** 2006; 27 (1): 23-26 (22 ref.)

**Keywords:** Diabetes Mellitus, Type 2-Metabolism; Fasting; Religion and Medicine; Energy Intake; Cholesterol-Blood; Triglycerides-Blood; Hemoglobin A, Glycosylated; Lipids-Blood; Islam; Obesity

**Abstract:** Objectives: To examine the effect of fasting during Ramadan on certain serum components such as fasting serum glucose [FSG], glycated hemoglobin [HbA1c], total cholesterol [TC], triglycerides [TGs], high density lipoproteins [HDL-C], and low density lipoproteins [LDL-C] parameters in obese women patients with type 2 diabetes. Methods: We conducted the study in Petit-Vichy Diabetology Center, Sidi-Bel-Abbes, Algeria from October 2003 to March 2004, on 60 obese outpatient women [BMI = 35.41 +/- 3.64 kg/m<sup>2</sup>], aged 51 +/- 10 years, who had diabetes for 5 +/- 2.5 years. The patients followed no specific diet, on medications, and presenting no degenerative complications. We carried out the study over 3 periods: before [pre-fasting], during [fasting], and after Ramadan month [post-fasting]. Comparing Ramadan [fasting period] with non-Ramadan days [pre- and post-fasting periods], we observed significant decreases in FSG [16.72%, p0.001], in HbA1c [11.3%, p0.005], and in HDL-C [26.81%, p0.001] rates, while TC [13.85%, p0.001], TGs [16.9%, p0.003], and the LDL-C [22.39%, p0.0001] levels increased significantly. Conclusion: These findings show a beneficial effect of fasting during Ramadan on glucose homeostasis, however, we observed an unbalanced profile on lipids.

## Therapy

### Comparison of lipid profiles and lipoprotein [a] levels in patients with type 2 diabetes mellitus during oral hypoglycemic or insulin therapy.

Habib, Syed S.; Aslam, Muhammad; Naveed, Adul K.; Razi, Muhammad S.

King Saud University - College of Medicine - Department of Physiology

**Saudi Medical Journal** 2006; 27 (2): 174-180 (47 ref.)

**Keywords:** Diabetes Mellitus, Type 2-Blood; Insulin-Therapeutic Use; Hypoglycemic Agents-Therapeutic Use; Lipids-Blood; Lipoproteins-Blood; Diabetic Diet

**Abstract:** The aim of this study is to compare lipid and lipoprotein [a] profiles in patients with type 2 diabetes mellitus [DM] on insulin and oral hypoglycemic therapy. The study took place in the Department of Physiology, Army Medical College, Rawalpindi, Pakistan, during 2002. Ninety-seven type 2 DM patients participated in the study. We divided the patients according to the type of treatment into sulphonylurea [n=40], sulphonylurea plus metformin [n=33] and insulin [n=24] therapy groups as well as 40 healthy subjects served as controls. Fasting blood samples were analyzed for lipoprotein [a] [Lp [a]], total cholesterol [TC], triglycerides [TG], low-density lipoprotein cholesterol [LDL-C], high-density lipoprotein cholesterol [HDL-C], glucose, glycosylated hemoglobin [HbA1c] and insulin. Different groups of diabetic patients showed elevated fasting blood glucose [FPG] levels [p0.0001 for all], HbA1c [p0.0001 for all] compared with controls. Meanwhile, fasting insulin levels were elevated only in insulin treated group compared with oral hypoglycemic treated groups and controls [p0.0001 for all]. Patients on sulphonylurea and on sulphonylurea plus metformin groups showed significantly elevated TC [p0.001, p0.0001], TG [p0.001, p0.01], LDL-C [p0.01, p0.001] and LDL-C/HDL-C [p0.0001, p0.0001] compared with controls. Insulin therapy group showed significantly decreased TC, TG, LDL-C, LDL-C/HDL-C levels compared with sulphonylurea and sulphonylurea plus metformin treated groups, however, no significant difference was noted in the levels of above mentioned parameters and controls. Meanwhile, HDL-C levels were significantly lower in all diabetic groups compared with controls and were higher in insulin treated group compared with sulphonylurea plus metformin therapy group [p0.05]. Lipoprotein [a] levels were significantly higher in different diabetic groups compared with controls. While there was a non-significant difference in Lp [a] levels between

different diabetic groups. Patients with type 2 DM who are being treated on insulin have a better lipid profile [TC, HDL-C, LDL-C, TG] compared with those patients on oral hypoglycemic agents. Meanwhile, Lp [a] levels were raised in all diabetic patients and seem not to be affected either by insulin or by oral hypoglycemic treatment.

## Diabetic Foot

### Epidemiology

#### The diabetic foot. In the Arab world.

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*Saudi Medical Journal* 2006; 27 (2): 147-153 (24 ref.)

**Keywords:** Diabetic Foot-Therapy; Arabs

**Abstract:** The literature is replete with diabetic foot problems throughout the world, but few has been written about the problem in the Middle East and even in the Arab world. After reviewing these discussions, we realized that the magnitude of the problem is not yet appreciated for many reasons. In this paper, we explained why it is more prevalent, less managed and has been associated with worse health outcomes in diabetic patients in the Arab world. We believe that the leading problems are preventable, and this cancer can be controlled in a simple cost-effective way.

## Diabetic Retinopathy

### PhysioPathology

#### Regulation of taurine transporter activity in cultured rat retinal ganglion cells and rat retinal Muller cells.

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*SPJ - Saudi Pharmaceutical Journal* 2006; 14 (1): 16-26 (47 ref.)

**Keywords:** Diabetic Retinopathy-prevention and control; Taurine-Metabolism; Rats; Blood Glucose-Analysis; Retina-Metabolism; Retina-Pathology; Membrane Transport Proteins; Retinal Ganglion Cells

**Abstract:** Diabetic retinopathy is one of the most common complications of diabetes. The amino acid taurine is believed to play an antioxidant protective role in diabetic retinopathy through the scavenging of the reactive species. It is not well established whether taurine uptake is altered in retinal cells during diabetic conditions. Thus, the present study was designed to investigate the changes in taurine transport in cultures of rat retinal Muller cells and rat retinal ganglion cells under conditions associated with diabetes. Taurine was abundantly up taken by rat retinal Muller cells and rat retinal ganglion cells under normal glycemic condition. Taurine was actively transported to rat Muller cells and rat retinal ganglion cells in a Na. and Cl. dependent manner. Taurine uptake further significantly elevated in both types of cells after the incubation with high glucose concentration. This effect could be attributed to the increase in osmolarity. Because nitric oxide [NO] is a molecule implicated in the pathogenesis of diabetes, we also determined the activity of the taurine transporter in cultured rat retinal Muller cells and rat retinal ganglion cells in the presence of the NO donors, SIN-1 and SNAP. Taurine uptake was elevated above control values after 24-h incubation with low concentration of NO donors. We finally investigated the ability of neurotoxic glutamate to change taurine transporter activity in both types of cells. Uptake of taurine was significantly increased in rat retinal ganglion cells when only incubated with high concentration of glutamate. Our data provide evidence that taurine transporter is present in cultured rat retinal ganglion and Muller cells and is regulated by hyperosmolarity. The data are relevant to diseases such as diabetes and neuronal degeneration where retinal cell volume may dramatically change.

### Surgery

#### Anterior chamber depth and intraocular pressure following panretinal argon laser photocoagulation for diabetic retinopathy.

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*Annals of Saudi Medicine* 2006; 26 (1): 73-5 (16 ref.)

**Keywords:** Diabetic Retinopathy-Physiopathology; Intraocular Pressure; Laser Surgery; Xenon; Anterior Chamber; Light Coagulation; Argon

## Diltiazem

### Pharmacokinetics

#### Diltiazem release from eudragit NE40 coated pellets and effects of themal treatment .

Nisar Ur Rahman; Yuen, K.H.; Woei, Wong Jia

Islamia University - Department of Pharmacy

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 69-74 (14 ref.)

**Keywords:** Delayed-Action Preparations; Polymethacrylic Acids; Heating; Drug Stability

**Abstract:** A film coat for diltiazem pellets was applied with aqueous dispersion of Eudragit NE40 using bottom spray Fluidized-bed coater. The effects of thermal treatment, dissolution media and ionic strength of media on drug release from the pellets were evaluated. Coated pellets were treated at 37°C, 40°C, 50°C and 60°C for 24 hours. Thermally treated pellets showed slight reduction in the release rates at 50°C and 60°C compared to initial release profile at 37°C. Curing or thermal treatment of the coat at an appropriate temperature and length of time was found essential to achieve complete coalescence of the polymer particles such that the rate of drug release was stable during prolonged storage. Diltiazem release was fairly independent of pH and the ionic strength of the dissolution media. However, the release rates were slightly decreased with increasing molar concentrations of sodium chloride in the buffer media.

## Diptera

### Genetics

#### **Cytogenetic studies of calliphora vicina and lucilia sericata (diptera: calliphoridae) from North Western Egypt.**

El Bassiony, Ghada M.

Cairo University, Giza, Egypt - Faculty of Science - Department of Entomology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 23-32 (35 ref.)

**Keywords:** Cytogenetic Analysis; X Chromosome; Y Chromosome; Karyotyping

**Abstract:** The blow fly, *Calliphora vicina* [Robineau-Desvoidy, 1830] and the green bottle fly, *Lucilia sericata* [Meigen, 1826] were collected from the north coast of Egypt. The karyotype of both flies was characterized by cytotoxicological methods, including chromosome number, shape, relative length, arm ratio, centromeric index and designation. To quantify relative chromosome length, the percent of total haploid autosomal complement length [%TACL] for each autosome was calculated. The deplod number of chromosomes, of both flies, is  $2n = 12$  where females have XX and males have XY sex determination mechanism. *C. vicina* have four metacentric autosomal pairs, with variable arm ratios, and one submetacentric pair. Both X and Y chromosomes are metacentric whereas X chromosome is the longest chromosome in the designation. The karyotype of *L. sericata* is characterized by the first autosome which is somewhat longer than all other chromosomes [%TACL = 27.02]. The autosomes of *L. sericata* are four metacentric pairs and one submetacentric pair. X and Y chromosomes are metacentric and submetacentric, respectively.

## Domestic Violence

#### **Domestic violence experiences among medical students in 2 universities.**

Aydin, Serpil

**Saudi Medical Journal** 2006; 27 (1): 125-127 (6 ref.)

**Keywords:** Students, Medical; Education, Medical; Faculty, Medical

## Down Syndrome

### Complications

#### **Congenital heart diseases and other major anomalies in patients with Down syndrome.**

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**Saudi Medical Journal** 2006; 27 (2): 219-222 (13 ref.)

**Keywords:** Heart Defects, Congenital-Complications; Abnormalities, Multiple; Heart Septal Defects, Ventricular; Retrospective Studies

**Abstract:** To determine the frequency and types of congenital heart diseases [CHDs] and other congenital anomalies among Down syndrome [DS] patients, and the short-term survival rate. This is a retrospective review of 98 DS patients seen in Aseer Central Hospital from July 1994 to June 2005. The clinicians notes, echocardiography reports and operative notes were examined. The mean follow up period was 30 +/- 40.1 months. Ninety-three patients had echocardiography; CHDs were found in 57 patients [61.3%]. Ventricular septal defect [VSD] was the most common [33.3%] followed by atrioventricular septal defect [22.8%], atrial septal defect [21.1%], patent ductus arteriosus [14%] and tetralogy of Fallot [5.3%]. Three patients [5.3%] developed inoperable obstructive pulmonary vascular disease [OPVD] and 3 were deemed inoperable for other reasons. The CHD was clinically suspected in 96%. The most common noncardiac anomalies were gastrointestinal, affecting 22 patients [22.4%]: duodenal atresia 8 patients, imperforate anus 7 patients and Hirschsprung disease 4 patients. Sixteen patients [16.3%] died at a mean age of 19 months, 15 of them [93.8%] had anomalies. The most common CHD in DS is VSD and the most common noncardiac anomaly is gastrointestinal. Down syndrome patients should be screened by echocardiography early in life to avoid OPVD. The mortality in DS is highest among those with congenital anomalies, and therefore, early intervention is crucial.

## Drug Hypersensitivity

### Anticonvulsant hypersensitivity syndrome.

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University of Juba - College of Medicine - Department of Venereology and Dermatology

**Sudanese Journal of Dermatology** 2006; 4 (1): 35-39 (21 ref.)

**Keywords:** Anticonvulsants-adverse effects; Pruritis; Carbamazepine-adverse effects

**Abstract:** Anticonvulsant drug hypersensitivity syndrome [AHS] is a severe, life-threatening adverse drug reaction. AHS is a cutaneous eruption associated with the aromatic anticonvulsant drugs: carbamazepine, phenytoin, phenobarbital and lamotrigine. The clinical picture of AHS is characterized by a triad of fever, skin rash and internal organs involvement. The management is by prompt withdrawal of the offending drug and supportive measures [pain relief, antipyretics, skin care \_]. Systemic corticosteroids use is controversial. Its use is suggested only when there is severe internal organs involvement. At the end of this review we presented our experience with two cases of AHS [photos are added], both developed the condition after use of carbamazepine.

## Ear, External

### Anatomy and Histology

#### The diagonal ear-lobe crease. As sign of some diseases. Reply from the authors.

Bacheloglu, Meltem; Demirel, Birol; Fabijanic, Damir; Miric, Dinko; Radic, Mislav

Cazi University School of Medicine - Department of Anatomy and Forensic Medicine

**Saudi Medical Journal** 2006; 27 (1): 13 (7 ref.)

**Keywords:** Ear, External-Pathology; Coronary Disease-Diagnosis; Physical Examination

## Echinococcosis

### diagnosis

#### Detection of hydatid fluid and protoscolices antigens in sheep with hydatidosis.

Rajabiyoun, M.; Hashemitabar, Gh. R.; Tavakool Afshari, J.

Ferdowsi University of Mashhad - School of Veterinary Medicine - Department of Pathobiology

**Iranian Journal of Veterinary Research** 2006; 7 (2): 59-64 (27 ref.)

**Keywords:** Echinococcosis-immunology; Sheep; Echinococcus Granulosus; Enzyme-Linked Immunosorbent Assay; Blotting, Western

**Abstract:** Hydatidosis is a disease caused by infection with the metacestode stage of the dog tapeworm, *Echinococcus granulosus*. This is recognised as one of the world's most important zoonoses, affecting both humans and their domestic animals. In the current study, 20 sheep cystic livers or lungs were collected. Hydatid fluid and protoscolices were isolated and the soluble protein was prepared. Polypeptide profile of hydatid fluid and protoscolices was analysed by SDS-PAGE with 12.5% acrylamide concentration. Humoral immunity and antigenic pattern were evaluated by Western blotting. In electrophoresis of hydatid fluid, five bands with molecular weight of 84, 68-70, 55, 27-28 and 16-17 kDa were observed; the 68-70 and 55 kDa bands were noticeably dominant. In Western blot of hydatid fluid protein, only 68-70 and 55 kDa bands had considerable positive reaction. A total of 12 bands were also observed in protoscolices polypeptide profile. The molecular weight of the bands were 120, 88-89, 84, 66, 55-56, 49-50, 43-44, 36, 30-31, 24, 20 and 15-16 kDa. Seven bands with molecular weight of 66, 55-56, 49-50, 43-44, 36, 30-31 and 24 kDa had positive reaction in Western blot. We concluded that the determination of specific antigenic bands for sheep hydatid fluid and protoscolices was successfully achieved in this study.

### Epidemiology

#### Cystic echinococcosis in central Anatolia, Turkey.

Yazar, Suleyman; Yaman, Ozan; Cetinkaya, Fevziye; Sahin, Izzet

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Erciyes, University - Medical Faculty - Department of Parasitology

**Saudi Medical Journal** 2006; 27 (2): 205-209 (17 ref.)

**Keywords:** Echinococcosis-Diagnosis; Aged, 80 and Over; Enzyme-Linked Immunosorbent Assay; Ultrasonography; Abdomen-Ultrasonography

**Abstract:** Human cystic echinococcosis [CE] caused by infection with a larval stage of *Echinococcus granulosus* is a serious public health problem in Turkey. Echinococcosis is a zoonotic disease; dogs and livestock are important hosts in transmission. The aim of this study is to evaluate the rate of CE in Kayseri Rural Area, Central Anatolia, Turkey. At the present study, we planned to evaluate the rate of CE in Kayseri rural area in Central Anatolia between 2000 and 2002. We investigated 2,242 subjects using enzyme-linked immunosorbent assay [ELISA] and indirect fluorescence antibody [IFA], and we examined the seropositivity by using Western blotting [WB]. The seropositivity rate was 2.7% by ELISA and IFA. We retested seropositive serum samples and 200 seronegative sera by WB. Seropositive serum samples were studied using abdominal ultrasound and chest x-ray to confirmed the presence of hydatid cyst and we

found 10 [0.5%] different localized cysts. The results of our study indicate that Kayseri rural area has a high endemicity of human CE.

## Echocardiography

### **Echocardiographic study of aortic root diameter in healthy children.**

Kervancioglu, Piraye; Kervancioglu, Mehmet; Tuncer, Cudi M.

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Dicle University - Medical Faculty - Department of Anatomy

**Saudi Medical Journal** 2006; 27 (1): 27-30 (17 ref.)

**Keywords:** Aorta-Anatomy and Histology; Angiocardiography; Reference Values; Child

**Abstract:** Objectives:Echocardiography is commonly used to measure the internal diameter of aortic root, which provides the evaluation of aortic root dilatation. Aortic root dilatation provide information concerning prognosis of aortic regurgitation and predisposition to aortic root dissection or rupture. The purpose of the study was to create normal values for aortic root diameters by using echocardiography in healthy children.Methods:We obtained the aortic root diameters in 229 normal children, aged one day to 15 years by using M-mode echocardiography. We performed the echocardiograms from the Department of Pediatric Echocardiography Laboratory, Medical Faculty, Dicle University, Turkey. We divided the children into 6 groups according to their body surface area [BSA]: 0.20-0.25 m<sup>2</sup>, 0.25-0.50 m<sup>2</sup>, 0.50-0.75 m<sup>2</sup>, 0.75-1.0 m<sup>2</sup>, 1.0-1.25 m<sup>2</sup>, and 1.25-1.50 m<sup>2</sup>. We corrected the aortic root diameters for BSA.Results:The aortic root diameters in children were 7.6 mm to 24 mm with a mean value of 14.8 mm. The corrected aortic root diameter for BSA ranged from 10.7 to 40.6 mm/m<sup>2</sup> with a mean value of 19.9 mm/m<sup>2</sup>. Aortic root diameters increased with age, weight and BSA. In contrast, aortic root diameter/BSA values were higher in younger children.Conclusion:The presented aortic root diameters according to the BSA will serve as reference data for echocardiographic evaluation of patients with various cardiac diseases.

## Echocardiography, Transesophageal

### **Cardiac sources of embolic cerebral infarction in transesophageal echocardiography.**

Zibaeenezhad, Mohammad Javad; Mowla, Ashkan; Salahi, R.; Nikseresht, Ali Reza; Shariat, Hamid; Ashjaezadeh, Nahid; Banani, Seyyed Javad

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University of Medical Sciences - School of Medicine, Cardiovascular Research Centre, Shiraz, Iran

**Annals of Saudi Medicine** 2006; 26 (1): 43-45 (24 ref.)

**Keywords:** Cerebrovascular Disorders-Etiology; Embolism-Etiology; Ischemic Attack, Transient-Etiology; Electrocardiography; Cerebral Infarction; Intracranial Embolism

## Ecosystem

### **Characterization of bacterial flora from coastal areas of Pakistan.**

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University of Punjab - Department of Microbiology and Molecular Genetics

**Journal of Basic and Applied Sciences** 2006; 2 (2): 119-126 (17 ref.)

**Keywords:** Biodiversity; Indian Ocean; Seawater; Genes

**Abstract:** Microbial flora in coastal areas of Pakistan forms an integral part of this unique marine ecosystem. Samples from Karachi and Baluchistan coast were collected from surface water, deep-sea water, sediments, sea animals and plants. The samples were analyzed both qualitatively and quantitatively for the presence of bacteria. A total of 193 bacterial strains were isolated, purified and preserved. Characterization of free and attached bacteria was performed with respect to heavy metals and antibiotics resistance. The bacterial strains were identified by API kits while few of them were also confirmed by 16S rRNA gene sequencing.

## Enbucrilate

### **Adverse Effects**

#### **N-butyl-2-cyanoacrylate Histoacryl complication: a case report.**

Al Ashgar, Hamad; Kabbani, A.; Al Kadhi, Yusuf

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**Annals of Saudi Medicine** 2006; 26 (1): 71-2 (9 ref.)

**Keywords:** Tissue Adhesives-Therapeutic Use; Cyanoacrylates-Chemistry; Embolization, Therapeutic; Esophageal and Gastric Varices-Therapy; Cyanoacrylates-Adverse Effects

## Encephalomyelitis, Acute Disseminated

### Diagnosis

#### Acute disseminated encephalomyelitis in an adult patient. magnetic resonance and diffusion-weighted imaging findings.

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Cumhuriyet University - Faculty of Medicine - Department of Radiology

**Saudi Medical Journal** 2006; 27 (1): 105-108 (17 ref.)

**Keywords:** Brain Diseases-Diagnosis; Diffusion Magnetic Resonance Imaging; Image Processing, Computer-Assisted; Magnetic Resonance Imaging; Encephalomyelitis, Acute Disseminated-Radiography

**Abstract:** Acute disseminated encephalomyelitis ADEM is an uncommon inflammatory disease of the central nervous system and can be defined strictly as scattered focal or multifocal disseminated inflammation of brain or spinal cord, or both. An ADEM usually reveals patchy demyelinated lesions with a high signal on T2-weighted sequences. Here, we report a case of a 39-year-old man with ADEM. Echo-planar trace diffusion magnetic resonance imaging revealed high signal intensity changes at the lesion sites on b=1000 s/mm<sup>2</sup> images, initially suggesting restricted diffusion. On corresponding apparent diffusion coefficient ADC maps, however, the lesions have a high signal intensity and high ADC values, compared with the normal white matter. This was consistent with the presence of elevated diffusion, and hence, vasogenic edema.

## Endometriosis

### Diagnosis

#### A young woman with endometriosis of kidney.

Dutta, Pinaki; Bhat, Mohammad H.; Bhansali, Anil; Kumar, Vijay

Postgraduate Institute of Medical Education and Research - Department of Endocrinology

**Saudi Medical Journal** 2006; 27 (2): 244-246 (10 ref.)

**Keywords:** Endometriosis-Pathology; Kidney Diseases-Diagnosis; Kidney-Pathology; Ovarian Diseases-Diagnosis

**Abstract:** Endometriosis of kidney is a rare manifestation of a relatively common disease. We report a case in which ovarian and renal endometriosis were diagnosed concurrently. The disease was probably silent for a long time due to coexistent thyrotoxicosis modifying estrogen metabolism. Fine needle aspiration cytology clinched the diagnosis of endometriosis and avoided unnecessary nephrectomy.

## Epidermal Necrolysis, Toxic

#### Toxic epidermal necrolysis due to co-trimoxazole.

Suliman, M. Taifour

**Saudi Medical Journal** 2006; 27 (1): 109 (5 ref.)

**Keywords:** Sulfamethoxazole-Adverse Effects; Trimethoprim-Adverse Effects; Trimethoprim-Sulfamethoxazole Combination; Drug Combinations

## Epilepsy

### diagnosis

#### A study on predictive factors in pediatric intractable epilepsy.

Akhoudian, J; Jafari, A.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 357-362 (28 ref.)

**Keywords:** Epilepsy-epidemiology; Seizures-etiology; Electroencephalography; Status Epilepticus; Risk Factors; Precipitating Factors

**Abstract:** Epilepsy is one of the most important disorders in children Ten to thirty percent of epileptic children are medically intractable. The aim of this study was to determine main predictive factors of intractable epilepsy and early identification of children at risk for development of this disease. In this case - control study epileptic children under 15 years old that referred to pediatric neurology clinic of Imam Reza hospital divided in two groups Group I which contained 51 patients with refractory seizures who had a minimum of one episode of seizure per month while taking at least two antiepileptic drugs and group II which included 80 cases were chosen randomly among patients who have not had any seizure during 6 month after starting the treatment. There were 39 males and 12 females in group I while 42 males and 38 females in group ii. In groups I age at onset of seizures was under one year old in 64.7% of patients whereas in group II was 22.5%. Comparison of other factors between two groups showed that in group I 13.7% family history of epilepsy , 80.4 % neurological defects , 13.7 % myoclonic seizures , 66.7% daily seizures , 17.6% neonatal seizures , 96.1 % abnormality in first EEG , 52.9 % abnormality in brain CT scan , 11.8% history of status epilepticus and in group II above results were 12.5% , 8.8 % , 2.5% , 22.5 % , 5% , 83.8% , 13.6 % and 11.3 %

respectively. Male sex , age at onset of seizures under one year old , myoclonic seizures , neurologic defects , daily seizures , history of neonatal Seizures , abnormality in first EEG and abnormality in brain CT scan are factors affect on the occurrence of intractable epilepsy.

## Esophageal Neoplasms

### Surgery

#### **Anastomotic esophageal leak due to Taenia saginata following esophagectomy for esophageal cancer.**

Baleela, Reem M.; Huessain, Mohamed Y.; Ahmed, Mohamed E.  
University of Khartoum - Faculty of Medicine - Department of Surgery

**Saudi Medical Journal** 2006; 27 (2): 241-243 (14 ref.)

**Keywords:** Esophagectomy; Taenia saginata; Taeniasis-Complications; Postoperative Complications; Carcinoma, Squamous Cell-Surgery

**Abstract:** A 50-year-old female with squamous cell carcinoma of the lower third of the esophagus underwent an esophagectomy via laparotomy and right thoracotomy. She developed a major anastomotic leak on the third postoperative day. The chest tube slipped out on the 10th postoperative day and a segment of Taenia saginata tapeworm came out through the tube drain site and was extracted. She was given praziquantel tablets treatment; after which the leakage dropped dramatically and ceased completely after one week. Patients scheduled for esophagectomy who experienced recurrent abdominal pain in areas endemic with a tapeworm need to be screened for taeniasis before surgery.

## Excercise Tolerance

#### **Prognostic significance of negative exercise tolerance test in patients with acute chest pain.**

Rafighdoost, A.; Porzand, H.; Nikdoost, M.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 393-398 (16 ref.)

**Keywords:** Exercise Test; Chest Pain; Angina Pectoris; Acute Disease; Prognosis

**Abstract:** The purpose of this study was to identify patients suitable for early discharge after observation for acute chest pain and also demonstrating the prognostic significance of early negative exercise tolerance test in low risk patients with such symptoms. An exercise tolerance test [ETT] is often performed to identify patients suitable for early discharge after observation for acute chest pain [5], but its prognostic significance in low risk patients still remains to be cleared. Therefore we decided to investigate the efficacy of this noninvasive, low cost strategy for our patients to select anginal chest pain due to coronary diseases from other forms, and discharge noncardiac chest pain patients as soon as possible and also to use it as a prognostic guide. This descriptive-case was performed on 190 low risk patients during two years [2001-2003] who underwent ETT within 48 hours after presentation to emergency department with acute chest pain. The patients were followed up to six months for emergency room visits, readmission and Occurrence of major cardiac events. The ETT was negative in 152 pts [80%] and positive in remaining ones [38 pts, 20%]. During six months follow up, patients with a negative ETT had fewer additional visit [0.6% vs 21%, P 0.001] and readmission to the hospital [1.3% vs 7.8%, P 0.001] than those with positive ETTs. No pts with a negative ETT died and only two pts experienced a major cardiac event. Our results suggest that ETT can be safely used to identify pts at low risk of subsequent events. Pts with positive ETT are at increased risk for readmission and cardiac events and should be more closely followed. Being low risk in initial evaluation does not preclude threatening coronary disease.

## Exercise Test

#### **Effect of intravenous atropine on treadmill stress test results in patients with poor exercise capacity or chronotropic incompetence.**

Ghaffari, Samad; Sohrabi, Bahram

Tabriz University of Medical Sciences - Madani Heart Hospital - Department of Cardiology

**Saudi Medical Journal** 2006; 27 (2): 165-169 (8 ref.)

**Keywords:** Atropine-Administration and Dosage; Heart Rate; Coronary Disease-Physiopathology; Injections, Intravenous

**Abstract:** Exercise stress test [EST] is one of the main diagnostic and prognostic tests for ischemic heart disease. However, its usefulness depends on achieving target heart rate, then chronotropic incompetence and poor exercise capacity limits its utility. We evaluated the usefulness of atropine administration during the EST to decrease the number of tests with inconclusive results in these patients. We carried out this study in Shahid Madani Heart Center, Tabriz, Iran from September 2003 to December 2004 and comprised of 210 patients undergoing EST. In subjects experiencing fatigue when they achieved 50-75% of target heart rate [THR], or those who failed to achieve their THR, atropine was administered in doses of 0.5 mg per minute until the test conclusion [positive test results or target heart rate achieved] or until a maximum dose of 2 mg was administered. Forty-one [19.5%] of the 210 patients required atropine [mean dose: 1.1 mg] during the study. Among patients who received atropine, conclusive test was achieved in 38 cases [92.7%]. Atropine administration resulted in a mean increase in heart rate of 38 beats/min [range 8-71 beat/min]. Atropine injection resulted in a trend towards more positive results of EST in comparison to non-atropine group [31.7% versus 18.3%, p=0.053]. There was no difference in response to atropine in subjects with chronotropic



incompetence or poor exercise capacity [p=0.5]. Use of atropine as an adjunct to standard EST can help decrease the number of inconclusive tests. Larger studies are necessary to define the role of atropine in EST and also to evaluate the accuracy of conclusive EST after atropine administration.

## Exfoliation Syndrome

### **Prevalence of glaucoma among subjects with pseudoexfoliation syndrome at Prince Ali Hospitals, Kerak, Jordan.**

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Prince Ali Hospital - Ophthalmology Department

*Jordan Medical Journal* 2006; 40 (1): 40-44 (24 ref.)

**Keywords:** Glaucoma; Prevalence; Eye Diseases

**Abstract:** To determine the prevalence of glaucoma among subjects having pseudoexfoliation syndrome in this part of Jordan This is a prospective study conducted by the ophthalmology clinic at Prince Ali Hospital in Kerak province, during the period from November 2003 to April 2004. 400 consecutive patients, aged 40 years or above attending the eye clinic were included in this study. The prevalence of pseudoexfoliation syndrome among subjects attending the eye clinic at Prince Ali Hospital in Kerak and aged 40 years or above was found to be 21.25%, and the prevalence of glaucoma among those was 27.8%. Pseudoexfoliation is strongly associated with the presence of glaucoma. Prevalence of exfoliative glaucoma among patients with pseudoexfoliation is average compared to studies from other parts of the world.

## Exophthalmos

### **Etiology**

#### **Sudden proptosis of the left eye in a Saudi male. Diagnosis: Orbital compression syndrome in sickle cell disease.**

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King Fahad Hospital - Department of Medicine

*Annals of Saudi Medicine* 2006; 26 (1): 65-76 (7 ref.)

**Keywords:** Exophthalmos-Diagnosis; Disease Progression; Acute Disease; Tomography, X-Ray Computed; Anemia, Sickle Cell; Orbital Diseases

## Familial Mediterranean Fever

### **Familial mediterranean fever : a prevalent condition amongst the arabs.**

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University of Iowa - Children's Hospital of Iowa - Department of Pediatrics

*Jordan Medical Journal* 2006; 40 (1): 46-64 (126 ref.)

**Keywords:** Auto immune Diseases; Arabs; Prevalence; Genetic Diseases, Inborn

**Abstract:** Autoinflammatory diseases are a group of disorders characterized by seemingly unprovoked inflammation in the absence of high-titer autoantibodies or antigen-specific T-cells and include the hereditary periodic fever syndromes. Familial Mediterranean Fever [FMF] is the prototype of the autoinflammatory disorder. It is an autosomal recessive disorder with high prevalence in non Ashkenazi Jews, Armenians, Turks and Arabs. The classic clinical picture is recurrent acute short-lived febrile and painful attacks with variable periods of remission. It is complicated by amyloidosis that leads to renal failure in a subset of patients. The gene responsible for FMF, MEFV, has been identified and its role in inflammation is under study. There appears to be a distinctive clinical picture among Arab FMF patients and the spectrum and distribution of MEFV mutations is different from other ethnic groups commonly affected by FMF. The clinical and molecular aspects of FMF in the Arabs are discussed.

## Fascioliasis

### **Diagnosis**

#### **The clinical picture of hepatitis C virus as a concomitant infection with fascioliasis.**

Wahib, Ali A.; Seif El Nasr, Mohamed S.; Mangoud, Amal M.; El Shazly, Atef M.; Morsy, Ayman T. A.

Al Azhar University, Cairo, Egypt - Faculty of Medicine - Department of Tropical Medicine

*Journal of the Egyptian Society of Parasitology* 2006; 36 (1): 41-52 (39 ref.)

**Keywords:** Hepacivirus; Muscle Fatigue; Arthritis; Eosinophilia; Pallor; Serologic Tests; Hepatitis C Antibodies; Polymerase Chain Reaction; Hepatitis C

**Abstract:** Hepatitis C and human fascioliasis are two of the most important public health problems locally and internationally. Each one has its own complications regarding spreading to man, clinical picture, laboratory and serologic diagnosis, treatment and prevention. Concomitant human infection with both magnified the complications.

Clinically, both diseases [HCV and fascioliasis] have their own broad signs and symptoms. In concomitant infection, the clinical pictures of both showed some variations. The most common feature in fascioliasis and HCV patients was easy fatigability in 78.6% and the lowest was 7.18% for each of tympanic abdomen, tender colon, tender right upper quadrant, itching, arthritis, epi-gastric pain, and right quadrant pain. The eosinophilia % ranged from 5-24 and the haemoglobin ranged from 7-11.1 gm/dl. In patients with fascioliasis alone, the most common feature was pallor in 96.15% and the lowest was 3.85% for each of splenomegaly, ascites and itching. Eosinophilia % ranged from 1 to 22 and haemoglobin ranged from 6-12 gm/dl. In general, the double infection with both HCV and fascioliasis magnified the laboratory and clinical pictures of such patients.

## Feces

### Parasitology

#### Detection of protozoal parasites in the stools of diarrhoeic patients using different techniques.

El Nagggar, Soheir M.; El Bahy, Mohamed M.; Abdel Aziz, Jomana; El Dardiry, Marwa A.

Cairo University - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 7-22 (49 ref.)

**Keywords:** Child; Diarrhea; Protozoa; Giardia lamblia; Entamoeba histolytica; Escherichia coli; Cryptosporidium parvum; Intestinal Diseases, Parasitic; Questionnaires

**Abstract:** A total of 300 children were selected. A total of 180 apparently healthy children were selected. Each child was given a numerical number and subjected to a medical questionnaire. The rate of infection by the enteric protozoa detected by the four techniques revealed that G. lamblia reached 11.0% by concentration-sedimentation method, 10.3% by Sheather's concentration method and 7.0% [cysts] and 1.7% [vegetative] by direct wet smear. E. histolytica was 3.3% and 3.7% by the two concentration methods respectively. By direct wet smear 2.3% [cysts] and 0.7% [vegetative] were detected. E. coli was 7.3% and 7.0% by the two concentration methods respectively. By the direct wet smear 5.0% [cyst] and 0.3% [vegetative] were detected. Modified Zeihl-Nelsen stain demonstrated 9 cases of C. parvum [3.0%]. Mallory and Iron haematoxylin gave the good characteristic colour for G. lamblia, E. histolytica, and E. coli followed by Trichrome. It was worthy to mention that direct smear method detected the low infections' percentage of all the intestinal target parasites in comparison with the four staining techniques.

## Femoral Fractures

### Surgery

#### Titanium elastic nail fixation for paediatric femoral shaft fractures.

Al Sayed, Hassan

Al Razi Orthopaedic Hospital, Kuwait - Paediatric Orthopaedic Unit

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 7-15 (14 ref.)

**Keywords:** Fracture Fixation-Methods; Bone Nails; Titanium-Therapeutic Use; Length of Stay; Child; Follow-Up Studies; Treatment Outcome

**Abstract:** In the period from January 2000 to September 2004, 25 children with 25 femoral shaft fractures were treated by retrograde titanium elastic nail fixation in the Paediatric Orthopaedic Unit of Al-Razi Orthopaedic Hospital in Kuwait. Two nails of the same diameter were used for the fixation of each femoral shaft fracture using a fracture table and under image intensifier control. Postoperatively, early graduated weight bearing was allowed and the children were followed up clinically and radiographically. The nails were removed after fracture consolidation. Our results are compatible with those of the largest series of titanium elastic nails with universal union of the fractures, no refractures, occasional skin irritation by the nails and occasional minor lower limb length discrepancies.

## Femur

### Abnormalities

#### Congenital absence of both femora a case report.

Al Sayed, Hassan

Al Razi Orthopaedic Hospital, Kuwait - Paediatric Orthopaedic Unit

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 85-88 (9 ref.)

**Keywords:** Femur-Deficiency; Fibula-Deficiency; Foot Deformities, Congenital

**Abstract:** An extremely rare case of congenital absence of both femora has presented to the Paediatric Orthopaedic Unit of Al Razi Orthopaedic Hospital in Kuwait. It belongs to a male Afghani child living in Kuwait. He started to present to our unit at the age of one year. This is the only case of congenital absence of both femora seen in our unit since it was established in 1991. This child has associated bilateral congenital absence of fibula and bilateral very rigid club foot deformity. The extreme rarity of this case, as reported in the literature, was the stimulus to present this case report.

## Fetal Death

### Associated risk factors with ante-partum intra-uterine fetal death.

Shaaban, Lamia A.; Al Saleh, Rihab A.; Alwafi, Buthina M.; Al Raddadi, Rajaa M.

Maternity and Children's Hospital - Department of Obstetric and Gynecology

*Saudi Medical Journal* 2006; 27 (1): 76-79 (13 ref.)

**Keywords:** Fetal Mortality; Pregnancy Complications; Cohort Studies; Risk Factors; Prenatal Care; Retrospective Studies

**Abstract:** To determine ante-partum maternal risk factors for intrauterine fetal death. We carried out a case control retrospective study, at the Maternity and Children's Hospital, Jeddah, Kingdom of Saudi Arabia. We included all pregnant women diagnosed as singleton intra-uterine fetal death in the third trimester with fetal weight of 1500 gm and more, admitted to the hospital over a 2-year [2001-2002] period [study group]. We examined the following risk factors: diabetes, hypertension, abruptio-placenta, age, gestational age, parity, trauma, sepsis, booking, chromosomal abnormality, previous history of intra-uterine fetal death [IUID] and intra-uterine growth restriction [IUGR]. We compared the results to those pregnant women with live pregnancy admitted before and after each case [control group]. There were 157 cases of singleton IUID during that period. The intra-uterine fetal death rate was 10.1 per 1000 deliveries. In 28% of the cases, we could not determine the associated risk factors. Among cases there were 57.3% [odds ratio [OR] 2.4 95% confidence interval [CI] 1.4-4] lacking antenatal care, cord accident in 56.6% [OR 5.1% 95 CI 2.7-9.5], 29.3% [OR 5.5 95% CI 2.4-12.6] hypertension, 26.1% [OR 12.9 95% CI 5.5-30.6] diabetes, IUGR in 24.8% [OR 1.73% 95% CI 1.1-2.7], 14% [OR 23.4% 95% CI 4.6-119.3] abruptio-placenta, and previous history of IUID in 8.3% [OR 7.01 95% CI 2.1-23.6]. Other risk factors found were age between 20-30 years in 51.6%, gestational age between 37-41 weeks in 58.6%, parity between 0-5 in 77.1%, and chromosomal abnormality in 5.7% [OR 0.91% 95% CI 0.91-0.99]. The identified risk factors for IUID in our community appear preventable. We should pay attention to health education with emphasis on antenatal care and the benefits of regular clinic attendance. Patients compliance is important in reducing most of these preventable fetal deaths.

## Food Contamination

### Aerobic bacteria isolated from eggs and day-old chicks and their antibacterial resistance in Shiraz.

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University of Shiraz - School of Veterinary Medicine - Department of Food Hygiene and Public Health

*Iranian Journal of Veterinary Research* 2006; 7 (2): 20-30 (30 ref.)

**Keywords:** Drug Resistance; Eggs; Public Health; Chickens; Chick Embryo

**Abstract:** To study the putative transfer of antibiotic resistance from broiler breeders to human, hen's eggs and their day-old chicks were examined for the presence of bacteria. The most frequently isolated organisms in decreasing order were: *Streptococcus* spp. , *Bacillus* spp. , *Staphylococcus* spp. , *Klebsiella* spp. , *Enterobacter* slip. and *Escherichia coli* followed by *Citrobacter* spp. , *Proteus* spp. and *Pseudomonas* spp. from the eggs and *E. coli*, *Enterobacter* spp. and *Citrobacter* spp. followed by *Klebsiella* spp. and *Bacillus* spp. from the chicks. Different detection methods were evaluated which use various enrichment and plating media for bacteria in eggs and day-old chicks. Sensitivity tests showed the presence of antibacterial resistant strains of bacteria. In comparison, resistance to all antibiotics in chicks' isolated bacteria were more frequent than eggs' isolates, but statistically no significant differences between patterns of antibacterial resistance were seen [P/.

## Fracture Fixation, Intramedullary

### Surgical treatment and results of the fractures with medullary nailing.

Azar, Masoud Shayesteh; Sajjadi, Majid; Nasah, Mohammad H. Karimi; Khalilian, Ali R.

*Saudi Medical Journal* 2006; 27 (2): 275-280 (7 ref.)

**Keywords:** Fractures, Bone-Surgery; Postoperative Complications; Cross-Sectional Studies; Prospective Studies

## Fractures, Bone

### Etiology

#### Fracture of the anterior iliac crest following autogenous bone grafting.

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King Abdul-Aziz University - Department of Orthopedic Surgery

*Saudi Medical Journal* 2006; 27 (2): 254-258 (10 ref.)

**Keywords:** Bone Transplantation; Postoperative Complications; Spinal Fusion; Transplantation, Autologous; Ilium-Injuries

**Abstract:** Anterior iliac crest is the most common donor site for anterior cervical spine surgeries. We searched the literature to summarize the reported fractures of the anterior iliac crest following bone graft harvesting for anterior cervical fusion and documented our experience with such complication. In this account, we report 3 new patients with

this rare complication of fracture of the anterior iliac crest following bone graft for anterior cervical fusion. The dual energy x-ray absorptiometry scan was performed in all our patients to assess bone mineral density and all patients had osteoporosis. Non-operative treatment was the method of treatment in our patients. A better understanding of surgical technique and complications of iliac crest bone grafting is important to minimize graft site morbidity, and even more important is identification of risk factors that are involved in fracture of the iliac crest.

## Fractures, Comminuted

### Surgery

#### Management of comminuted fracture of the olecranon by bone graft and tension band wiring.

Nassar, Ibrahim A.; Ezz El din, Ashraf E.

Al-Azhar University - Department of Orthopaedics Surgery

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 55-59 (18 ref.)

**Keywords:** Ulna; Elbow; Bone Wires; Follow-Up Studies; Range of Motion, Articular; Bone Transplantation

**Abstract:** The aim of the work is to evaluate the results of management of comminuted fracture olecranon by iliac bone graft and tension band wiring. Ten patients with comminuted fracture olecranon were treated by multiple tension band wiring and iliac bone graft, their mean age was 29.5 years [19-48]. Eight men and two women, right side was involved in seven patients and the left side in three patients, the mean interval between injury and operation was 9.5 days [2-15]. The mean follow up was 14.6 months [9-20] and the mean time to union of the fracture was five months [3-7], no patients reported difficulties with activities of daily living or symptoms of instability of the elbow, all fractures healed soundly, only two patients had mild pain and loss of strength. Our results compare favorably with those previously reported and the technique is thought to be a practical alternative to plate fixation in fracture with extreme comminution.

## Galactosemias

### diet therapy

#### The effect of diet on antioxidant status in patients with galactosemia.

El Bassyouni, Hala T.; Ashour, Adel M.; Ezzat, Afaf; Bassiouni, Randa; Fateen, Ekram M.

National Research Center - Department of Clinical Genetics

**Journal of Medical Sciences** 2006; 6 (3): 452-457 (37 ref.)

**Keywords:** Diet Therapy; Oxidative Stress; Antioxidants; Trace Elements

**Abstract:** Galactosemia is an autosomal recessively inherited disorder of galactose metabolism. It has good prognosis, if detected in neonatal period or early infancy. Treatment consists of life long dietary restriction of galactose. Present study included eight patients with galactosemia on dietary treatment, five of them had galactose-1-phosphate uridylyltransferase deficiency known as classical galactosemia and three had uridine-diphosphate galactose-4' epimerase deficiency. Clinical evaluation of patients under galactose restricted diet and assessment of the antioxidant status in response to dietary therapy was done. Delayed milestones were present in all patients, jaundice at birth was present in 4 and low birth weight was present in 3 patients. Craniofacial dysmorphism was present in 5 patients. Hepatomegaly was present in 6 patients. MRI of the brain showed brain atrophy in 3 patients and demyelination in 2 patients. There was cataract in 7 patients. The levels of zinc, copper, iron, calcium, phosphate, magnesium, selenium, manganese, beta-carotene and vitamin A were evaluated in the blood of galactosemic patients on galactose restricted diet and a comparison between trace elements, beta-carotene and vitamin A in studied patients with galactosemia and controls was done. Copper, calcium, phosphate, manganese and beta-carotene levels in blood were significantly decreased in our patients [p0.001] than in controls. These findings suggest that patients on galactose restricted diet are at risk of oxidative stress. The data emphasize the importance of dietary supplementation with an antioxidant containing beta-carotene, calcium, copper, selenium and manganese to inhibit oxidative stress in these patients. Consequently this will minimize the neurological deficits improve bone mineralization, reduce the development of retinopathy and damage to liver cells in patients with galactosemia.

## Gene Expression

#### Insertion of liver enriched transcription factor hepatocyte nuclear factor-4 (HNF-4) In a vector which contains simian virus (SV40) Promoter.

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University of Bath - Department of Pharmacy and Pharmacology

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 27-33 (11 ref.)

**Keywords:** Gene Expression Regulation, Viral; Hepatocyte; Transcription, Genetic; Simian virus 40; Liver-Metabolism

**Abstract:** One way of targeting gene expression in vivo is to control transcription using a tissue-specific regulatory system. Tissue-specific promoters or enhancers are in use in transgenic animals and could be utilized in medicine for gene therapy. At present the usual method for selection of a tissue-specific promoter is to identify a gene, which is

expressed at unusually high level in the target tissue, and then to use the promoter for this gene to drive expression of another therapeutic gene in the target tissue. This approach is logical but does not always lead to high levels of gene expression. A second approach is to investigate the scope for discovery of synthetic specific promoters using a target tissue. The objective of the work described in this paper was to use both approaches to design plasmid DNA expression vectors that would carry liver-specific promoter/enhancer linked to a reporter gene [i.e. luciferase]. Then transfect these vectors to both liver-derived and non-liver cell lines. This is followed by evaluation of the liver-specificity of each construct by measuring the basal level expression of the reporter gene [i.e. luciferase activity] in both cell lines. Hepatocyte nuclear factor-4 [HNF-4] is liver-enriched transcription factor used to design new synthetic enhancers by inserting a tandem array of 1', 3' or 5' repeats of the HNF-4 binding site upstream of the SV40 promoter linked to the luciferase reporter gene within an Epstein-Barr virus [EBV]-based vector, p706. The results of transfection revealed that unexpectedly the HNF-4 binding sites in these constructs act as a repressor rather than enhancer of the liver-specific expression of the luciferase gene.

## Gene Rearrangement

### The pattern of cross lineage T-cell receptor delta/gamma gene rearrangements in B-precursor acute lympho-blastic leukemia of Iranian children using polymerase chain reaction.

Poopak, B.; Pourfathollah, A.A.; Najmabadi, H.; Mortazavi, Y.; Yahyavi, S.H.; Vosough, P.; Arzani, M.T.; Izdyar, M.; Shahgholi, E.; Bahoosh, G.R.; Haimidieh, A.A.; Faranoosh, M.; Khosravipoor, G.; Haghnejad, F.  
Islamic Azad University - Hematology and Blood Banking

**Blood** 2006; 2 (6): 203-214 (30 ref.)

**Keywords:** Neoplasm, Residual; Leukemia, Lymphocytic, Acute; Prospective Studies; Bone Marrow Examination; Polymerase Chain Reaction

**Abstract:** Diversity in heavy chain immunoglobulin [IgH] and T-cell receptor [TCR] molecules occurs during B- and T-lymphocyte differentiation through the rearrangement of variable [V], diversity [D], junction [J] and constant [C] gene segments. Lymphoid leukemia cells are similar to normal precursors and have rearranged IgH, IgK and TCR [cross-lineage rearrangement] genes which can be used as a marker of clonality and evaluation of minimal residual disease [MRD]. The purpose of this study is to evaluate the pattern of TCR- delta/gamma gene rearrangements using Polymerase Chain Reaction [PCR] in B-precursor acute lymphoblastic leukemia [ALL] in Iranian children. In our prospective study, bone marrow aspirates of 183 children with early diagnosis of acute leukemia were collected at admission before any chemotherapy. After reviewing cytomorphology and immunophenotyping, only 140 subjects with diagnosis of B-precursor ALLs were selected for study. Sixteen were excluded from our study due to various reasons including cellular degeneration. Mononuclear cells including leukemic blasts were isolated by density gradient. After DNA extraction, hyper-variable regions TCR-delta [V delta2-D delta3 and D delta2-D delta3] and TCR-gamma [V gamma; V gamma I and V gamma II] were amplified by consensus primers using PCR. PCR products were analyzed after heteroduplex analysis and polyacrylamide gel electrophoresis [silver stain]. The DNA sequences were then compared and aligned to the homologous sequences of Gene Bank for confirmation. T-test, Mann whitney, Fisher exact test and Chi-square were used for data analysis. Clonal rearrangement of TCR-gamma [V gamma] and V gamma I/II were present in 79.3% and 64.9% of patients respectively and only 5% of cases showed biclonal pattern. The V gamma II rearrangement was the most common [46.8%] type in TCR-gamma. 47 [45.2%] and 11 [16.6%] of patients had V delta2- D delta3 and D delta2-D delta3 partial gene rearrangements, respectively. Biclinal/oligoclonal patterns were present respectively in 27.7% and 4.3% of cases with Vdelta2-D delta3 rearrangement. Only one patient had biclinal D delta2 D delta3 rearrangement. Clonal rearrangement of TCR-delta [Vdelta2-Ddelta3 and D delta2-D delta3] genes had a pattern similar to other populations. Frequency of TCR- gamma [V gamma I and V gamma II] rearrangements was slightly higher than previous reports, and in contrary to others except for Brazilian report the V gamma II rearrangement was the most common type. We found no significant correlation between presence of different types of rearrangements and quantitative variables. The only significant point was the reduction of Vdelta2Ddelta3 with increase in age . According to preliminary results, these clonal markers can be used in diagnosis and follow up of MRD.

## Genitalia, Female

### abnormalities

#### Acquired reproductive tract abnormalities of ewes in northwest of Iran : an abattoir survey.

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University of Urmia - Faculty of Veterinary Medicine - Department of Clinical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 44-48 (13 ref.)

**Keywords:** Infertiliti; Sheep, Domestic; Abattoirs; Data Collection

**Abstract:** Reproductive abnormalities cause major losses of sheep production. Abattoir materials were used to determine the extent of reproductive wastage. Reproductive tracts were collected from 524 ewes slaughtered at Urmia slaughter-house in Urmia, northwest of Iran, during a period of 12 months. Overall, 30.10% of the ewes examined were pregnant. A total of 149 [28.44%] tracts developed acquired reproductive tract abnormalities. Based on the observation of the tracts, abnormalities of the ovaries, ovarian bursa and uterine tubes and uterine lesions accounted for 11.41%, 21.48% and 67.11% of the lesions, respectively. The most common ovarian lesion was ovario-bursal adhesions [47.06%]. Uterine tube obstruction was the most common uterine tube abnormality [8.07%]. Pyometra [8.07%], uterine

hemorrhage [6.73%] and endometritis [4.04%] were the most common abnormalities observed in the uterus. Two tracts [0.9%] contained macerated fetal remnants. A large number of tracts [16%] had melanin pigment in the uterine wall. It is concluded that, firstly, the large number of pregnant ewes slaughtered highlights significant economic losses. Secondly, lesions such as hydrosalpinx, pyometra and metritis were likely to affect female sheep reproduction. The acquired abnormalities were therefore more significant in terms of individual animal infertility than as a major cause of infertility in flocks.

## Giardiasis

### drug therapy

#### Comparison of metronidazole and furazolidone against giardia lamblia in children.

Talari, S.A.; Momtazmanesh, N.; Talebian, A.; Khorshidi, A.; Taghavi, A.; Fakharian, E.; Talari, M.R.; Mokhtari, Z  
Kashan University of Medical Sciences - Department of Parasitology

**Journal of Medical Sciences** 2006; 6 (3): 378-381 (24 ref.)

**Keywords:** Metronidazole-therapeutic use; Furazolidone-therapeutic use; Metronidazole-adverse effects; Furazolidone-adverse effects; Giardia Lamblia-drug effects

**Abstract:** This study was conducted on children infected by Giardia lamblia to evaluate the effectiveness and side effects of Metronidazole and Furazolidone drugs in Kashan. One hundred twenty two individuals infected with Giardia lamblia were assigned in 2 groups. They were 5-12 years old. Patients were surveyed four weeks following the therapy with Metronidazole and Furazolidone. Results were compared using chi-square method. Of 122 infected patients, 68.8% were urban residents, 43.4% were females and 56.6% were males. Abdominal pain was the most common clinical symptoms [84.2%]. Four weeks after the therapy, the efficacy of metronidazole and furazolidone were 87 and 81.6%, respectively. Malaise [12.9%] and dark urine [25%] was the most frequent side effects of metronidazole and furazolidone, respectively. With respect to the efficacy of antiparasite drugs in the treatment of giardiasis, further studies in different parts of the country are highly recommended.

## Growth

#### Comparison of growth performance of six commercial broiler hybrids in Iran.

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**Iranian Journal of Veterinary Research** 2006; 7 (2): 38-44 (19 ref.)

**Keywords:** Chickens; Animals; Eggs; Weight Gain

**Abstract:** An investigation was carried out to evaluate the growth performance of six commercial broiler hybrids available in Iran [Arbor Acres, Arian, Cobb 500, Hubbard, Lohmann and Ross 508]. Two hundred and fifty fertile eggs of each hybrid were taken from different breeder farms, all over the country. The similarity of flocks ages and their health conditions were considered. After hatching, the sexed chicks were randomly assigned to six replicates of floor pens of 17 chicks, except the male Cobb hybrid which had five replications. All groups were managed in a similar way throughout the 56 days of study. Daily feed intake [FI] and daily body weight gain [BWG] were measured on weekly basis and the European production index [EPI] were calculated at 49 and 56 days of age. There were no significant differences among hybrids in FI during starter and grower periods [P>0.05], although significant differences were observed in finisher period [P<0.01]. Differences in daily FI were significant between male and female chicks in grower and finisher periods [P<0.05], but not in starter period. Differences in daily BWG were significant among hybrids throughout the experiment [P<0.01]. Sex significantly affected the daily BWG in all periods [P<0.01]. The calculated EPI showed significant differences for both 49 and 56 days of age among hybrids and between two sexes [P<0.01]. There were no significant differences among hybrids in carcass yield, percentage of breast and abdominal fat to carcass weight at 42 and 56 days of age. On day 42, males had more percentage of carcass and breast yield compared with females [P<0.01]. Percent of abdominal fat in females on day 56 was more than that of the males [P<0.01], while on day 42 no significant differences were found in this respect.

## Guillain-Barre Syndrome

### Epidemiology

#### Epidemiology and characteristics of Guillain-Barre syndrome in the northwest of Iran.

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**Annals of Saudi Medicine** 2006; 26 (1): 22-27 (26 ref.)

**Keywords:** Guillain-Barre Syndrome-Diagnosis; Guillain-Barre Syndrome-Mortality; Prospective Studies; Incidence; Disability Evaluation; Disease Progression; Prognosis

## Health Services

### **Maternity and child health care services delivered by public health centers compared to health cooperatives : Iran's experience.**

Nikniyaz, Alireza; Farahbakhsh, Mostafa; Ashjaei, Kazem; Tabrizi, Djafarsadegh; Sadeghi Bazargani, Homayoun; Zakeri, Akram

Ardabil University of Medical Sciences - National Public Health Management Center

**Journal of Medical Sciences** 2006; 6 (3): 352-358 (22 ref.)

**Keywords:** Women's Health Services; Child Health Services; Quality of Health Care; Health Care Reform; Privatization; Managed Competition

**Abstract:** Reform programs in some developing countries are focused in transferring these services to nongovernmental organizations or groups. In this WHO grant study our aim was to implement and evaluate the efficacy of a new model for transferring state service delivery governance to nongovernmental groups and studying if they can be efficient in field of child and maternity health services compared to public health centers. In this comparative study a total of 1000 households were selected systematically from the population covered by 9 health centers transferred to cooperatives and 18 current public health centers. Data were collected during a three months long study period and analyzed by SPSS 10 statistical package. Chi-Square and t-tests were used to analyze data. Overall health care coverage was higher for either cooperative or public health centers compared to private sector physicians [p = 0.005]. Around 88.8% of under 6 years aged children were under coverage of health services provided by health centers in both groups and no difference was found. There was no statistically significant difference in quality of child health care services in declaring the date of health care visit and follow up in due time. There was no difference between the groups in perfect filling child growth cards but the ability of mothers in interpreting child growth cards was statistically higher for the population covered by cooperative health centers [p = 0.02]. Growth status of children based on growth percentiles were relatively similar in two groups. Some health indices of target groups covered by public and cooperative health centers such as family planning, child health cares, perinatal cares, and the numbers of households covered by health volunteers were studied. The results showed that in all of these fields cooperative health centers had better rates. Observed differences were statistically significant [family planning: p = 0.03, infant health care: p = 0.03, 1-6 years old children cares: p = 0.009]. The proportion of those women owning a vaccination record [card] was higher in population covered by cooperative health centers [p = 0.004]. The rate for performing a cervical smear examination during the national program for cervical cancer screening was higher for the women covered by cooperative health centers [p = 0.01]. No difference was found between the knowledge level of women covered by cooperative health centers about the importance of cervical examination when compared with public health centers. We conclude that in the field of target group children's health care and maternity health services, cooperatives sector not only acts as well as public sector meeting the standards of the program, but also has got a better function in some areas. This can be assumed as an achievement for the policy of transferring the health services to cooperative health centers along with ongoing governmental supervision.

## Heart Diseases

### **drug effects**

#### **The effect of different levels of sodium chloride on round heart disease in the Turkey.**

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**Iranian Journal of Veterinary Research** 2006; 7 (1): 38-43 (22 ref.)

**Keywords:** Heart Diseases-metabolism; Sodium Chloride; Myoglobin; Poultry Products; Cardiomyopathies; Chickens

**Abstract:** Round heart disease is a disease of unknown etiology in turkey. The objective of this study was to examine the effect of different amounts of sodium chloride in inducing cardiomyopathy in turkey poults. There are some reports that hypoxia and furazolidone can induce cardiomyopathy in turkey. Two hundred 2-day-old turkey poults were wing-banded and placed randomly into 6 groups and 24 replicates [4 replicates for each group]. The 6 groups received commercial turkey starter diet contain 0.12, 0.17, 0.22, 0.27, 0.32 and 0.37% of sodium, respectively. They had access to food and water ad libitum. Suffering and dead birds were weighed and examined for post-mortem study. Live body weight of turkey poults measured individually on days 1, 2, 5 and 19. To study the hearts for presence of cardiomyopathy on the day 19, all the poults were weighed and killed by cervical dislocation. The pieces of the hearts were placed into numbered tubes, flash frozen by liquid nitrogen and stored at -70°C for myoglobin and hemoglobin microassay. The assay was based on spectrophotometry and separated myoglobin and hemoglobin by ammonium sulphate extraction. For determination of cardiomyopathy the ratio of the inner cavity of left ventricle to the total diameter of the left ventricle [IC. v/TD. v] was calculated. Myopathic ratio for groups 1, 2, 3, 4, 5 and 6 were 0.1, 0.29, 0.3, 0.34, 0.35 and 0.36, respectively. Turkey poults which received excessive salts drank more water which produced volume overload more cardiac muscle activity, needed more oxygen and were more likely to develop myopathy. Cardiac muscle myoglobin and hemoglobin microassay showed that there was no significant relationship between the amount of myoglobin and hemoglobin with the amount of diet sodium.

## Heart Failure, Congestive

### The serum magnesium level in patients with congestive heart failure.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 399-404 (18 ref.)

**Keywords:** Magnesium-blood; Arrhythmia-etiology; Atrial Fibrillation-etiology

**Abstract:** Electrolyte disturbances, specially hypokalemia and hypomagnesaemia are common in patients with congestive heart failure [CHF]. This study was carried out to determine the serum concentration of magnesium [Mg] in patients with CHF. This descriptive analytical study performed at Mashhad Ghaem hospital between shahrivar 1382 and shahrivar 1383. Serum Mg concentration of 60 patients with symptomatic CHF was measured by spectrophotometric absorption technique and analyzed based on clinical variables and echocardiographic parameters of left ventricular function. Data was analyzed in SPSS software by t-test at alpha=0.05. From 60 patients with CHF, 52% were male and 48% were female with mean age 63+/-13.15 years. 56.5% of patients were in the range of 60-80 years old. Hypomagnesaemia was showed in 55% of patients. No significant correlation was found between serum Mg level, age, sex, functional class and LVEF. Hypomagnesaemia was common in the presence of arrhythmia, Atrial fibrillation [ 60%] and PVC [80%] Hypomagnesaemia is common in patients with CHF especially in patient with arrhythmia [AF, PVC].

## Heat

### Diurnal fluctuation of the heat fluxes over the Northern Arabian Sea.

Syed, Naeem Ahmed; Ali, Arshad; Khan, Ather Ali; Zai, Muhammad Ayub Yosuf

National Institute of Oceanography

**Journal of Basic and Applied Sciences** 2006; 2 (2): 105-117 (28 ref.)

**Keywords:** Oceans and Seas; Water Loss, Insensible; Air; Volatilization

**Abstract:** The sea surface hourly meteorological parameters that were recorded at five time series stations under the North Arabian Sea Environment and Ecosystem Research [NASEER] programme [1992-1994] were used to study the heat fluxes including; momentum, latent, sensible and moisture heat fluxes as well as the net heat gain and total heat loss over the northern Arabian Sea. The study is the part of research on the formation and distribution of northern Arabian Sea water mass. The momentum or wind stress fluxes during the January 1992 and December 1994 were quite large in both the components of eastward [0.188 N m. 2] and northward [0.148 N m. 2]. During the August 1992, the east and north components were negative indicated direction of momentum from southwest with values under 0.1 N m-2. The data recorded during the March of 1993, have the visible diurnal variational pattern. The average of sensible heat fluxes during January 1992 was 76 Wm. 2, while in the August of 1994 was 71 Wm. 2. The results of evaporation indicated the similar pattern of diurnal variation as observed for the data of latent heat fluxes. During the January 1992 cruise, minimum evaporation is computed in the early morning and maximum after 1100 hours. However, during the December 1994, minimum evaporation was observed after sunrise and maximum near to sun set. The mean of the Net Heat Gain during the January 1992 was 138 Wm. 2 while, in the August 1992, mean of the area was computed as 96 Wm. 2. The Net Heat Gain values depicted that in the entire area of observation, heat was lost from sea surface to the atmosphere.

## Hemophilia A

### Hemophilia in Jordan : study of inhibitors and viral status.

Awidi, Abdalla; Arikat, Maysa; Kailani, Mona; Anshasi, Baha'a; Barqawi, Musa; Dwairi, Mohammad; Falah, Mostafa; Ramahi, Mohammad; Arafat, Eyad; Hadadin, Esam; Eid, Suhair; Fasuri, Sameer

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University of Jordan - Medical School - Thrombosis and Hemostasis Laboratory

**Jordan Medical Journal** 2006; 40 (1): 14-20 (22 ref.)

**Keywords:** Factor VIII; Enzyme-Linked Immunosorbent Assay; Hepatitis C Antibodies; Hepatitis C-epidemiology

**Abstract:** This work aims at studying inhibitors to factor VIII:C, factor IX: C in Jordanian patients with Hemophilia A and B and the prevalence of hepatitis B, C, HIV viruses in these patients. A total of 99 male patients were included in the study. Of these, 83 [83.8%] are hemophilia A and 16 [16.2%] are hemophilia B. All were investigated for inhibitor development by Bethesda assay. Inhibitors for factor VIII:C were additionally test by an ELISA technique. Each Patient's serum was tested by ELISA for the presence of antibodies against hepatitis A, B, and C viruses as well as against HIV I and II. Those found positive for hepatitis C antibodies were tested by PCR for hepatitis C viral RNA. None of the hemophilia B patients were found to have inhibitors. Eight patients [9.6%] of hemophilia A were found to have inhibitors. The prevalence of antibodies for hepatitis C was 25.25%, for hepatitis B 0% and for HIV 1%. Of those who were HCV antibody positive, 13 [52%] were positive for HCV-RNA by PCR. It is concluded that inhibitor development in Jordanian hemophilia A patients is similar to that described in western countries. Regular monitoring of these inhibitors should be an essential part of the routine care and follow-up of hemophilia A patients. The high prevalence of HCV indicates the need for more rigorous hepatitis C screening in local blood to render it safer than it is.



## Hepatitis B

### Transmission

#### Which equipments are more infected with hepatitis B virus infection? Dental equipments or endoscopes?.

Sharifi Mood, Batool; Rashidi, Homeira; Khalili, Manijeh; Sanei Moghaddam, Esmail  
BOO-Ali Hospital - Department of Infectious Diseases

**Journal of Medical Sciences** 2006; 6 (3): 502-504 (15 ref.)

**Keywords:** Hepatitis B Virus; Cross-Sectional Studies; Endoscopes-microbiology; Endoscopes-virology; Dental Instruments-microbiology; Dental Instruments-virology; Equipment Contamination; Sterilization

**Abstract:** Hepatitis B Virus infection [HBV] is a significant hazard in the dental environment and endoscopy room because the virus may be transmitted through contaminated instruments. This study was conducted in order to detect the HbsAg in the endoscopy and dental equipments and then to compare the results. In this cross-sectional study, in a time period of 30 days, 100 and 50 specimens were obtained randomly from multiple apparently sterile dental equipments and endoscopes, respectively. Obtained samples evaluated for HbsAg by ELISA method [Sorin biomedical Kit]. Results of the present study shows that 2% of instruments used for dental treatment was infected with hepatitis B virus. Among 50 specimens of endoscope instruments, only one sample was positive for HbsAg. Upon our results, there might exist the possibility of HBV transmission through dental equipments and endoscope instruments. We advise the use of standard sterilization for prevention of transmission of hepatitis B virus infection.

## Hepatitis B Virus

#### Evaluation of serumic beta-2 microglobulin in HBsAg+ HBV DNA PCR+ and HBsAg+ HBV DNA PCR- subjects : as HBV replication marker.

Shaiegan, M.; Tarabadi, F.A.; Kafi Abad, S. Amini; Samiei, Sh.; Babaeie, Gh.; Talebian, A.

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Iranian Blood Transfusion Organization - Research Center

**Blood** 2006; 2 (6): 253-258 (30 ref.)

**Keywords:** Hepatitis B Surface Antigens; Polymerase Chain Reaction; Enzyme-Linked Immunosorbent Assay; Biological Markers

**Abstract:** Beta-2 microglobulin [beta2MG] is the light chain of Histocompatibility-Class I human antigen and its normal range is 3mg/ml. beta2MG level in sera of hepatitis B patients increases. In Hepatitis infection the presentation of the viral antigen on the hepatocyte in the presence of Class I HLA antigen plays a major role in the elimination of the virus. In this descriptive study, s beta2MG, HBsAg [by ELISA], and HBV DNA [by PCR] were evaluated in sera of 49 patients with hepatitis B and 35 subjects in control group. Our results showed HbsAg was positive in all patients. 29 of patients were HBV-DNA-PCR positive and 20 HBV-DNA-PCR negative. beta2MG in all subjects in control group was in normal range and in 34.7% of patients above normal limit. beta2MG in HBV-DNA-PCR positive patients was higher than HBV DNA PCR negative patients. Such differences were significant [p 0.05]. It seems S beta2MG is a good marker for HBV replication and its absence may exclude HBV replication. The role of beta2MG in monitoring response to therapy needs to be further evaluated.

## Hepatitis C

### epidemiology

#### Prevalence of hepatitis B and hepatitis C viruses in human urban population of bahawalpur district, Pakistan.

Uz Zaman, Rifat

Islamic University - Department of Pharmacy

**Journal of Medical Sciences** 2006; 6 (3): 367-373 (34 ref.)

**Keywords:** Hepatitis B-epidemiology; Prevalence; Urban Population; Blood Transfusion; Hepatitis Viruses

**Abstract:** The present study examines the prevalence of hepatitis [B and C] infection in population of the urban areas of Bahawalpur district. The study population comprised of 6815 peoples [3924 male, 2891 female] of different age group and professions. The subjects were selected randomly and had blood samples taken. Rapid immunochromatographic tests were conducted to detect hepatitis B and C infections. The prevalence of diseases was: hepatitis B, 9.59% and hepatitis C, 4.41% indicating the spread of infections on rise in Pakistan. The results of the study illustrate the importance of education of the society including health care individuals to observe the protective measures against hepatic viral infections and of maintaining the health care measures.

## Hepatitis C Antigens

#### Cloning, optimization of expression condition, purification and immunological characterization of hydrophilic section of HCV core Ag, expressed in E-coli by T7-ara BAD promoter.

Aghasadeghi, M.R.; Sadat, S.M.; Amini, S.; Budkowska, A.; Roohvand, F.  
 Pasteur Institute of Iran - Hepatitis and AIDS Department

**Blood** 2006; 2 (6): 223-231 (22 ref.)

**Keywords:** Arabinose; Promotor Regions [Genetics]; Polymerase Chain Reaction; Chromatography

**Abstract:** The capsid or core Ag of Hepatitis C virus is a multifunctional protein which has the principal pathogenesis and diagnostic role in HCV related infections and most of these properties are attributed to the hydrophilic section [amino acids 2-122] of this protein. For different research and diagnostic applications, high amounts of this protein in pure and original form are required. So, the aim of this study was to clone the gene, optimize the expression condition, purify it in the original form, and immunologically characterize hydrophilic section of HCV Core Ag, expressed by T7-araBAD promoter system in E.coli. The PCR amplified region corresponding to 2-122 section of this Ag from genotype 1b was cloned in pVEX 2.3, a T7 promoter derived vector. The proper construct after digestional analysis and sequencing confirmations was transformed into BL2 1 -Al E. coli, and protein expression under control of araBAD promoter by addition of 0.2% Arabinose was induced. After optimization of expression condition, purification of protein by NI-NTA agarose gel chromatography in native condition by imidazole yielded about 3 .5mg/L of HCV core Ag. Immunological studies by western blotting through application of core specific mAbs and results of ELISA tests indicated that the protein is with desired immunological properties. AraBAD promoter can be perfectly utilized to produce the hydrophilic section of HCV core in high yields, and purification through NI-NTA in native condition may provide the antigen for different research and diagnostic applications.

## Hepatitis, Viral, Human

### Virology

#### Prevalence of GBV-C / hepatitis G virus viremia among chronic hepatitis B, chronic hepatitis C and hemodialysis patients in Turkey.

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Celal Bayar University - Department of Microbiology and Clinical Microbiology

**Annals of Saudi Medicine** 2006; 26 (1): 68-69 (15 ref.)

**Keywords:** Hepatitis B virus; Hepacivirus; Hepatitis C, Chronic-Epidemiology; Hepatitis B, Chronic-Epidemiology; Prevalence; Renal Dialysis; GB virus C

## HIV Infections

#### Immigrant fathers, mothers and babies who are living with HIV/AIDS.

Sharifi Mood, Batool; Salehi, Masoud; Sanei Moghaddam, Esmail; Khasravi, Sohila  
 Zahedan University of Medical Sciences - BOO-Ali Hospital - Department of Infectious Disease

**Journal of Medical Sciences** 2006; 6 (3): 492-494 (12 ref.)

**Keywords:** Emigration and Immigration; Cross-Sectional Studies; Prevalence; Enzyme-Linked Immunosorbent Assay; Acquired Immunodeficiency Syndrome; Mothers; Fathers; HIV Seropositivity

**Abstract:** In this cross-sectional, descriptive study, in a time period of 5 months in 2005, in Zahedan [Southeast of Iran], we evaluated the prevalence of HIV/AIDS in the families of the men with HIV/AIDS who had a history of immigration to other countries to work. Blood samples of the mothers and the babies were evaluated by ELISA method and in those who had a positive test, results were confirmed with a more specific assay [western blot]. Among 274 patients with HIV infection/AIDS [224 male and 50 female] in Sistan and Baluchestan Province in Southeast of Iran, 65 cases [41 male, 24 female] were from Saravan [a city in Sistan and Baluchestan]. Out of 41 men with HIV/AIDS in Saravan, 21 cases had a history of immigration, to neighbouring countries to work. Forty five percent of mothers [11 cases] who had infected immigrant husbands, showed a positive test and they were infected with HIV. Also, HIV test was positive in 3 children of families whom their fathers were infected immigrants. Present study showed that 45% of the mothers and 2.5% of the babies in families who the fathers were infected and had a history of immigration, had a positive test and they had been infected with HIV infection. Fifty percent of men with HIV/AIDS had history of immigration. Upon this results, immigration and family deprivation is a potent risk factor for occurrence of infection.

## Hymenolepiasis

### Drug Therapy

#### Effect of some immunomodulators on the host- parasite system in experimental hymenolepiasis nana.

Sanad, Magda M.; Al Furaiehi, Laila M. H.

Girls' College of Education, Riyadh, Saudi Arabia - Department of Zoology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 65-80 (38 ref.)

**Keywords:** Mice; Adjuvants, Immunologic-Adverse Effects; Immunosuppressive Agents; Cyclophosphamide; Lead; Immunization; Interferon-alpha-Drug Effects; Immunotherapy; Liver; Ileum; Intestines; Histology

**Abstract:** Mice experimentally infected with H. nana and injected with immunosuppressant [cyclophosphamide [Cp] and lead nitrate [Ln] showed significant increase in infection intensity, significant decrease in intestinal mast cell count,

dissemination of larvae to the liver, toxic hepatitis and absence of specific serum IgG. Cyclophosphamide caused morphological abnormalities in adult worms, prolongation of patent period and more severe villous changes. Immunostimulants represented by Levamisol [Lv] and gamma interferon [IFN-alpha] caused significant decrease in infection intensity, significant shortening of patent period and early improvement of histopathological changes. Immunostimulants, particularly IFN-alpha, were highly effective in counteracting hyperinfection seen with immunosuppression. The study confirmed the deleterious effects of immunosuppression on hymenolepiasis and suggested a beneficial role for immunotherapy for immunosuppressed patients.

## Immunoglobulins

### Blood

#### **Serum immunoglobulin A, G and M in healthy adults in Dhofar, Oman.**

Al Jabri, Ali A.; Ganguly, Shyam S.

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

**Annals of Saudi Medicine** 2006; 26 (1): 70-1 (2 ref.)

**Keywords:** Immunoglobulin A; Immunoglobulin G-Blood; Immunoglobulin M-Blood; Desert Climate

## Influenza in Birds

### epidemiology

#### **A serological survey for detection of avian infectious bronchitis virus antibodies in domestic village chickens in Esfahan, central Iran.**

Mahzounieh, M.R.; Karimi, I.; Bouzari, M.; Zahraei Salehi, T.; Irvani, S.

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University of Shahrekord - School of Veterinary Medicine - Department of Pathobiology

**Iranian Journal of Veterinary Research** 2006; 7 (2): 89-91 (8 ref.)

**Keywords:** Influenza in Birds-virology; Chickens; Seroepidemiologic Studies; Infectious Bronchitis Virus

**Abstract:** Infectious bronchitis [IB] is a very contagious disease caused by a coronavirus [IBV]. In chickens, the virus affects the respiratory, reproductive, and urinary systems. This study was carried out to determine the seroprevalence of anti-IBV antibodies in domestic village chickens. Serum samples of 300 domestic village chickens from Esfahan [central Iran] were collected and examined for the presence of anti-IBV antibodies by commercial ELISA kits. The results showed that 85.3% of the domestic village chickens had high titers of anti-IBV antibody without any clinical signs. It was concluded that the rate of IBV infection in these chickens is very high that could be a potential hazard for commercial poultry.

### prevention and control

#### **The efficacy of inactivated oil-emulsion H9N2 avian influenza vaccine.**

Moghaddam Pour, M.; Momayez, R.; Akhavadegan, M.A.

[mmoghaddamp@yahoo.com](mailto:mmoghaddamp@yahoo.com)

Razi Vaccine and Serum Research Institute - Department of Poultry Research and Production Vaccines

**Iranian Journal of Veterinary Research** 2006; 7 (2): 85-88 (15 ref.)

**Keywords:** Influenza in Birds-virology; Influenza Vaccines-pharmacology; Vaccination; Chickens

**Abstract:** An experimental inactivated oil-emulsion H9N2 avian influenza vaccine was formulated with 3 parts of inactivated avian influenza antigen A/Chicken/Iran/101/1998[H9N2] emulsified in 7 parts of oil adjuvant. Twelve week-old specific pathogen-free [SPF] chickens were divided into seven groups of 10 birds. Six groups were vaccinated with 1, 1/10th, 1/50th, 1/100th, 1/200th and 1/400th field dose of the experimental avian influenza vaccine [EAIV]. The last group, was injected with saline and served as the control group. The mean titer in haemagglutination inhibition [HI] test [log<sub>2</sub>] on the vaccinated groups, 21 days post-vaccination were 6.0, 4.4, 3.83, 3.3, 3.0 and 2, respectively. Prevention of virus shedding through cloaca was used as the potency test which revealed that the protective doses 50% [PD50] of full, 1/10th and 1/50th of the field dose of the experimental vaccine were 100, 100 and 96.25%, respectively. Those groups that received 1/50th dose could not prevent virus shedding. So it can be concluded that EAI vaccine could even be entirely protective and efficient in 1/10th dose and got a desirable immunity in experimental SPF chickens.

## Information Storage and Retrieval

#### **A comparison of handsearching versus EMBASE searching of the Annals of Saudi medicine to identify reports of randomized controlled trials.**

Cathey, John T; Al Hajeri, Amani Ali; Fedorowicz, Zbys

King Faisal Specialist Hospital and Research Center - annals of Saudi Medicine

**Annals of Saudi Medicine** 2006; 26 (1): 49-51 (7 ref.)

**Keywords:** Periodicals; Randomized Controlled Trials; Databases, Bibliographic; Abstracting and Indexing

## Intestinal Diseases, Parasitic

### Patients with gastrointestinal complains due to enteric parasites, with reference to entamoeba histolytica/dyspar as detected by Elisa E. histolytica adhesion in stool.

El Kadi, Mohammad A.; Dorrah, Ahmad O.; Shoukry, Nahla M.

Al Azhar University Cairo, Egypt - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 53-64 (38 ref.)

**Keywords:** Dysentery; Abdominal Pain; Flatulence; Vomiting; Feces-Parasitology; Entamoeba histolytica; Enzyme-Linked Immunosorbent Assay; Helminthiasis; Schistosoma mansoni; Shigella; Campylobacter coli

**Abstract:** A total of 210 patients with gastrointestinal troubles, of both sex and a mean age of 32 +/- 6.1 years, selected from the outpatient's clinics of Al-Azhar University Hospitals. 115 [54.76%] had dysentery, 95 [45.23%] did not have dysentery, 15 [14%] suffered flatulence, 20 [9.52%] had epi-gastric pain, 19 [9.05%] had vague abdominal pain, 5 vomiting [5.2%] and 10 [4.9%] had fever. Two symptoms were in 29 [13.81%] patients and three symptoms in 12 [5.7 1%]. Of the 210 patients, 20 [9.9%] had helminthes infection, 121 [57.6%] had intestinal protozoa and 69 [32.9%] had no parasitic infection. Of these parasite-free patients, 16 had Shigella sp. and nine had Campylobacter sp. Of the patients with intestinal protozoa, 34 [16.2%] had E. histolytica/ dyspar by stool examination of stained smears. By using ELISA for detection of E. histolytica adhesion in stool samples of 115 with diarrhea only 18 had true E. histolytica infection and of 3 without diarrhea only one had E. histolytica infection. Mean-while, ELISA did not cross-reacted E. coli, Giardia lamblia, Cryptosporidium parvum, Endolimax nana or Blastocystis hominis. So, ELISA for detection of E. histolytica adhesion in stool samples was more specific than microscopy and safe direction to the E. histolytica treatment. Apart from intestinal protozoan and bacteria, helminthes were seen in stool analysis. These were Schistosoma mansoni [0.95%], Capillaria sp. [0.95%], Enterobius vermicularis [1.90%] macroscopically, Hymenolepis nana [4.3%] and Ascaris lumbricoides [1.43%].

## Intestinal Obstruction

### Etiology

#### Adhesive intestinal obstruction in pediatric patients in Jordan.

Al Momani, Hashem M.; Saleem, Mohd M.; Abu Khalaf, Mahmoud

**Saudi Medical Journal** 2006; 27 (2): 274-276 (6 ref.)

**Keywords:** Adhesions; Postoperative Complications; Retrospective Studies; Pediatrics

## Intracerebral Hemorrhage

### etiology

#### Intraventricular hemorrhage in blunt head trauma.

Ehsaei, M.; Bahadorkhan, Gh.; Samini, F.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 351-356 (19 ref.)

**Keywords:** Intracerebral Hemorrhage-diagnosis; Intracerebral Hemorrhage-mortality; Craniocerebral Trauma; Head Injuries, Closed; Glasgow Coma Scale

**Abstract:** Before the CT scan was widely used for imaging, intraventricular hemorrhage [IVH] was a rare diagnosis and in most cases proved fatal. Currently, thanks to the CT scan IVH. is easily diagnosed. Prognosis of IVH is very poor and almost always is accompanied with other intracranial traumatic lesions and pure traumatic IVH is very rare. This descriptive study done on 28 patients with IVH. During a year 742 patients were admitted to the Neurosurgical Intensive Care Unit of Shahid Kamyab Hospital. In 28 cases the leading cause of admittance was motor vehicle accidents, Most of the patients were between the age of 21-30., Out of 28 cases had IVH, 5 patients [18%] had pure IVH and the remaining others had intera cranial legions like, parenchymal hemorrhage, sub-arachnoid hemorrhage, brain contusions, subdural hemorrhage and acute hydrocephalus in one patient [3.6%]. 82% of patients had a very low-conscious level at admittance, which measured by the Glasgow Coma Scale, lower than 8. Mortality was higher than 61%. Four patients had surgical treatment and all died. Eight cases did not have any surgical procedure. Traumatic IVH is very rare in severe blunt head injuries and is associated with other brain lesions and had a poor prognosis. Mortality rate is different and depends on other accompanying intracranial lesions. Surgical intervention does not have a significant effect for a successful out come.

## Iron

#### Prenatal and postnatal trend of iron-supplement use in Isfahan city.

Tirani, M.; Masomi, Gh.; Sadri, Gh.; Shafiei, A.

**Journal of Hygiene and Health** 2006; 2 (1): 35-39 (16 ref.)

**Keywords:** Iron, Dietary; Pregnancy; Cross-Sectional Studies; Questionnaires; Data Collection; Anemia, Iron-Deficiency

**therapeutic use****Effects of oral iron supplementation on haematocrit, live weight gain and health in neonatal dairy calves.**

Mohri, M.; Sarrafzadeh, F.; Seifi, H.A.

[mohri@ferdowsi.um.ac.ir](mailto:mohri@ferdowsi.um.ac.ir)

Ferdowsi University of Mashhad - School of Veterinary Medicine - Department of Clinical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 34-37 (25 ref.)

**Keywords:** Iron, Dietary-therapeutic use; Hematocrit; Cattle; Weight Gain; Health

**Abstract:** Forty neonate calves were used in this study. The animals were divided into two treatment [n = 20] and control [n = 20] groups. In the treatment group, oral iron as ferrous sulphate was supplemented to each calf at the dose of 150 mg/day for 28 days, from the birthday. Blood sampling was taken from jugular vein immediately after birth and on days 7, 14, 21 and 28 after birth. Significant differences in haematocrit [PCV] levels were found between two groups on days 14, 21 and 28 [P<0.05]. Total gain, mean daily gain and weight gain during 4th week of life was significantly higher in the treatment group than control group [P/.

## Kidney Failure, Chronic

**blood****Antiphospholipid antibodies in Egyptian patients with chronic renal failure.**

Abo El Yazeed, Samiha; Abdel Ghaffar, Nagwa; Younes, Khaled; El Ghobary, Ahmed

Al Azhar University - Faculty of Medicine - Department of Internal Medicine

**Journal of Medical Sciences** 2006; 6 (3): 468-473 (32 ref.)

**Keywords:** Kidney Failure, Chronic-immunology; Antibodies, Anticardiolipin; Antiphospholipid Syndrome; Liver Function Tests; Kidney Function Tests

**Abstract:** The objectives of present research was to detect the incidence of antiphospholipid antibodies among Egyptian patients with chronic renal failure and its relation to their clinical manifestation and vascular access thrombosis. This study including 80 patients with chronic renal disease divided into two groups. Group A, forty patients with impaired renal function and group B, forty patients in chronic renal failure on hemodialysis. In addition to 10 age and sex matched subjects as a control group. All of them were subjected to clinical examination and laboratory investigation including antiphospholipid antibodies. Lupus anticoagulant was present in 21.25%, aCL IgM in 18.75% while aCL IgG in 11.25% of whole chronic renal disease patients. There was higher incidence of antiphospholipid antibodies in-group B end stage renal failure on hemodialysis [28/40[70%]] compared to group A of renal impairment [25/40[62.5%]]. Also there was insignificant relationship between antiphospholipid antibodies and age, kidney function or liver function tests. There is increase of antiphospholipid antibodies among patients with chronic renal failure with great liability for thrombosis of vascular access. Also patients with positive LA have a great possibility to be hypertensive. HCV infection in hemodialysis group may be the cause of increased incidence of antibodies. Antiphospholipid antibody profile should be done for patients with recurrent thrombosis of vascular shunt, as it is the main cause of hospitalization of dialysis patients.

## Lead

**blood****The serum lead level of children in emergency ward.**

Farhat, A.SH.; Parizadeh, M.J.; Balali, M.; Khademi, Gh.R.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 405-408 (17 ref.)

**Keywords:** Lead-toxicity; Cross-Sectional Studies; Emergency Services, Hospital

**Abstract:** Lead is neurotoxic metal and particularly harmful to the developing nervous system of young children. The U.S. Department of Health and Human services established a National goal to eliminate blood lead level more than 100 Microgram/lit in children age 7 years by 2010. Our purpose was to evaluate the serum lead blood level of 1-7 years old children in Khorasan province. This cross sectional - descriptive study performed on 206 children aged one to seven years who were referred to pediatric out patients clinic and pediatric emergency service of Emam Reza medical center. Mashhad Iran from Jan. 2001 - 2002 children age and blood lead levels were collected in special form. From all children before entrance to study 3 cc blood had been taken for blood lead level. Blood lead levels in all samples were measured by the same lab and same technician. Collected data were processed by descriptive statistics and frequency tables. In this study we measure blood lead levels in 206 children aged one to six years in Emam Reza Medical center pediatric emergency service and out patients clinic. The mean age of children was 40/04 +/- 1 8/66 months and the mean blood lead level was 121/95 +/- 33/54 Mcg/lit and in 74/8% of children the lead levels were more than 100 Mc/lit. study showed the lead levels are more than other countries studies. Further epidemiologic studies should be performed for this very important health problem of Mashhad children.

## Leg Bones

### Injuries

#### Management of pilon fractures.

Hassan, Mohamed R.

Zagazig University, Egypt - Benha Faculty of Medicine - Department of Orthopaedic

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 29-37 (19 ref.)

**Keywords:** Decompression, Explosive-Surgery; Fracture Fixation, Internal; Tomography, X-Ray Computed; Ankle Joint; Follow-Up Studies; Treatment Outcome; Postoperative Complications

**Abstract:** To clarify which factors influence the final result of surgical management of plafond or pilon fractures, thirty two pilon fractures in 32 patients were treated by open reduction and internal fixation using low profile plates. C.T was obtained before definitive surgery. Management was based on the degree of soft tissue compromise and the type of pilon fracture. Nine patients with Tscherne Grades 0 and I closed injuries underwent immediate open reduction and internal fixation. Seventeen patients with Tscherne Grades II and III underwent temporary stabilization either by splint or calcanean traction for an average duration 13 days before surgery. Four patients presented with open injuries and two patients presented with compartment syndrome, they underwent irrigation, debridement and fasciotomy then a two pin external fixator was applied for an average 20 days before surgery. Clinical and radiographic evaluations were performed at an average twenty six months after surgery. The radiological score of quality of reduction was anatomic in twenty two cases [68.75%], good in five cases [15.62 %], fair in four cases [12.5%] and poor in one case [3.12 %]. The clinical outcome was excellent in eighteen cases [56.25%], good in seven cases [21.87%], fair in 5 cases [15.62%] and poor in two cases [6.25%]. There was no iatrogenic injury to the neurovascular bundle. Superficial wound edge necrosis was noted in three cases which healed later without further procedure. Two cases developed deep venous thrombosis. two cases showed delayed union one case of nonunion. No deep infection, or systemic sepsis was ported. Open reduction and stable internal fixation through postero-medial-anterior approach for pilon fractures can ensure anatomic restoration of the articular surface of the distal tibia and early motion of the ankle joint.

## Legg-Perthes Disease

### Therapy

#### Is it necessary to treat Perthes' disease?.

El Deeb, Khamis

Alexandria Faculty of Medicine, Egypt

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): V-VII (32 ref.)

**Keywords:** Orthopedics; Palliative Care; Legg-Perthes Disease-Surgery

## Leishmaniasis

### statistics and numerical data

#### Biostatistics of leishmaniasis in Saudi Arabia.

Al Aboud, Fahad

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King Abdulazize University - College of Sciences - Department of Statistic

**Sudanese Journal of Dermatology** 2006; 4 (1): 6-9 (4 ref.)

**Keywords:** Leishmaniasis-diagnosis; Leishmaniasis, Cutaneous; Statistics

**Abstract:** Biostatistics is a very important tool for health planning and management. Both cutaneous and visceral types of leishmaniasis exist in Saudi Arabia with the predominance of the first type. This statistics commentary is written to review in numbers the cutaneous and visceral leishmaniasis in Saudi Arabia from 1983-2004.

## Leishmaniasis, Cutaneous

#### Role of TCD4 + cells and cytokines in response to treatment in cutaneous leishmaniasis.

Mohajeri, M.; Shamsian, A.K.; Sakery, M.T.; Raesolmohadesin, M.; Mahmodi, M.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 379-386 (32 ref.)

**Keywords:** Flow Cytometry; Cytokines; CD4-Positive T-Lymphocytes

**Abstract:** Cutaneous leishmaniasis is one of the protozoal diseases in which %90 of cases occurs in Iran, Afghanistan, Syria, Saudi-Arabia, Brazil and Peru. Mashhad is one the most important foci of infection in our country. Various responses and prognosis to specific treatment in different patients from one side, and importance of IFN gamma and IL-4 producer cells on the other side impressed us to study the profile of lymphocytes and their subtypes by flow cytometry in patients with cutaneous leishmaniasis. The study was conducted in Ghaem Hospital and Bu - Ali Research Institute, Mashhad University of Medical Sciences, on 36 patients with cutaneous leishmaniasis from August 2001 until October 2002. Lymphocytes were counted and cultured to determine the cytokines. While cells were stimulated by phorpol 12-myistate 13-acetate [PMA], Inomycin and Monensin, cytokines were measured and analyzed,

using different conjugate monoclonal antibodies [e.g. anti-IFN gamma - PE etc.], obtained from IQ Products Co., The Netherlands. In this project, the percentage of different responsible immunity cells in 29 subjects were [who carried out the survey] determined by F.C.S before and after medication. In our study, Th1 in the whole population of the patients as well as 22 patients of group 1 who gave a positive response to the treatment showed a significant increase as [P=0.016] and [N 0.069], comparing with the control group. The present results show resemblance with the results obtained in most of the previous studies. Mean while, the Th1 of the whole patients as well as the patients in group 1 involved in this study, shows a significant decrease, that is [N 0.063] for the whole patients and [P= 0.0039] for group 1, after the treatment in comparison with the status before the treatment. Perhaps, the toxic influence of medicine and stimulation of lymphocytes by P.M.A. [none-specific stimulator] are the reasons for the reduction of Th1 in this group of patients.

### Immunology

#### **The adjuvant effects of IL-12 and BCG on autoclaved leishmania major vaccine in experimental cutaneous leishmaniasis.**

Michel, Magad Y.; Fathy, Fouad M.; Hegazy, Eman H.; Hussain, Eman D.; Eissa, Maha M.; Said, Doaa E. Alexandria University, Alexandria, Egypt - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 158-176 (35 ref.)

**Keywords:** Interleukin-12; BCG Vaccine; Interferon Type II-Blood; Mice; Vaccines, Inactivated; Immunization; Enzyme-Linked Immunosorbent Assay

**Abstract:** Cutaneous leishmaniasis is a universal disease causing skin ulceration and deformity. A reliable vaccine remains to be a possible practical means of control. The amastigotes multiply intracellularly in macrophages provoking a cell-mediated type of immune response. IL-12 is the central cytokine of CMI. It is produced by sensitized macrophages, stimulates both Th 1 and NK cells to secrete IFN-gamma which in turn activates the intracellular killing of Leishmania in macrophages via increased oxygen radicals. This work aimed mainly at studying the adjuvant effect of IL- 12 on autoclaved L. major [ALM] vaccine, compared to that of BCG in L. major infection. The material included five groups of Swiss albino mice; the test group infected after receiving ALM + IL-12, a non-infected control group, and three other control groups infected after receiving ALM + BCG, IL-12 alone and BCG alone L. major was cultured to provide promastigotes for vaccine and infection. The measured parameters included the lesion size, type and progress; the parasite density and the level of IFN-gamma in serum. The results showed that the best protection against challenge infection was obtained by ALM + IL-12 followed by ALM + BCG. The former is recommended for use as a vaccine with regards to its proved efficacy and known safety.

### Leptospirosis

#### **The frequency of photosensitization in a dairy cattle herd infected by leptospire.**

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Ferdowsi University of Mashhad - School of Veterinary Medicine - Department of Clinical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 70-72 (6 ref.)

**Keywords:** Photosensitivity Disorders; Cattle; Incidence

**Abstract:** Leptospirosis is a bacterial zoonotic disease, which can induce hepatic lesions. Photosensitization [PS] maybe is the result of accumulation of photodynamic agents in unpigmented area of the skin exposed to sunlight which occurred due to hepatic lesions. An outbreak of leptospirosis was occurred in a dairy cattle herd complex with 760 dairy milking cows in March [1990]. Totally, 412 cows [54.21%] showed clinical signs including fever, systemic mastitis, haemoglobinuria, jaundice, lameness, abortion and stillbirth. The microscopic agglutination test [MAT] was used for diagnosis of leptospirosis. The herd was infected with *Leptospira interrogans grippityphosa*, *L. interrogans icterohaemorrhagiae*, *L. interrogans pomona*, *L. interrogans canicola* and *L. interrogans hardjo*. Only one [0.13%] cow showed PS in the unpigmented skin dorsum. MAT showed that she was infected with *L. interrogans pomona*, *L. interrogans hardjo* and *L. interrogans icterohaemorrhagiae* with titre of 1:3200 of antibody. In spite of the high incidence of leptospirosis, the frequency of PS was too low.

### Lichen Planus

#### **Chronic desquamative gingivitis as part of mucocutaneous manifestations.**

Ramadan, Abdel Rahman M.A.

Khartoum College of Medical Sciences - Department of Periodontology and Oral Medicine

**Sudanese Journal of Dermatology** 2006; 4 (1): 16-27 (103 ref.)

**Keywords:** Gingival Diseases; Gingivitis, Necrotizing Ulcerative; Pemphigus; Psoriasis; Lupus Erythematosus, Systemic

**Abstract:** Desquamative gingivitis is a clinical feature of a variety of diseases. In this paper, the clinical features of dermatoses or mucocutaneous disorders where desquamative gingivitis is presenting manifestations have been reviewed [lichen planus, mucous membranes pemphigoid and pemphigus vulgaris]. Other less common mucocutaneous disorders affecting the oral mucosa [lupus erythematosus, linear IgA, plasma cell gingivitis, chronic ulcerative stomatitis and psoriasis] are also described. Correct identification of these conditions entails taking a careful history and performing a thorough intra-oral examination. Presence of cutaneous, nasal, ocular and genital lesions should be carefully elicited from the patient. The clinical manifestations, investigations and modalities of treatment are reviewed. Desquamative gingivitis [DG] is a clinical feature of a variety of diseases. It is characterised by epithelial

desquamation, erythema, ulceration, and/or the presence of vesiculobullous lesions of the gingiva and other oral tissues. This phenomenon can be a manifestation of a number of dermatoses, most commonly lichen planus, mucous membrane pemphigoid [cicatricial pemphigoid], and pemphigus vulgaris [1-3]. Other causes include allergic reactions to toothpastes/mouth rinses [plasma cell gingivitis] [4-6], Crohn's disease [7], psoriasis [8], linear IgA disease [9] and chronic ulcerative stomatitis [10]. Desquamative gingivitis can be mistaken for plaque induced gingivitis and this can lead to delayed diagnosis and inappropriate treatment of serious dermatological diseases such as pemphigoid or pemphigus [11-14]. Desquamative gingivitis as a presenting feature is most commonly noticed in oral lichen planus [OLP] [15-17].

## Listeria Infections

### Listeriosis in a premature neonate with meconium staining.

Amini, Elahe; Daneshjou, Khadije; Zolfaghari, Ali

Tehran University of Medical Sciences - Imam Khomeini Hospital - Department of Pediatrics

**Journal of Medical Sciences** 2006; 6 (3): 505-506 (5 ref.)

**Keywords:** Listeria Monocytogenes-pathogenicity; Meconium; Ampicillin-therapeutic use; Rifampin-therapeutic use

**Abstract:** This report describes a preterm newborn 32 weeks gestation and listeriosis that present with meconium staining. The passage of meconium on response to stress in seldom observed before a gestational age of 34 weeks. so, with the meconium staining appearance in this gestational age or less, should prompt a high index of suspicion for listeriosis.

## Lumbar Vertebrae

### abnormalities

#### Facet tropism in lumbar vertebrae and its prevalence in low back pain patients.

Gangi, R.; Hallage, M.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 431-436 (18 ref.)

**Keywords:** Lumbar Vertebrae-radiography; Zygapophyseal Joint-abnormalities; Low Back Pain-etiology; Risk Factors

**Abstract:** Facet tropism is defined as asymmetry in the facet joint angles of lumbar vertebrae. in the text books there is no subject about it but there are many title and article about this anomaly and the effect of it on lumbar pain. This study tries to evaluate prevalence of facet joint tropism in the patient with low back pain. During one year, 350 patients were referred to Emam Reza Hospital due to low back pain without any etiologic factors like acute trauma, infection, tumor or Spinal deformity. The patients were evaluated with lumbosacral radiography and for patients with asymmetry of facet joint, CT Scan was performed. Then the angle of facet joint in both sides of vertebrae was measured. Altogether the Facet tropism were seen in 68 patient [19%] and 43 cases [63%] in L5-S 1 were the most common location among these vertebrae. this study shows that facet tropism can be considered as a predisposing factor for low back pain.

## Lung Diseases

### Genetics

#### Familial occurrence of pulmonary alveolar microlithiasis in 3 siblings.

Al Alawi, Alia S.

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**Saudi Medical Journal** 2006; 27 (2): 238-240 (10 ref.)

**Keywords:** Lithiasis-Genetics; Pulmonary Alveoli-Pathology

**Abstract:** Pulmonary alveolar microlithiasis [PAM] is a rare disease of unknown etiology characterized by intra-alveolar calcium deposits. More than 500 cases were reported in the literature. The disorder affects people at every age beginning from the early childhood. It occurs probably as a result of autosomal recessive transmission. Familial occurrence is often found with family history of the disease being present in up to 50% of the reported cases. We report PAM in 3 siblings.

## Lung Neoplasms

### Genetics

#### Relationship between alpha-1 antitrypsin deficient genotypes S and Z and lung cancer in Jordanian lung cancer patients.

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**Saudi Medical Journal** 2006; 27 (2): 181-184 (28 ref.)



**Keywords:** Protease Inhibitors; Arabs-Genetics; alpha 1-Antitrypsin-Genetics; alpha 1-Antitrypsin Deficiency; Genotype

**Abstract:** Alpha-1 antitrypsin [alpha1-AT] is a secretory glycoprotein produced mainly in the liver and monocytes. It is the most abundant serine protease inhibitor in human plasma. It predominantly inhibits neutrophil elastase thus, it prevents the breakdown of lung tissue. The deficiency of alpha1-AT is an inherited disorder characterized by reduced serum level of alpha1-AT. Protease inhibitors Z [PIZ] and protease inhibitors S [PiS] are the most common deficient genotypes of alpha1-AT. The aim of this study is to test the relationship between alpha1-AT deficient genotypes S and Z and lung cancer in Jordanian lung cancer patients. We obtained the samples used in this study from 100 paraffin embedded tissue blocks of the lung cancer patients from Prince Iman Research Center and Laboratory Sciences at King Hussein Medical Center, Amman, Jordan. Analyses of the Z and S genotypes of alpha1-AT were performed by polymerase chain reaction and restriction fragment length polymorphism techniques at Jordan University of Science and Technology during 2003 and 2004. We demonstrated that all lung cancer patients were of M genotype, and no Z or S genotypes were detected. There is no relationship between alpha1-AT deficient genotypes S and Z and lung cancer in patients involved in this study.

## Lupus Erythematosus, Systemic

### Soluble P-selectin in systemic lupus erythematosus.

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National Research Center - Department of Inrenal Medicine

**Journal of Medical Sciences** 2006; 6 (3): 463-467 (25 ref.)

**Keywords:** P-Selectin; Homocysteine; Atherosclerosis

**Abstract:** The present research aimed to evaluate serum Adhesion Molecules [AMs] in patients with Juvenile Idiopathic Arthritis [JIA] to correlate their values with disease activity in different clinical subtypes. Serum levels of some soluble AMs [E-selectin, sICAM. and sVCAM. ] were assayed by ELISA in 37 patients with JIA both during activity and after remission. Other activity parameters like sedimentation rate and leukocytic counts were tested as well. Twenty healthy children of matched age and sex were taken as control. Serum E-selectin was found significantly higher in JIA compared to control [in all subtypes across all disease stages], with significant drop after remission, yet not reached the normal values. These changes were more evident in systemic JIA compared to other subtypes. Serum ICAM. and VCAM. showed the same changes in relation to control and to the disease activity. We can conclude that systemic JIA is associated with higher levels of soluble AMs thus explaining the perpetual inflammatory process and hence the remissions and exacerbations which are usually associated with higher morbidity in systemic JIA than in the other subtypes. We recommend following JIA patients until laboratory remission [normalization of serum AMs] to correlate AMs levels to clinical course aiming to put forward a therapeutic plan.

### Etiology

#### Systemic lupus erythematosus following acute lymphocytic Leukemia.

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King Faisal Specialist Hospital and Research Centre - Department of Pediatrics

**Annals of Saudi Medicine** 2006; 26 (1): 59-61 (11 ref.)

**Keywords:** Leukemia, Lymphocytic, Acute-Complications; Tomography, X-Ray Computed; Immunosuppression

## Macular Degeneration

### etiology

#### Prevalence of chloroquine and hydroxychloroquine maculopathy in rheumatoid arthritis patients.

Monsavi, M.; Sedaghat, M.R.; Houseini, E.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 409-16 (25 ref.)

**Keywords:** Arthritis, Rheumatoid-therapy; Chloroquine-adverse effects; Hydroxychloroquine-adverse effects

**Abstract:** The most serious side effect of chloroquine and hydroxychloroquine is retinopathy. Central 10-2 red target perimetry is one of the most sensitive routes to detect early maculopathy. A cross-sectional study of 62 RA patients whom treated with chloroquine and hydroxychloroquine at least for 6 months was undertaken. Age, duration, daily dose of drug and history of previous exams by ophthalmologist was noted. Complete ophthalmic examination and central 10-2 red target perimetry was done. Patients must be excluded if chloroquine has changed to hydroxychloroquine for more than 3 months. 46 patients had used chloroquine and 16 patients had used hydroxychloroquine. 5 1 patients were female and 11 patients were male. Range of age of these patients was between 10 to 81 years [Mean 39.59]. Any patients who use hydroxychloroquine hadn't retinal toxicity [neither with perimetric result nor by fundus exam]. In chloroquine group 8 patients [17.4%] have criteria for drug toxicity in perimetric results and 9 [19.6%] patients have drug toxicity in fundus examination. There was no correlation between retinal toxicity and duration of treatment, daily dose and accumulative dose or sex but there was correlation between age and retinal toxicity by chloroquine [P=0.017] also weak correlation between decreased vision and retinal toxicity was found [P=0.07] In present study mean daily dose, duration and accumulative dose of chloroquine for retinal toxicity was significantly lower than other reports which represents that our patients are more sensitive to chloroquine.

Hydroxychloroquine is much safer than chloroquine.

## Madurella

### Cell phenotypes, immunoglobulins and complement in lesions of eumycetoma caused by madurella mycetomatis.

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**Sudanese Journal of Dermatology** 2006; 4 (1): 2-5 (3 ref.)

**Keywords:** Maduromycosis; Phenotype; Immunoglobulins; Complement System Proteins; Antigens, CD15

**Abstract:** Mycetoma [maduromycosis] is a common health problem in Sudan. The causative organisms are either true fungi [eumycetoma] or actinomycetes [actinomycetoma]. The commonest eumycetoma in Sudan is caused by *M. mycetomatis*. The cell phenotypes, immunoglobulins and complement in lesions of *M. mycetomatis* were characterized by immunohistochemistry. In the H&E sections there were three types of inflammatory reactions. Type I reaction consisted of three zones: a neutrophil zone surrounding the grain, an intermediate zone of macrophages and giant cells and a peripheral zone consisting of lymphocytes and plasma cells. The neutrophils stained positively for CD15. The macrophages were positive for CD68. The majority of cells in the outermost zone were CD3 positive [T lymphocytes]; they were rimmed by CD20 positive cells [B lymphocytes]. In type II reaction there was no neutrophil zone, the grain being surrounded by macrophages and giant cells that stained positive for CD68. Type III reaction consisted of a discrete epithelioid granuloma without wellformed grains. IgG, IgM and C3 were found on the surface of the grain and the hyphae.

## Magnetic Resonance Imaging

### Methods

#### Dark-lumen magnetic resonance colonography.

Goyen, Mathias; Ajaj, Waleed; Lauenstein, Thomas C.

**Saudi Medical Journal** 2006; 27 (1): 116-119 (5 ref.)

**Keywords:** Colonography, Computed Tomographic; Colon-Pathology; Colonic Diseases-Diagnosis; Sensitivity and Specificity

## Malaria

### Epidemiology

#### Epidemiology of travel-related malaria in a non-malarious area in Saudi Arabia.

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Dhahran Health Center - Saudi Aramco Medical Services Organization

**Saudi Medical Journal** 2006; 27 (1): 86-89 (12 ref.)

**Keywords:** Endemic Diseases; Travel; Incidence; Risk Factors; Retrospective Studies

**Abstract:** The study describes the epidemiology of malaria in the Eastern Province of Saudi Arabia and the species of Plasmodium causing the disease and the associated factors. This is a retrospective study of the epidemiology of malaria at Saudi Aramco Medical Services Organization in Dhahran, Eastern Province of Saudi Arabia. The study included all patients with malaria from January 1994 to June 2005. We retrieved the cases from the archive epidemiology records on all notifiable diseases. The medical records of patients were reviewed and the following information was collected: age, gender, nationality, year and month of acquisition, travel history and the species causing malaria. Over the study period from January 1994 to June 2005, there were 56 cases of imported malaria seen at Saudi Aramco Medical Services Organization. There were 28 males and 28 females with a mean age of 28.2 +/- 19.7 [range, 1-80] years. Saudis constituted 25% of the patients and the remaining [75%] were non-Saudi. Most of the cases [78.7%] were acquired outside Saudi Arabia and 21.3% were acquired in the Kingdom but outside the Eastern Province. The most frequent species were Plasmodium vivax [P. vivax] [54.4%], Plasmodium falciparum [P. falciparum] [43%] and Plasmodium malariae [1.8%]. Of the cases acquired within other parts of Saudi Arabia, 71.4% were secondary to P. falciparum. Acquisition of malaria in India P. falciparum constituted 71.4% and in Pakistan 91%. For Sudanese patients, P. falciparum constituted 47% and P. vivax was 53%. Most of the non-Saudi cases were seen in the month of September [19%] whereas 57% of the Saudi cases were seen in February and April. There were no active cases of malaria transmission within the Eastern province of Saudi Arabia; however, the continued presence of imported malaria into this region may pose a significant health problem especially in the presence of the malaria vector. Thus, effective treatment and vigilance for cases of malaria is needed.

## Malaria, Falciparum

**Drug Therapy****Intramuscular artemether in the treatment of uncomplicated plasmodium falciparum malaria in Sudanese patients.**

Mohammed, Ayda R.; Kheir, Musa M.; Adam, Ishag

**Saudi Medical Journal** 2006; 27 (1): 122-123 (5 ref.)

**Keywords:** Antimalarials-Therapeutic Use; Antimalarials-Administration and Dosage; Artemisinins; Injections, Intramuscular; Treatment Outcome; Plasmodium falciparum

## Malnutrition

**complications****Fungal and bacterial infection in malnourished children and its relation to severity of the disease.**

Sakr, Mamdouh, R.; El Aiady, Ahmed A.; Ragab, Shadia H.; Gomaa, Howayda E.; Gamal El Din, Hesham  
Cairo University - Faculty of Medicine - Department of Pediatric

**Journal of Medical Sciences** 2006; 6 (3): 432-438 (35 ref.)

**Keywords:** Malnutrition-microbiology; Mycoses; Bacterial Infections; Risk Factors; Protein-Energy Malnutrition; Kwashiorkor

**Abstract:** The present research was conducted to assess the prevalence of fungal and bacterial infections in malnourished children and correlating these infections with the severity and type of malnutrition. The study included 50 malnourished children [25 Marasmus and 25 Kwashiorkor KW], their ages ranged from 1 to 36 months with a mean of 10.7 months. All patients were subjected to full history taking, thorough clinical examination: Anthropometric measures: Routine investigations and Microbiological study [fungal and bacterial cultures] of urine samples obtained by suprapubic aspiration both rectal and mouth swabs as well as gastric aspirate using nasogastric feeding tube were taken from each patient. The present study revealed that *Candida albicans* was the most prevalent fungal pathogen isolated, constituted 81% of +ve fungal cultures [85% in marasmus and 15% in KW patients]. *E. coli* was the most prevalent bacterial pathogen, detected in 50.5% of all +/- ve cultures [57% in marasmus and 43% in KW patients]. The severity of childhood malnutrition determines the incidence of fungal and bacterial infection.

## Man-Machine System

**Clinical paradox. Man versus machine.**

Manzar, Shabih

**Saudi Medical Journal** 2006; 27 (1): 110-111 (7 ref.)

**Keywords:** Clinical Trials; Data Display; Computers; Evaluation Studies; Echocardiography

## Marek Disease

**diagnosis****Polymerase chain reaction for the detection and differentiation of Marek's disease virus strains MDV-1 and HVT.**

Sadeghi, M.R.; Ghorashi, S.A.; Kargar Moakhar, R.; Morshedi, D.; Salehi Tabar, R.; Ghaemmaghani, S.S.  
Agriculture Organization - Veterinary Medicine Research Center

**Iranian Journal of Veterinary Research** 2006; 7 (1): 17-21 (23 ref.)

**Keywords:** Marek Disease-immunology; Polymerase Chain Reaction; Bird Diseases

**Abstract:** Marek's disease [MD] is a lymphoproliferative disease of chickens characterized by lymphocytic infiltration of various organs. The present study was an attempt to use polymerase chain reaction [PCR] to optimize a rapid and reliable assay for detection of MDV genome. Detection of serotype I of MDV [MDV-I] was confirmed by presence of a 200 bp DNA fragment as a PCR product. Differentiation of MDV-I and herpesvirus of turkeys [HVT] was also conducted using specific primers from the glycoprotein A [gA] gene and a 388 bp DNA fragment was amplified from HVT genome. The specificity of the test was confirmed by sequencing of PCR products. Results indicate that MDV-1 can be diagnosed in clinical samples and inoculated cell cultures which is used for virus isolation. In addition, differentiation between MDV-I and HVT viruses was confirmed based on the size of PCR products. The test proved to be rapid and reliable and can be performed as a robust diagnostic test in veterinary diagnostic laboratories.

## Measles

## immunology

**Evaluation of anti measles IgG prior to mass vaccination in soldiers in Iran.**

Ghorbani, G.H.

Baqiyatallah Medical Sciences University - Military Health Research Center

**Journal of Medical Sciences** 2006; 6 (3): 498-501 (18 ref.)**Keywords:** Measles-prevention and control; Cross-Sectional Studies; Immunoglobulin G; Mass Immunization; Military Personnel**Abstract:** We evaluated the immunity of measles in soldiers in capital city of Iran at 2003. Three hundred sixty soldiers were evaluated for anti measles IgG and question chart were completed with age, education level, history of measles, vaccination, contact with patients, measles in their family and cigarette smoking. ELISA assay of cut-off OD was been done in 5 cc of blood sample. Then this data was been analyzed by SPSS computer program. Present results confirmed that all soldiers were male and mean age was 20.4 +/- 0.89 SD. Level of education was little of college, anti measles IgG antibody was negative in 81 persons [22.5%] of soldiers. Verbally history of vaccination was positive in 264 persons [73.3%]. Considered to these findings that showed the protectivity against measles was incomplete and soldiers were at risk for measles out break, therefore we recommend vaccination for control of measles in soldiers.**A serological survey of measles, mumps and rubella immunity among school aged children in Western Saudi Arabia.**

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Faculty of Medicine - Department of Pediatrics

**Saudi Medical Journal** 2006; 27 (1): 63-69 (38 ref.)**Keywords:** Rubella-Immunology; Measles-Mumps-Rubella Vaccine; Seroepidemiologic Studies; Vaccination-Standards; Probability; Antibodies, Viral-Analysis; Risk Assessment; Mumps-Immunology; Schools; Child**Abstract:** To evaluate the adequacy of measles, mumps and rubella [MMR] vaccination among children and to assess risk of outbreak in Jeddah, Kingdom of Saudi Arabia [KSA]. We recruited a total of 527 children from schools located at different urban regions, and preschool children from those attending the well baby clinics in Jeddah, KSA. We tested for MMR viruses antibodies using ELISA technique. Approximately 99% of children received MMR vaccine. Overall seropositivity for measles antibodies was 71%, mumps 65% and rubella 90%, which were elevated in vaccinated versus non-vaccinated children [p0.000]. In vaccinated children, percentage of seropositivity for MMR was higher in public school children versus private [p0.01] or those who did not attend school [p0.01] and in Saudi versus non-Saudi children [p0.000]. In vaccinated children, percentage of seropositivity obtained according to age groups of 4-6 years for measles was 73.7%, for mumps 66.7% and for rubella 91.7%. As for 7-11 years age group, seropositivity for measles was 72.6%, for mumps 68.1% and for rubella 93%, while for the 12-14 years, seropositivity for measles was 66.4%, mumps 59.1% and for rubella 86.1%. The prevalence of seropositivity against the above-mentioned viruses decreased with progression of age. Measles, mumps and rubella mass vaccination program achieved high coverage rate among children, in Jeddah, KSA. However, there is still a high level of sera negative children among vaccinated ones for measles and mumps. Seropositivity decreased with age, which might raise possibility of outbreaks among adolescent. Additional doses of vaccine against measles and mumps are recommended and evaluation of new MMR protocol should be made.

## Meckel Diverticulum

## anatomy and histology

**Morphological studies on Meckel's diverticulum in duck [ansa ansa domesticus].**

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University of Shahrekord - School of Veterinary Medicine - Department of Basic Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 14-16 (11 ref.)**Keywords:** Meckel Diverticulum-abnormalities; Ducks**Abstract:** This research was carried out to define the morphological features of Meckel's diverticulum [MD] in duck and to investigate whether the MD resides in a constant position along the intestinal tract. For this purpose, a total of 30 adult healthy ducks of both sexes, 50-52 weeks of age were used. After dissecting, some morphological factors such as: total intestine length as well as the lengths of the intestine from the gizzard to MD [GMD], from gizzard to cloaca [GC] and from MD to the caecal opening [MDC] were measured. The weight, thickness and length of MD were then recorded. By using t-test and analysing factors between two sexes we concluded that, the location of MD in total specimens was 91.52 +/- 8.09 cm far away from the gizzard. There was no significant difference between morphological factors of MD [weight, thickness and length] in both sexes [P0.05]. There was significant difference [P0.05] between GMD, GC in both sexes. In histological studies of MD, aggregated lymphatic follicles and thin muscularis mucosa were observed in tunica mucosa.

## Melanoma, Amelanotic

### Diagnosis

#### Subungual amelanotic malignant melanoma.

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Kahramanmaraş Sutcu Imam University - Medical Faculty - Department of Dermatology

**Saudi Medical Journal** 2006; 27 (2): 247-249 (10 ref.)

**Keywords:** Nails; Toes; Skin Neoplasms-Pathology

**Abstract:** We report a 61-year-old, male patient complaining from prolonged lesion on his great toe that has been previously treated surgically. Histopathological examination of toenail specimen revealed the presence of nests of atypical tumor cells that led to the diagnosis of amelanotic malignant melanoma. Four years ago, he was diagnosed as gout due to extreme erythema and edema in the same toe. He has been taken to surgical treatment and chemotherapy and is still undergoing. As this disease is seen very rarely, it can be misdiagnosed. This situation also has poor prognosis. We presented a case of subungual amelanotic melanoma, as it is rare disease, early and correct diagnosis is very important.

## Meningioma

### Pathology

#### Evaluation of argyrophilic nucleolar organizer region staining in predicting the behavior of meningiomas.

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**Annals of Saudi Medicine** 2006; 26 (1): 38-42 (17 ref.)

**Keywords:** Meningeal Neoplasms-Pathology; Neoplasm Recurrence, Local; Nucleolus Organizer Region-Pathology; Recurrence; Prognosis

## Meningitis

### etiology

#### Chronic meningitis in acute promyelocytic leukemia [a case report].

Tayebi, N.; Farzadnia, M.; Amoeyan, S.; Memar, B.; Rokni, F.

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**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 448-452 (13 ref.)

**Keywords:** Leukemia, Myelocytic, Acute-complications; Chronic Disease; Bone Marrow-ultrastructure

**Abstract:** The occurrence of extramedullary disease [EMD] at presentation or at relapse has long been considered a rare event in Acute Promyelocytic Leukemia [APL]. Our purpose from recent reports of EMD at presenting in APL have raised increasing concern about one of causes of chronic meningitis. This study describe a case of acute promyelocytic leukemia [APL] in 25 years old female patient admitted in Emam Reza hospital, presenting with severe headache and vomiting and showed signs of meningeal irritation as well as papilledema. Cyto centrifuge examination of CSF showed an excess of promyelocytes, but peripheral blood didn't show any abnormal cell or blasts where as BMA showed increase of promyelocyte with multiple auer rod. After 2 weeks of aleukemic phase, this patient developed hematologic picture of APL diagnosed myeloid origin cells with myeloperoxidase stain. She was diagnosed as having leukemic meningitis and after 3 weeks in spite of chemotherapy, she dead Leukemic relapse or first presentation of leukemia may be the etiology of aseptic meningitis. Rarely central nervous. system leukemia and leukemic meningitis are associated with normal bone marrow and sometimes patients at Aleukemic phase present with meningitis. therefore we suggested that in patients with aseptic meningitis cerebrospinal fluid cytopspine smear should be evaluated for neoplastic and leukemic cells.

## Meningitis, Bacterial

### Epidemiology

#### Acute bacterial meningitis in Qatar.

Elsaid, Mahmoud F.; Flamerzi, Amina A.; Bessisso, Mohammed S.; Elshafie, Sittana S.

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Hamad Medical Corporation

**Saudi Medical Journal** 2006; 27 (2): 198-204 (22 ref.)

**Keywords:** Streptococcal Infections-Epidemiology; Haemophilus Infections-Epidemiology; Retrospective Studies; Acute Disease

**Abstract:** To study the changes in the epidemiology, clinical and bacteriological profiles of bacterial meningitis in the era of the Haemophilus influenzae type b [Hib]vaccine and pneumococcus resistance. This is a retrospective study of children aged 12 years admitted to the Hamad Medical Corporation, Qatar between January 1998 through December 2002 with positive cerebrospinal fluid culture. We described 64 patients with culture proven bacterial meningitis. In infants 3 months [n=35 [55%]]; Hib [25%] and Streptococcus pneumoniae [STP] [20%] were the most common organisms before introduction of Hib vaccination. A significant drop of Hib infections were noticed after introduction of the vaccine. Fever, neck stiffness, seizure, vomiting, and bulging fontanel were the most frequent presenting features. Group B Streptococcus were sensitive to ampicillin and cefotaxime with no resistance detected. Forty percent of STP isolates were resistant to penicillin and 12% were resistant to ceftriaxone. Fifty percent of Hib were resistant to ampicillin; while none of Hib were resistant to ceftriaxone. No case of Listeria monocytogenes meningitis was diagnosed. Morbidity was 28%, and one patient expired [2%] after Klebsiella pneumoniae meningitis. Streptococcus pneumoniae was associated with the highest morbidity [62%] while Hib had zero morbidity in our patients. Bacterial meningitis is a serious illness with a significant morbidity and mortality. Haemophilus influenzae type b infection decreased which indicated an effective vaccination. As there is 12% bacterial resistance of STP reported against ceftriaxone; We recommend Cefotaxime for infants 3 months while ceftriaxone plus vancomycin as empiric therapy for older patients with community acquired bacterial meningitis. A pneumococcal vaccination may further decrease the incidence of meningitis in our community. A continuous surveillance to detect changes in the microbiology of organisms causing bacterial meningitis or their sensitivity in our community is essential to update these recommendations.

## Menisci, Tibial

### Injuries

#### Diagnostic value of MR imaging in meniscal tears of the knee.

Nazem, Khalilollah; Jabalameli, Khashayar; Iranpour, Farhad

**Saudi Medical Journal** 2006; 27 (1): 121-122 (5 ref.)

**Keywords:** Magnetic Resonance Imaging; Knee Injuries-Diagnosis; Arthroscopy

## Metabolic Syndrome X

### Epidemiology

#### Prevalence of metabolic syndrome in Taiwanese adults: a hospital-based study.

Lin, Chih Hsueh; Lai, Shih Wei; Liu, Chiun Shon

China Medical University Hospital - Department of Family Medicine

**Annals of Saudi Medicine** 2006; 26 (1): 46-48 (12 ref.)

**Keywords:** Metabolic Syndrome X-Diagnosis; Hospitals; Cross-Sectional Studies; Prevalence; Triglycerides-Blood; Cholesterol-Blood

## Methemoglobinemia

### Chemically Induced

#### Prilocaine induced methemoglobinemia.

Aygenel, Sahender G.; Akinci, Emine; Pamukcu, Gul

**Saudi Medical Journal** 2006; 27 (1): 111-113 (5 ref.)

**Keywords:** Methemoglobinemia-Pathology; Prilocaine-Adverse Effects; Cyanosis-Pathology; Diagnosis, Differential

## Metoclopramide

### Pharmacology

#### Interactions of metoclopramide and ciprofloxacin on electrocardiographic indices in anesthetized normal and hyperthermic rats.

Daba, Mohamad Hesham Y.; Fouad, Abdel Motaal M.; Dahab, Gamal M.

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King Saud University - College of Pharmacy - Department of Clinical Pharmacy

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 42-51 (43 ref.)

**Keywords:** Ciprofloxacin-Pharmacology; Drug Interactions; Electrocardiography- Drug Effects; Fever; Rats, Sprague-Dawley

**Abstract:** The combination of metoclopramide [MCP] and ciprofloxacin [CPX] is not uncommon in clinical practice, as nausea and vomiting are well known during febrile illness. Some reports in the literature have linked both MCP and

CPX to serious cardiac adverse effects including QT prolongation and cardiac arrests. In this study we examined the effect of the combination between MCP and CPX on the ECG parameters and serum potassium in normothermic and hyperthermic rats. Thiopental-anesthetized rats were injected i.v. with MCP [0.2 mg/kg] and/or CPX [20 mg/kg] after induction of hyperthermia by intracerebroventricular administration of PGE<sub>1</sub> [0.4-micro g/kg]. ECG recordings were done every 10 min during 90-min duration. Plasma potassium was measured at 0, 20, 40, 60, and 80-min. Small doses of MCP and CPX changed ECG indices in statistically significant manner at normal and elevated body temperatures. MCP produced early bradycardia and prolongation of PR interval although it was less pronounced during hyperthermia possibly due to increased sympathetic nerve discharge. It also produced slight increase in QT interval [-4 ms] in normo- and hyperthermia. On the other hand, CPX caused non-significant effects on HR and conduction velocity but prolonged the QT interval by -4.3 ms during normo- and hyperthermia. Combination of MCP and CPX did not affect the influence of MCP alone on the HR or conduction velocity while it exaggerated their individual effects on the QT and QTc prolongation. This interaction was not affected by hyperthermia. CONCLUSION: the combination of MCP and CPX should be avoided as it may lead to serious QT prolongation while hyperthermia is not considered a dangerous threat for this interaction.

## Milk

### Changes of milk fat, crude protein, NPN and protein : fat ratio in holstein cows fed a high concentrate diet from early to late lactation.

Mohebbi Fani, M.; Shekarforoush, S.S.; Dehdari, M.; Nahid, S.

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University of Shiraz - School of Veterinary Medicine - Department of Animal Health Management

**Iranian Journal of Veterinary Research** 2006; 7 (2): 31-37 (19 ref.)

**Keywords:** Milk Proteins; Fats; Lactation; Cattle

**Abstract:** Percentages and yields of fat, crude protein [CP], true protein [TP] and non-protein nitrogen [NPN] were assessed in milk of four groups of Holstein cows, at early, mid and late lactation [days in milk 20-70, 71-110, 111-150 and 151-210], on a diet rich in concentrates during a hot summer. Four milk samples were taken from individual cows at 10-day intervals. Milk fat percentages were close to breed average and increased toward the end of lactation with a tendency [P = 0.055] for significant difference between the early and late lactation. Percentages of CP [P = 0.14] and TP [P = 0.478], however, were low similarly among all groups and did not follow the normal pattern of the breed. Percentage of NPN was significantly higher in groups III and IV [P = 0.005]. Yields of fat [P = 0.035], CP [P = 0.002] and TP [P = 0.001], but not NPN [P = 0.589], decreased toward the end of lactation. There was a negative correlation [r = -0.354, P<0.001] between the percentages of NPN and TP. However, no correlation was observed between the percentages of NPN and CP. Despite a very strong correlation between yields of CP and TP [r .

## Mites

### Pathogenicity

#### House dust mites and allergic manifestations among some children in Dammam, Saudi Arabia.

Al Qurashi, Abdul Rahman M.

King Faisal University - College of Medicine - Department of Microbiology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 283-288 (24 ref.)

**Keywords:** Dust-Air Pollution, Indoor; Hypersensitivity; Immunoglobulins-Blood; Complement C3; Complement C4; Child; Dermatitis

**Abstract:** The house dust mites is [= HDM] still one of the many causes of allergy, particularly atopic dermatitis. In the houses of children who were suffering allergic manifestations as atopic dermatitis, respiratory allergy, bronchitis, skin rash and fever. Double manifestations with fever were reported in four children. In the present study, two types of mites were recovered, *Dermatophagoides farinae* and *Ornithonyssus bacoti*. The immunoglobulins [G., M., A. and E] as well as complements [C3 and C4] were measured in the patients and cross-matched controls. The complements did not show any significant difference among patients and controls. Elevation was detected in IgG and IgM, but not in IgA. However, high significant elevation was in IgE. The results were discussed on the light of regional work.

## Moon

### A comparative study of arithmetic, observational and predicted lunar calendar for Pakistan for years 2000-2004.

Qureshi, Muhammad Shahid; Khan, Nasiruddin

University of Karach - Institute of Space and Planetary Astrophysics

**Journal of Basic and Applied Sciences** 2006; 2 (2): 91-103 (16 ref.)

**Keywords:** Periodicity; Religion; Time

**Abstract:** Arithmetic Lunar Calendar is based on the concept of Leap Years and the average motion of the Moon. However, the actual motion of the Moon varies greatly due to various factors which cause the observational calendar to be different from the arithmetic calendar. Whereas, the Calendars based on prediction criterion of Yallop are the closest to the observational calendar. In this work, we compare these calendars with the actual observational calendar in practice in Pakistan for the years 2000 to 2004. It is found that on average 95% observations are according to the

Yallop's criterion. The disagreement is the result of either the bad weather due to which the new Lunar crescent could not be sighted and the Lunar month began one day late, or too optimistic claims of observation and the Lunar month began one day earlier than predicted. On the other hand the disagreement between the Arithmetic Calendar and the observational one is 54%..

## Morpholines

### therapeutic use

#### **Aprepitant: a promising antiemetic for prevention of chemotherapy-induced nausea and vomiting.**

Asseri, Mohammed A.

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North Dakota State University - Department of Pharmacy Practice

**SPJ - Saudi Pharmaceutical Journal** 2006; 14 (1): 84-86 (12 ref.)

**Keywords:** Vomiting-etiology; Vomiting-drug therapy; Nausea-etiology; Nausea-drug therapy; Antiemetics-therapeutic use; Chemotherapy, Adjuvant-adverse effects

**Abstract:** Most patients who undergo chemotherapy have noted that nausea and vomiting are the most feared and distressing side-effects of cancer treatment [1]. Nausea and vomiting from chemotherapy can be classified as acute, delayed, or anticipatory. Acute emesis generally occurs within 24 hours of chemotherapy administration; while delayed nausea and vomiting begin 24 hours after chemotherapy and may continue for up to one week. Anticipatory emesis occurs prior to chemotherapy in patients who anticipate another episode by sight, odors, or memory of the place where acute nausea and vomiting occurred [2,3]. Different neurotransmitters found in the gastrointestinal tract [GIT] and central nervous system [CNS] mediate the pathophysiology of chemotherapy-induced nausea and vomiting [CINV]. These include dopamine, histamine, acetylcholine, serotonin, and substance P; which act directly and indirectly on the vomiting center located in the lateral reticular formation of the medulla [1,4]. Substance P is a member of the tachykinins family of neuropeptides. The biological activity of this substance is to induce vomiting mediated by neurokinin-1 [NK1] receptors located primarily in the GIT and the CNS [5]. Both NK1 receptors and substance P play a significant role in the pathogenesis of acute and delayed CINV.

## Muscles

### injuries

#### **Rupture of the peroneus tertius in a horse.**

Kazemi, H.; Sardari, K.

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University of Tehran - Faculty of Veterinary Medicine - Department of Clinical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (2): 92-94 (5 ref.)

**Keywords:** Rupture; Horses; Horse Diseases; Lameness, Animal

**Abstract:** Rupture of the peroneus tertius was diagnosed in a 7-year-old stallion, based on clinical examinations. The stifle joint flexed as the limb was advanced forward without flexing the hock. When the limb was pulled backward, the hock joint extended but the stifle was in the normal position. The recommended treatment included complete stall rest for 6 weeks followed by limited exercise for 2 months. The animal, ultimately, returned back to its normal exercise.

## Musculoskeletal Diseases

### etiology

#### **Early symptoms of the work-related musculoskeletal disorders in hand and upper extremity in the poultry industry.**

Dokuztug, Ferda; Acik, Evrin; Aydemir, Akin; Issever, Halim; Yilmaz, Ayse; Arer, Metin

Abant Izzet Baysal University - School of Physical Therapy and Rehabilitation

**Journal of Medical Sciences** 2006; 6 (3): 305-313 (36 ref.)

**Keywords:** Poultry; Occupational Diseases; Upper Extremity-pathology; Hand-pathology

**Abstract:** The aim of this study was to identify the early musculoskeletal symptoms of the hand and upper-extremity of the workers in the poultry industry. A group of 154 workers in the poultry industry participated in our study. Fifty nine of these workers were women mean aged 30.25 years  $\pm$  6.19; 95 were men mean aged 28.52 years  $\pm$  5.35. The majority of the female workers surveyed, 86%, expressed complaints in their hands, 27% in the arms, 27% in the shoulders, 20% in the forearms, 11% in the elbows and 53% of the male workers voiced some complaints in their hands, 14% in arms, 12% in shoulders, 7% in forearms and 4% in elbows. According to these results, both female and male workers were observed to have complaints mostly on the hands/wrists; these are followed by the arm/shoulder and forearm/elbow complaints. At the end of the study, depending on the early musculoskeletal findings in hand and upper extremities we determined to call attention to the following two points: 1. the necessity of providing the employers and the employees with the educational programs aiming at preventing these disorders 2. regular check ups should be given to the workers.



## Mycobacterium Paratuberculosis

### The prevalence of mycobacterium paratuberculosis infection in ileocecal valve of cattle slaughtered in ahvaz abattoir, Southern Iran.

Haji Hajikolaie, M.R.; Ghorbanpoor, M.; Solaymani, M.

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**Iranian Journal of Veterinary Research** 2006; 7 (2): 77-80 (11 ref.)

**Keywords:** Cattle; Prevalence; Paratuberculosis; Abattoirs

**Abstract:** To investigate the prevalence of Mycobacterium paratuberculosis [M avium subsp paratuberculosis infection among cattle slaughtered in Ahvaz abattoir, samples were taken from 250 cattle. Before slaughter. sex and age were assessed. Thereafter, samples were taken from ileocecal valve, rectum mucosa, ileocecal lymph node and stool. All smears which taken from these samples were stained by Ziehl-Neelsen method and examined by light microscopy. At first, ileocecal samples were examined; other samples were examined when ileocecal sample was positive. Out of the 250 cattle, 5 [2%] were positive. With the exception of one sample in which the organism was observed in both ileocecal valve and ileocecal lymph nodes in other positive samples the bacteria was observed in only ileocecal valve smear.

## Mycobacterium tuberculosis

### Anti tuberculosis effect of ocimum sanctum extracts in in vitro and macrophage culture.

Farivar, Taghi Naser Pour; Fard, Amir Hossein; Zahedani, Shahram; Naderi, Mohammad; Moud, Batul Sharifi

Zahedan University of Medical Sciences - Department of Microbiology

**Journal of Medical Sciences** 2006; 6 (3): 348-351 (20 ref.)

**Keywords:** Ocimum; Plant Extracts; In Vitro; Macrophages

**Abstract:** This study was conducted to evaluate the anti Mycobacterium tuberculosis effects of Ocimum sanctum directly and in macrophage culture which were infected with Mycobacterium tuberculosis before treatment with different concentrations of this plant. Suspensions of bacteria were prepared in 7H9 broth and after Macrophage culture, cell suspensions of the M.tuberculosis were added to the attached macrophages. Adherent monolayers was disrupted and bacterial suspensions were serially diluted and plated onto Middle brook 7H10 agar plates. Colonies were counted under a dissecting microscope and reported as CFU. For each culture dilution, six replicate samples were plated and the mean number of colonies was calculated and then Intracellular and extra cellular killing of Ocimum sanctum extracts were measured by colony counting. Present findings showed that in a defined laboratory and macrophage culture, Ocimum sanctum has a potent anti-Mycobacterium tuberculosis effects both directly and in infected macrophage culture. In this study we confirmed anti-tuberculosis effects of different concentration of O. sanctum extracts in vitro and in Macrophage culture but key components of anti tuberculosis action of these extracts and their mechanisms of actions must be discovered in future researches.

## Myiasis

### Parasitology

#### Study on human ophthalmomyiasis externa caused by oestrus ovis larva, in Sirte-Libya: parasite features, clinical presentation and management.

Fathy, Fouad M.; El Barghathi, Adam; El Ahwal, Abdalla; El Bagar, Shaban

Alexandria University, Alexandria, Egypt - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 265-282 (34 ref.)

**Keywords:** Eye Diseases-Diagnosis; Diptera; Larva; Rural Population; Treatment Outcome; Follow-Up Studies; Occupational Diseases; Disease Management

**Abstract:** Oestrus ovis larva is by far the commonest cause of human ophthalmomyiasis. The larva usually limits its activity to the conjunctiva and cornea, but, penetration of the eye is a potential complication. Misdiagnosis is common and the condition of acute catarrhal conjunctivitis is ascribed to other causes. The study included 20 patients referred to university hospital of Sirte, Libya. Results showed that the condition was more common among adult male shepherds and farmers in rural areas. Important criteria for diagnosis were; sudden mobile foreign body sensation with abrupt itching and lacrimation occurring in endemic area, in warm months even without history of fly strike. Effective treatment consisted of mechanical removal of the larva by the cotton swap mounting technique which resulted in rapid improvement. Suffocation of residual larvae was mediated by use of liberal amounts of topical antibiotics. Slit lamp examination of larva showed that it was small, translucent, avoid the light beam and easily overlooked. Detailed microscopic examination of larval surface structures revealed a multi-component attachment apparatus consisting of oral hooks, inter-segmental spines, caudal spines and a multi-layered spiny thoracic complex described for the first time. These injurious structures are believed to be responsible through inflicting direct mechanical damage for the observed haemorrhage, ulceration or even the potential invasion, as these changes were more obvious in neglected cases. So, early diagnosis and treatment are essential to avoid complications.

## Naphthoquinones

### Pharmacology

#### Effects of henna dye on oxygen saturation reading using pulse oximetry.

Samman, Yaseen S.; Rahimi, Jamilah S.; Siraj O. Wali; Krayem, Aymen B.; Abdel Aziz, Muntasir M.

**Saudi Medical Journal** 2006; 27 (2): 268-269 (5 ref.)

**Keywords:** Coloring Agents-Pharmacology; Oxygen-Blood; Oximetry

## Nematoda

### Ultrastructure

#### An ultrastructural study on *desportesius invaginatus* (nematoda, acuariidae) from ardeola ibis Ibis in Egypt.

Varjabedian, Kahar Garo

Cairo University, Giza, Egypt - Faculty of Science - Department of Zoology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 149-157 (9 ref.)

**Keywords:** Birds; Bird Diseases-Parasitology; Proventriculus-Anatomy and Histology; Microscopy; Proventriculus-Pathology

**Abstract:** The present study is undertaken to describe the ultra-structure of *Desportesius invaginatus* [Nematoda, Acuariidae] for the first time in Egypt showing details that were not clearly defined before. This nematode is found in the proventriculus of *Ardeola ibis*. The latter is known in Egypt as "Abu Erdan" and it is a very common and useful bird to Egyptian farmers. The pathogenicity of this nematode within their host was observed. The presence of such high number of worms raised the curiosity of the present author to see if they had the potential to cause any harm to such economically important birds to Egyptian farmers.

## Neural Conduction

#### Effect of exercise on ulnar and peroneal nerve conduction velocity.

Nemati, H.; Nozadi, M.; Modir, V.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 387-392 (14 ref.)

**Keywords:** Exercise; Exercise Test; Ulnar Nerve-physiology; Peroneal Nerve-physiology; Case-Control Studies

**Abstract:** Regarding to sedentary lifestyle and its early complications, electrodiagnostic studies can have valuable effects on prevention, diagnosis, follow up and treatment of neuromuscular disorders. This study aimed to compare nerve conduction velocity [NCV] of the ulnar and peroneal nerves in athletes and nonathletes. This case-control study was performed in athletes in Mashhad University of medical sciences in 2003. Totally 237 university students, 114 with appropriate exercise activity from the students of school of sport and exercise sciences as study group and 123 without appropriate physical activity from medical students as control group were selected. General data and data related to NCV of ulnar and peroneal nerves in two groups were collected using a previously designed questionnaire and neurogram test. Data were analysed by SPSS software using Mann-Whitney test in order to compare means. The results showed NCV of right and left ulnar and peroneal nerves in female students were more than male ones [P=0.003, P=0.075, P=0.002 and P=0.001 respectively]. NCV of the right and left ulnar in athletes and nonathletes females had statistical differences [P<0.001] but there were no significant differences between right and left peroneal nerves. [P.

## Nitric Oxide

### blood

#### Plasma nitric oxide level in myocardial disorders with left ventricular diastolic dysfunction.

Elshamaa, M.F.; Sharaf, E.A.E.A.; Farid, Y.A.; Elghoroury, E.A.; Abdel Ghaffar, E.

National Research Center - Department of Pediatric

**Journal of Medical Sciences** 2006; 6 (3): 439-444 (24 ref.)

**Keywords:** Cardiomyopathies; Heart Failure, Congestive; Echocardiography

**Abstract:** Nitric oxide is a free radical that is elevated in the plasma of patients with heart failure due to contractile dysfunction. This study examines the relation between plasma NO level and Left Ventricular [LV] diastolic function and its aetiology in heart failure patients in the pediatric age group. We performed echocardiographic Doppler studies in 47 patients [mean age of 6.16 +/- 2.8 years, 31 males and 16 females] with congestive heart failure. Left ventricular diastolic dysfunction was classified as either a restrictive [RFP] or non restrictive filling pattern [non-RFP]. Same day venous total nitrite and nitrate levels were measured by colourimetric assay. Plasma NOx level was significantly higher in the studied patients than the control group [141 +/- 54 and 43 +/- 4 micromol/L, respectively, p<0.001]. ROC curve found that the cut off point for plasma NOx level was 60 micromol/L to differentiate between normal children and patients with heart failure. Patients with RFP showed insignificantly higher levels of plasma NOx than the non-RFP patients. Only in muscular dystrophy patients, there was a negative correlation between plasma NOx level and LV ejection fraction [r.

## Nocardia Infections

### **Pulmonary nocardiosis in an immunocompetent patient.**

Rokni, F.; Javanian, M.; Kalali, A.M.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 444-447 (13 ref.)

**Keywords:** Nocardia asteroides; Pneumonia-etiology; Immunocompetence

**Abstract:** Nocardiosis is an uncommon bacterial infection caused by aerobic actinomycetes in the genus Nocardia. This pathogen generally causes opportunistic infection in immunocompromised hosts although infection has also been reported in immunocompetent patients. In this manuscript, we report a case of pulmonary nocardiosis without evident signs of an immunocompromising illness. A 14-years-old girl was admitted with fever, productive cough, weight loss, anorexia and occasionally bloody sputum since 2 months before. Nocardia was detected in the smear and culture of sputum. A sulfamethoxazole-trimethoprim combination was administered, and the clinical findings improved. It is suggested that pulmonary nocardiosis should be considered in the differential diagnosis of chronic pulmonary symptoms even in non immunocompromised patients.

## Noise

### **Evaluation of noise pollution in Isfahan urban areas.**

Mortazaeei, S.; Bira, B.; Berjis, N.

**Journal of Hygiene and Health** 2006; 2 (1): 46-52 (12 ref.)

**Keywords:** Environmental Pollution; Evaluation Studies; Sound; Urban Population

## Numerical Analysis, Computer-Assisted

### **A numerical method for the solution of linear second order boundary value problem.**

Naeem, Rana Khalid; Begum, Farzana; Khan, Waseem Ahmed

University of Karach - Department of Mathematics

**Journal of Basic and Applied Sciences** 2006; 2 (2): 83-90 (11 ref.)

**Keywords:** Mathematical Computing; Insulator Elements

**Abstract:** A numerical method for solving the second order linear boundary value problems is presented. The method is tested on twenty B.V.P's and it is found that numerical and exact solutions are in good agreement.

## Nurses

### **Health assessment of female nurses of Isfahan University of medical science.**

Mehrabi, T.; Ghazavi, Z.

**Journal of Hygiene and Health** 2006; 2 (1): 1-5 (17 ref.)

**Keywords:** Nursing Assessment; Health Personnel; Data Collection; Health Status

## Nutrition

### **education**

### **Effects of proper nutrition education on BMI reduction and changes on FBS, chol and TG rates of type 2 diabetic patients.**

Heydari, G.H.; Moslemi, S.; Heydari, Q.; Kebraiee, A.

Zahedan University of Medical Sciences - School of Health - Department of Public Health

**Journal of Medical Sciences** 2006; 6 (3): 374-377 (18 ref.)

**Keywords:** Diabetes Mellitus, Type 2; Metabolic Diseases; Data Collection; Questionnaires; Health Education

**Abstract:** In this study we have assessed the short-term effectiveness of diabetes education on BMI reduction, changes on [FBS, Chol, TG Rates] of type 2 diabetic patients in relation to proper nutrition. A sample of 125 diabetic patients was systematic randomly chosen. The method chosen for collecting the information [Data] was through questionnaires and laboratory tests [fasting blood sugar, total cholesterol, TG] that was conducted before educational programmes and after constantly education, finally the FBS, Chol, TG and weight were compared. The study showed significant improvements in several aspects of research. This study has shown a high level of illiteracy amongst our patients, which is of course common in developing countries. Diabetics did not gain weight and their relatives lost weight after nutrition curriculum. The mean fasting blood glucose before education was 216.27 mg %, whereas it fell to a mean level of 178.39 mg % after education. The patients had significantly lower serum cholesterol after 7 month education [172 mg %],  $p = 0.005$ . The present study clearly demonstrate the great benefits of diabetes self-care education. Most of these studies and our own, have been short term. We conclude that diabetes education is appropriate achievable and worthwhile. The challenge remains as to how to continue benefit long term.

## Obesity

### Blood

#### **The relationship between serum total sialic acid levels and adenosine deaminase activity in obesity.**

Kurul, Naciye; Akarsu, Ersin; Aktaran, Sebnem

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Sutcu Iman University - Faculty of Science - Department of Chemistry, Division of Biochemistry

**Saudi Medical Journal** 2006; 27 (2): 170-173 (29 ref.)

**Keywords:** Adenosine Deaminase-Blood; N-Acetylneuraminic Acid-Blood; Obesity-Enzymology

**Abstract:** To evaluate the relationship between serum adenosine deaminase [AD] activity and serum total sialic acid [TSA] levels in obese individuals. We performed this study at the Department of Chemistry, Division Biochemistry, Kahramanmaraş Sutcu Imam University Arts and Science Faculty, Turkey from 2003 to 2004. Fifty obese subjects and 25 non-obese healthy controls were included in the study. The serum AD activity and TSA concentrations were measured by spectrophotometric methods. The AD activity [p0.01] and TSA concentrations [p0.001] were significantly higher in the sera of obese subjects than those of non-obese control subjects. But, there was no statistically significant difference in the serum TSA levels and AD activity of the obese subjects with metabolic syndrome properties compared with those without metabolic syndrome properties. A significant correlation between the serum TSA and AD was found in the obese subjects [p0.05, r: 0.33]. Our findings suggest that there may be a closer interaction between the inflammatory events and obesity. However, our observations need to be confirmed by further studies to understand more regarding the underlying mechanisms.

## Odontogenic Cysts

### Genetics

#### **Suspected familial odontogenic keratocysts related to Gorlin Goltz syndrome.**

Yucetas, Sule; Cetiner, Sedat; Oygur, Tulin

Gazi University - Faculty of Dentistry - Department of Oral and Maxillofacial Surgery

**Saudi Medical Journal** 2006; 27 (2): 250-253 (20 ref.)

**Keywords:** Mandibular Diseases-Genetics; Basal Cell Nevus Syndrome

**Abstract:** This report represents the suspected familial case series of odontogenic keratocysts OKCs related to Gorlin Goltz syndrome GGS, a rare genetic disorder characterized mainly by multiple basal cell carcinomas, OKCs and other less frequent skeletal and neurological manifestations. Familial cases included grandmother's father, grandmother, father and son. Although they had all OKCs, father additionally possessed some of the other characteristics of GGS. We described all the patients' diagnoses, treatments and long-term follow-ups under the light of current literature.

## Omentum

#### **Primary omental torsion in children. The pre-disposing factors and role of laparoscopy in diagnosis and treatment.**

Mallick, Mohammad S.; Al Bassam, Abdulrahman

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King Khalid University Hospital - Department of Surgery

**Saudi Medical Journal** 2006; 27 (2): 194-197 (15 ref.)

**Keywords:** Peritoneal Diseases-Etiology; Peritoneal Diseases-Surgery; Peritoneal Diseases-Diagnosis; Laparoscopy; Torsion; Retrospective Studies; Child

**Abstract:** To determine the predisposing factors and to evaluate the role of laparoscopy in the diagnosis and management of primary omental torsion in children. We retrospectively reviewed the clinical records of all children treated for primary omental torsion from August 1999 to December 2004 at King Khalid University Hospital, Riyadh, Saudi Arabia. Demographic data, clinical presentation, diagnostic and therapeutic modalities were evaluated. Follow-up was also obtained. Six children were included in the study. Their age ranging between 9-12 years [average 10.4 years]. All of them presented with right lower quadrant [RLQ] pain mimicking appendicitis. The duration of symptoms varied from 3-5 days prior to presentation. Localized RLQ tenderness with guarding was demonstrated in all patients. All children were noted to be obese. Only one patient had low grade fever and nausea. None of the patients had an elevated white blood cell count. Laparoscopic exploration was carried out in all cases for possible appendicitis. Appendix was found to be normal and torqued omentum was clearly seen in all cases. The infarcted omentum was removed laparoscopically; all patients had uneventful recovery and were discharged on second postoperative day. Pathological examination showed necrotic infarcted omentum with no other abnormalities. Follow-up documented complete resolution of the patient's symptoms. Clinical presentation of primary omental torsion mimics that of acute appendicitis. Its diagnosis is usually difficult and almost impossible pre-operatively. Obesity, paucity of gastrointestinal symptoms and relatively long duration of symptoms should increase the index of suspicion. We believe that the laparoscopic approach is an excellent tool for the diagnosis and treatment for the primary omental torsion.

## Oocytes

### **In vitro survival rate of bovine oocytes following vitrification in glass capillary micropipette [GCM].**

Babaei, H.; Nematollahi Mahani, S.N.; Kheradmand, A.; Ayen, E.

[Babaei@mail.uk.ac.ir](mailto:Babaei@mail.uk.ac.ir)

Shahid Bahonar University of Kerman - Faculty of Veterinary Medicine - Department of Clinical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (1): 8-13 (36 ref.)

**Keywords:** Cell Survival; Cattle; Time Factors; Animals; Cryopreservation; In Vitro

**Abstract:** The purpose of this study was to evaluate the use of glass capillary micropipette [GCM] as a vessel for vitrification of bovine oocytes. Cumulus-oocyte complexes [COCs] were obtained from slaughter-house and washed 5 to 6 times in the washing medium [TCM-199 + 20% FBS] and randomly assigned to treatment and control group. In the first step of vitrification, COCs were exposed to first vitrification solution [VSI][10% ethylene glycol [EG], 10% DMSO in holding medium [TCM-199 + 10% FBS: HM]] for 1 mm at room temperature and then placed in VS2 solution [20% EG, 20% DMSO in HM] for 25 sec and immediately were loaded into the GCM vessel. The filled portion of GCM vessels were placed in liquid nitrogen [LN. ] for 3 to 5 sec and then completely immersed and stored there. The oocytes were thawed by immersing the capillary end of the straw in 1 ml of 0.25 M sucrose in HM and gently expelling the contents. After 1 mm the oocytes were transferred into 100 micro l of 0.15 M sucrose in HM for another 5 min and then washed with HM twice For examining the in vitro developmental potential of vitrified-warmed oocytes, the oocytes were placed in 50micro l droplet of maturation medium [TCM-199 + 10% FBS + 10 IU/ml PMSG +5 IU/ml HCG] covered with paraffin oil in a CO. incubator at 38.5°C for 24 hrs. A high proportion of morphologically normal oocytes [90%] was recovered after vitrification-warming. The percentage of live oocytes after 24 hrs when tested with trypan blue in GCM group was 85.18%, significantly did not differ from control group [90%]. The proportion of oocytes which were found to have undergone nuclear maturation did not show statistical difference between the control and GCM group [6129% vs 40%, respectively]. The results of present study demonstrated that vitrification of immature bovine oocytes in the GCM vessels and EG+ DMSO solution have high survival rate.

## Ovarian Neoplasms

### **Diagnosis**

#### **Intraligmentary solid-cystic neoplasia with histomorphological features of sclerosing stromal tumor.**

Gucin, Zuhail

**Saudi Medical Journal** 2006; 27 (1): 113-114 (7 ref.)

**Keywords:** Ovarian Neoplasms-Pathology; Sex Cord-Gonadal Stromal Tumors; Magnetic Resonance Imaging; Immunohistochemistry

## Ovary

### **Pathology**

#### **A case of ovarian enlargement in severe primary hypothyroidism and review of the literature.**

Bassam, Taher; Ajlouni, Kamel

The National Center for Diabetes Endocrinology and Genetics

**Annals of Saudi Medicine** 2006; 26 (1): 66-68 (12 ref.)

**Keywords:** Ovarian Neoplasms-Pathology; Hypothyroidism-Pathology; Magnetic Resonance Imaging; Tomography, X-Ray Computed; Ovarian Hyperstimulation Syndrome; Review Literative

## Pancreas

### **anatomy and histology**

#### **Histomorphometrical syudy of pancreas in Mehraban female sheep.**

Mansouri, S.H.; Gholami, S.; Mousavi Orimi, Gh

[hmansour@shirazu.ac.ir](mailto:hmansour@shirazu.ac.ir)

University of Shiraz - School of Veterinary Medicine - Department of Anatomical Sciences

**Iranian Journal of Veterinary Research** 2006; 7 (2): 14-19 (25 ref.)

**Keywords:** Sheep; Sheep Diseases

**Abstract:** In the present study, pancreas glands in Mehraban breed of female sheep were histomorphometrically studied in four different age groups included: fetus, newborn, sexually mature and old ages. The results of histomorphometrical analysis with regard to frequency and percentage of parenchymal and stromal structures such as, exocrine secretory units, secretory ducts, blood vessels, islets of Langerhans and stromal connective tissue showed that minimum and maximum percentages of structures within the whole gland belonged in fetal stage, to blood vessels

and stromal connective tissue; newborn stage, to blood vessels and exocrine secretory units; in sexually mature, to islets of Langerhans and exocrine secretory units and in old stage, also to islets of Langerhans and exocrine secretory units, respectively. The diameter changes of islets of Langerhans in different age groups from minimum to maximum were included: fetus, old, sexually mature and newborn stages. In comparison between different age groups, the frequency of exocrine secretory units showed a significant increase from fetal stage to newborn, sexually mature and old stages [P<0.05]. On the other hand, there was a significant decrease in frequency of secretory ducts from fetal stage to newborn, sexually mature and old stages and there was also a significant decrease in frequency of blood vessels from fetal to newborn stage [P<0.05]. Significant decrease was also observed in frequency of islets of Langerhans from fetal and newborn stages to sexually mature and old stages. In comparison between groups, there was a significant increase in diameter of islets of Langerhans from fetal to newborn and sexually mature stages and decrease from newborn to sexually mature and old stages. Our study revealed that, there was no significant difference in parenchymal and stromal structures and diameter of islets of Langerhans between different parts of the gland in each age group. However, the above mentioned parameters often showed significant differences between different age groups. These differences were more prominent between fetal stage compared to the other age groups. Therefore, it can be concluded that structural changes of parenchyma and stroma of pancreas gland begin from prenatal period and will proportionally continue during the period of post-natal development.

## Paresis

### physiopathology

#### **The relationship between lower-extremity muscle strength and functional performance in hemiparetic patients.**

Akbari, Asghar; Karimi, Hossein

Zahedan University of Medical Sciences - Paramedical School - Department of Physical Therapy

**Journal of Medical Sciences** 2006; 6 (3): 327-331 (21 ref.)

**Keywords:** Paresis-rehabilitation; Cross-Sectional Studies; Gait; Gait Disorders, Neurologic; Muscle, Skeletal-physiology; Mobility Limitation; Lower Extremity-physiopathology

**Abstract:** The purpose of this study was to investigate the relationship between involved lower extremity muscle strength and two functional tasks: gait ability and balance and motor skills in chronic stage of a stroke. In 2004, an analytical study was conducted in Tehran province, Iran. Participants were thirty-four hemiparetic patients secondary to stroke aging 52.41\_6.19 years and 37\_26.37 months since stroke. The isometric strength of seven muscle groups was measured with a hand-held dynamometer. Gait ability and balance and motor skills were evaluated using Functional Ambulation Category [FAC] and Timed get up and go tests, respectively. All muscle groups' strength, except for hip extensors [ $r = 0.16$ ], were correlated significantly with the timed get up and go scores [ $r = 0.37-0.45$ ]. None of these muscle groups' strength, except for hip abductors [ $r = 0.34$ ], were correlated with functional ambulation category test scores [ $r = -0.02-0.2$ ]. The results showed that all muscles' strength, except for hip extensors, were valid predictors of balance and motor skills and strength of hip abductors were valid predictors of gait ability. Our results are in support of using the involved lower extremity muscle strength measurements for evaluation of balance and motor skills and treatment of people in the chronic stage of a stroke.

## Periodicals

#### **The third regional conference on medical journals in Eastern Mediterranean Region, January 2006.**

Shamad, Mahdi

[mahdishamad@yahoo.co.uk](mailto:mahdishamad@yahoo.co.uk)

Chief Editor on Sudanese Journal of Dermatology

**Sudanese Journal of Dermatology** 2006; 4 (1): 49-50 (1 ref.)

**Keywords:** Journalism, Medical; World Health Organization; Publishing; Congresses

### Standards

#### **Saudi medical journal. maintaining the previous, achieving more progress.**

Al Deeb, Saleh M.

**Saudi Medical Journal** 2006; 27 (1): 5

**Keywords:** Research-Standards; Journalism, Medical; Peer Review, Research; Publishing; Editorial Policies

## Pest Control, Biological

#### **The biological effect of sepedon [diptera : sciomyzidae] fly larvae living on lymnea snails.**

Motamedi, Gh.R.; Dalimi Asl, A.H.; Akhavi-zadegan, M.A.; Pilehchian Langroodi, R.; Abdigoudarzi, M.; Mohammadi, M.

[G.Motamedi@RVSR.com](mailto:G.Motamedi@RVSR.com)

Razi Vaccine and Serum Research Institute - Department of Parasitology

**Iranian Journal of Veterinary Research** 2006; 7 (1): 62-65 (13 ref.)

**Keywords:** Diptera; Lymnaea; Snails

**Abstract:** The present work was carried out to investigate first, the ecology of the Sepedon flies as well as species of

Lymnea snails and secondly, the biological effects of Sepedon fly larvae living on Lymnea. In this regard, the life cycle, death rate and compatibility of Lymnea species, as well as the life cycle of Sepedon flies in breeding cage and the activity of the new larvae in the same ecological condition were investigated. The results showed that Lymnea truncatula needs more sophisticated ecological and feeding conditions than other species of the snails, Lymnea stagnalis was found sensitive to temperature variation and this may lead to gradual or sudden death. Lymnea pregra and Lymnea palustris could well adapt with laboratory conditions. The killing effect [P0.001] of the third-stage larvae on snails [3 to 4 weeks] was more than the effect of first- and second-stages larvae. This effect was more in a container with 2 cm water depth than a container with 5 cm depth.

## Phlebotomus

### **Ecology, Biology and susceptibility of phlebotomus papatasi to leishmania experimental infection in Suez Governorate.**

El Naggar, Mostafa H.; Shoukry, Nahla M.; Saliman, Belal A.; Darwish, Ahmed B.; El Sawaf, Bahira M.  
Suez Canal University, Egypt - Faculty of Science - Department of Zoology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 127-138 (34 ref.)

**Keywords:** Psychodidae; Ecology; Seasons; Feeding Behavior; Leishmania major; Cricetinae; Mice

**Abstract:** Zoonotic cutaneous leishmaniasis [ZCL] is endemic in Sinai Peninsula. The sand fly and reservoirs were investigated in Suez G., since new settlements and land reclamation programs are ongoing. The results showed that Phlebotomus papatasi reached its highest density in September. The successfully colonized P. papatasi facilitated its biology and competence study. An autogenous trait was proven within P. papatasi population indicating its ability to survive and breed during adverse conditions. The vector competence was carried out under laboratory condition through feeding on lesion of a L. major experimentally infected hamster and by membrane feeding technique. Both hamsters and BALB-c mice inoculated with L. major developed ZCL lesions.

## Platelet Aggregation Inhibitors

### **adverse effects**

#### **Oral anti platelet drugs in dermatology.**

Al Aboud, Khalid; Broshtilova, Valentina; Al Hawsawi, Khalid; Al Aboud, Ahmad A.L.

[amoa65@hotmail.com](mailto:amoa65@hotmail.com)

Bakhsh Hospital - Dermatology Department

**Sudanese Journal of Dermatology** 2006; 4 (1): 28-34 (38 ref.)

**Keywords:** Fibrinolytic Agents-adverse effects; Dipyridamole-adverse effects; Pentoxifylline-adverse effects; Pentoxifylline-pharmacology; Ticlopidine-pharmacology; Ticlopidine-adverse effects; Aspirin-pharmacology; Dipyridamole-pharmacology; Aspirin-adverse effects

**Abstract:** An up-to-date overview of antithrombotic drugs, with their currently reported beneficial cutaneous effects and skin side effect, is presented. Attempts to balance traditional pharmacodynamic concepts with the newly described empiric benefits are made. A concise, current and useful reference for dermatologists with an interest in dermatopharmacology and the practicing physician in the field of wound care, vasculitides and skin involvement of internal diseases is tried to be achieved.

## Pneumocystis carinii

### **Ultrastructure**

#### **Ultrastructural studies of Pneumocystis carinii jiroveci.**

Wazir, Javed F.

**Saudi Medical Journal** 2006; 27 (2): 266-267 (7 ref.)

**Keywords:** Pneumocystis carinii-Physiology; Pneumocystis Infections

## Primary Health Care

### **Standards**

#### **Quality gap of primary health care services at Kashan District Health Centers, Iran.**

Kebriaei, A.; Akbari, F.

Zahedan University of Medical Sciences - School of Health - Department of Public Health

**Journal of Medical Sciences** 2006; 6 (3): 393-399 (42 ref.)

**Keywords:** Health Services; Quality of Health Care; Cross-Sectional Studies; Data Collection; Questionnaires; Perception

**Abstract:** This study aims to identify quality gap by assessing users' perceptions and expectations of primary health care quality at Kashan district health centers in Iran. This cross sectional study was carried out during the first three months of 2002. A total of 324 regular female users of primary health care services at Kashan district health centers have been approached. Random sampling of the households covered by each health center was undertaken. The

survey instrument was designed around the validated SERVQUAL instrument. Service quality gap was measured by computing the difference between the rating respondents assign to expectations and perceptions statements. Internal consistency of different items of expectations and perceptions were 0.80 and 0.85, respectively using Cronbach's alpha coefficient. The Wilcoxon signed rank test to compare the distributions of the expectations and perceptions. Results show that there were mean differences between clients' expectations and perceptions in all dimensions of service. The largest and smallest mean quality gaps were in the responsiveness and tangibility dimensions, respectively. There were significant differences between clients' expectations and perceptions. The clients' choices clearly show that responsiveness, reliability and assurance are the three most critical dimensions of health care services, respectively. Negative quality gap in all dimensions indicate that there is room for service quality improvement in all five dimensions. These findings suggest that primary health care managers should be looking carefully at each of the dimensions where customers perceive that they are receiving a different service than expected and consider the extent to which they should work on influencing expectations or perceptions, or both.

## Proteus mirabilis

### growth and development

#### **Growth, swarming and production of halo-zone of different proteus mirabilis strains isolated from Jordanian clinical specimens.**

Akel, Hazem; Hunaity, Afnan

Hashemite University - Faculty of Allied Health Sciences - Department of Medical Laboratory Sciences

**Journal of Medical Sciences** 2006; 6 (3): 405-409 (11 ref.)

**Keywords:** Proteus mirabilis-isolation and purification; Proteus mirabilis-cytology; Bacteria

**Abstract:** The growth, swarming and production of halo-zone by six different strains of *P. mirabilis* were examined on different selective media. Inability of strains to grow on different selective medium commonly showed at 25°C. The swarming did not observe on Baired-Parker stable base agar and cetrinide agar medium at both used temperatures [25 and 37°C]; whereas no swarming observed on desoxycholate citrate lactose agar medium at 25°C and on violet red bile agar medium at 37°C. Both strains [PM4 and PM5] were able to produce hydrogen sulfide [H. S] at both used temperatures; in contrast, the other two strains [PM2 and PM3] were H. S negative. But PM1 and PM6 were H. S positive at 37°C and negative at 25°C. Several compounds inhibit the motility of swarmer cells by disturbing the structural integrity, the activity of flagella or by blocking their ability to move. Those compounds may also inhibit swarming but without affecting growth.

## Puberty

#### **Knowledge and educational needs of fifth grade teachers and health educators about girls' puberty in Isfahan city in 2004.**

Mazaheri, M. Amidi; Ghofranipoor, F.; Anoosheh, M.

**Journal of Hygiene and Health** 2006; 2 (1): 40-45 (18 ref.)

**Keywords:** Health Education; Sex Education; Cross-Sectional Studies; Questionnaires; Data Collection; Health Knowledge, Attitudes, Practice

## Pulmonary Surfactant-Associated Protein B

### Deficiency

#### **Surfactant protein B deficiency: a rare cause of respiratory failure in a Lebanese newborn.**

Ferzli, George; Yunis, Khalid A; Mroueh, Salman

American University of Beirut - Department of Pediatrics

**Annals of Saudi Medicine** 2006; 26 (1): 69-70 (6 ref.)

**Keywords:** Respiratory Distress Syndrome, Newborn; Respiratory Insufficiency-Congenital; Pulmonary Surfactants

## Pyelonephritis

#### **Abattoir survey of bovine pyelonephritis.**

Karimi, I.; Shagholian, M.; Ebrahimi, A.; Mahzounieh, M.R.

[irkarimi@yahoo.com](mailto:irkarimi@yahoo.com)

University of Shahrekord - School of Veterinary Medicine - Department of Pathobiology

**Iranian Journal of Veterinary Research** 2006; 7 (1): 59-61 (10 ref.)

**Keywords:** Cattle; Abattoirs; Cattle Diseases; Data Collection

**Abstract:** In order to investigate the prevalence and detection of etiological agents of pyelonephritis in Shahrekord abattoir, 404 kidneys of slaughtered cattle [207 female and 197 male] were inspected. Kidney samples, which had gross changes were obtained for histological examination. Urine and renal tissue samples were also collected aseptically for microbiological examination. In histological examination pyelonephritis were observed in 3 cases [0.74%], one of which occurred in a 7-year-old cow and the others in bulls less than 2-year-old. In microbiological examination *E. coli* was isolated from urine and renal tissues in 2 cases and *Staphylococcus aureus* isolated only from



renal tissue in the other case.

## Quality of Life

### **Health related quality of life among Egyptian patients on hemodialysis.**

Assal, Heba Sayed; Emam, Hanaa M.; Abdel Ghaffar, Nagwa  
National Research Center - Department of Internal Medicine

**Journal of Medical Sciences** 2006; 6 (3): 314-320 (35 ref.)

**Keywords:** Kidney Failure, Chronic; Data Collection; Questionnaires; Renal Dialysis; Hemodialysis Units, Hospital

**Abstract:** The present research was carried out to evaluate the physical [PCS] and mental [MCS] component summary scales in hemodialysis patients as compared to healthy subjects at a baseline and two years later. 130 patients on hemodialysis [mean age 40.6+/- 8.1 years] were enrolled in the study between February 2003 to February 2005. The short-form with 36 [SF-36] questionnaire was given every 6 months to hemodialysis patients. Results were compared to the general population and changes in QoL over time were determined. Mean PCS was 34 +/- 15.46 and mean MCS was 38.80 +/- 15.17 compared to the general population there were significant decline in PCS and MCS at baseline and two years later. There was no significant correlation between causes of End-Stage Renal Disease [ESRD] and Quality of Life [QoL], except for diabetes mellitus as regard MCS. High levels of serum albumin and hemoglobin was associated with highly significant quality of life. Serum albumin was a good predictor for quality of life in this study. Adequacy of dialysis treatment in hemodialysis patients was determined by serum albumin, hematocrit, KT/V and Urea Reduction Ratio [URR]. Present results showed the negative impact that ESRD and hemodialysis treatment have on self-assessed physical and mental health and it is important to treat all factors that induce hypoalbuminemia as well as anaemia.

### **Validity and reliability of the Turkish version of the ferrans and powers quality of life index diabetes version.**

Ozer, Zeynep C.; Efe, Emine

**Saudi Medical Journal** 2006; 27 (1): 123-125 (5 ref.)

**Keywords:** Neoplasms-Psychology; Translations; Questionnaires; Evaluation Studies; Diabetes Mellitus-Psychology

## Receptors, Adrenergic, alpha-1

### **Involvement of alpha1-adrenoceptors subtypes in the cardiac failure in spontaneously hypertensive rats.**

Abbas, S.A.; Munavvar, A.S.; Abdullah, N.A.; Johns, E.J.

International Islamic University - Faculty of Pharmacy

**Journal of Basic and Applied Sciences** 2006; 2 (2): 59-69 (17 ref.)

**Keywords:** Hypertension; Heart Failure, Congestive; Renal Circulation; Rats; Norepinephrine; Phenylephrine; Methoxamine

**Abstract:** The function of kidney deteriorates during the development of cardiac failure because of changes in renal haemodynamics and neurohormonal activity. This study aimed to examine the alpha1 adrenoceptor subtypes involved in mediating adrenergically induced renal vasoconstriction in a rat model of cardiac failure and hypertension. Spontaneously hypertensive rats [SHR] were used in the study. Cardiac failure was induced by the combined treatment of caffeine [40mg/kg] and isoprenaline [5mg/kg] for seven days. On day eight, the rats were used for acute study. The left kidney was exposed and renal blood flow [RBF] was measured with the help of electromagnetic probe. The reduction in renal blood flow induced by electrical renal nerve stimulation, intrarenal bolus doses of noradrenaline, phenylephrine or methoxamine were determined before and after administration of amlodipine, 5-methylurapidil, chloroethylclonidine and BMY 7378. Data, means +/- s.e.m were compared with 2 way ANOVA followed by Bonferroni post hoc with the significance level of 5%. The results obtained indicated that the renal vasoconstrictor responses in this model were attenuated mainly by amlodipine, 5 methylurapidil and BMY7378 but not by chloroethylclonidine. Furthermore, administration of chloroethylclonidine did not show a significant reduction in methoxamine induced renal vasoconstriction in cardiac failure SHR. This supported the view that alpha. A- adrenoceptors are involved in renal vasculature SHR regardless of its pathophysiological state. The findings from this study further suggested that besides the alpha. A, the alpha. D- adrenoceptors contribute to the adrenergically induced renal vasoconstrictor responses in cardiac failure SHR.

## Reproduction

### **drug effects**

### **Comparative activities of chloroquine mefloquine and sulphadoxine-pyrimethamine on in vivo and ex vivo male reproductive functions in mammalian models.**

Raji, Y.; Osonuga, O.A.; Olaleye, S.B.; Adedokun, K.I.; Akinsomisoye, O.S.; Mewoyeka, O.O.

University of Ibadan - College of Medicine - Department of Physiology

**Journal of Medical Sciences** 2006; 6 (3): 410-415 (25 ref.)

**Keywords:** Chloroquine-adverse effects; Mefloquine-adverse effects; Sulfadoxine-adverse effects; Pyrimethamine-adverse effects; Rats, Wistar

**Abstract:** Comparative reproductive activities of chloroquine, mefloquine and sulphadoxine-pyrimethamine were explored in albino Wistar rats and semen from West African Dwarf Buck [WADB] with a view to elucidating the mechanism of action of these drugs on malereproduction. Five adult male rats were administered 0.5 mL distilled water and served as the control. Five rats each were administered orally chloroquine [10 mg kg<sup>-1</sup> b.w.], mefloquine [10 mg kg<sup>-1</sup> b.w.] and sulphadoxine-pyrimethamine [5 mg kg<sup>-1</sup> b.w.] orally, for four weeks. Each group had its own recovery group. Sperm counts, motility and morphology were reduced in rats treated with these drugs in the order mefloquine [p0.05] chloroquine sulphadoxine-pyrimethamine. There was an appreciable recovery in the motility of sperms in all recovery groups. Semen samples from WADB were extended separately with chloroquine, mefloquine and sulphadoxine-pyrimethamine. Extender 1 [first control] had no PENSTRIP [Penicillin and Streptomycin combination] while extender 2 [standard extender; second control] had PENSTRIP. Semen in extenders 3, 4 and 5 were treated with chloroquine, mefloquine and sulphadoxine-pyrimethamine, respectively. Spermatozoa progressive motility in these extenders examined under the microscope at 24 h for 5 days significantly reduced in mefloquine [p0.01], slightly with chloroquine and unchanged with sulphadoxine-pyrimethamine. The pH of the extenders was significantly reduced in duration dependent manner in mefloquine while it remained unchanged with chloroquine and sulphadoxine-pyrimethamine. The results suggest the safety of sulphadoxine-pyrimethamine and chloroquine in preservation of semen ex vivo while the negative impact of mefloquine could reside within the testis or epididymis.

## Research Design

### Case Only - design in healthcare research. Reply from the Author.

Dastgiri, Saeed; Arabi, Yaseen

Tabriz University of Medical Sciences - School of Nutrition and Public Health - Department of Epidemiology and Public Health

**Saudi Medical Journal** 2006; 27 (2): 283-285 (49 ref.)

**Keywords:** Health Services Research; Ethics, Medical

### Study designs in healthcare research.

Affi, Mustafa

**Saudi Medical Journal** 2006; 27 (2): 283

**Keywords:** Health Services Research; Ethics, Medical

## Rheumatic Fever

### genetics

#### Genetic analysis of rheumatic fever among Egyptian families : consanguinity pattern, segregation analysis and blood group association.

Settin, Ahmad A.; Al Haggar, Mohammad S.; El Masrafawy, Hala; Abd Alkader, Amal; El Baz, Rizk A.; Mansor, Ahmad K.; Al Kasem, Rabab A.; Alam, Eman

Mansoura University - Children's Hospital - Department of Genetics

**Journal of Medical Sciences** 2006; 6 (3): 359-366 (59 ref.)

**Keywords:** ABO Blood-Group System; Consanguinity; Phenotype; Cytogenetic Analysis

**Abstract:** To assess genetic background of Rheumatic Fever [RF] among Egyptian families and to test for association to blood group allelic phenotypes. This study was done on 30 Egyptian rheumatic families of which 10 were multiplex; enrolled from Pediatric Cardiology Clinic, Mansoura University Hospital. Subjects included 30 probands and 1142 relatives of different degrees; they were classified clinically into 46 cases with RF, 136 subjects with recurrent Upper Respiratory Infection [URTI] and/or arthralgia and the remainders were irrelevant. Diagnosis of RF was based on Jones criteria. Pedigree analysis with stress on consanguinity, positive family history of RF and definite recurrent URTI. Nine blood group systems were analyzed for probands including; ABO, Rh, MNS, Kell, Lutheran, Lewis, Kidd, Duffy, P1 and individual secretor status. In rheumatic families consanguinity and inbreeding were higher than control [53.3%, 0.015]. Segregation analysis suggested multifactorial inheritance for RF with mean heritability [30%] whereas recurrent URTI followed recessive inheritance. Some alleles and phenotypes were of higher incidence in probands compared to control; alleles se [non-secretor], D, Jka+ and phenotypes Lu [a-b-], Le [a-b-] and Fy [a-b-] were of higher frequency, whereas alleles Se [secretor], A, B, Kp a+, Lu b+, Le b+, Fy a+, Fy b+ and phenotypes Fy [a+ b+], Sese or SeSe [secretor] were less frequent. Based on the inherited susceptibility to respiratory infection, RF is a genetic disease with multifactorial inheritance. Blood group systems on chromosome 19 could mark hot spots for further linkage and gene mapping.

## Rodent Diseases

### Parasitology

#### Studies on rodents role as reservoir hosts of leishmaniasis with special reference to their ectoparasites in Suez governorate.

Shoukry, Nahla M.; El Nagggar, Mostafa H.; Darwish, Ahmed B.; Soliman, Belal A.; El Sawaf, Bahira M.

Suez Canal University - Faculty of Education - Department of Biology and Geology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 93-106 (40 ref.)

**Keywords:** Disease Reservoirs; Leishmaniasis; Seasons; Ectoparasitic Infestations; Leishmania major; Ecology

**Abstract:** The distribution of rodents was studied in three different habitats. Seven rodent species were identified: *Rattus norvegicus*, *R. alexandrinus*, *R. frugivorus*, *Mus musculus*, *Acoins russatus*, *Meriones sacramenti* and *Gerbillus pyramidum*. The species distribution varied with the habitat type. The highest density of rodents was in July and August and the lowest one was in January. However, some species were collected all the year round. The rodents were investigated for the endo- and ecto-parasites. No *Leishmania* parasites were found. The ectoparasites were: *Xenopsylla vita cheopis*, *Leptopsylla segnis* and *Ctenocephalides felis*, *Polyplax spinulos*, *Hyalomma dromedarii* [nymph] and *Echinolaelaps echidninus* and *Hemolaelaps glassgowi*. Ecto-parasites were on rodents all year-round in domestic habitat and peridomestic habitats. In wild one, ecto-parasites activity was from March to December. The rodents' role as reservoir for *L. major* was experimentally studied. Rodents inoculated with *L. major* together with hamster and BALB-c mice developed cutaneous lesions. The active lesions, the rodents' ecological habitats and the presence of insect-vector may pave the way to an epidemic zoonotic leishmaniasis role.

Saliva

## Chemistry

### Salivary gland composition of some old world vector sand fly.

Wahba, Mahmoud; Riera, Cristina

[wahba95@hotmail.com](mailto:wahba95@hotmail.com)

El-Arish, Suez Canal University, Egypt - Faculty of Education - Department of Biology and Geology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 289-296 (16 ref.)

**Keywords:** Psychodidae; Proteins; Electrophoresis, Polyacrylamide Gel; Species Specificity

**Abstract:** The saliva of blood feeding arthropods has a variety of substances that are responsible for blood meal success. The composition and the influence of sand fly saliva vary considerably between species and even between populations of different geographical origin. In Old-World sand flies [*Phlebotomus* sp.] differences in protein components of the salivary gland homogenate were demonstrated between species and between colonies of the same species. We compared protein components in the salivary glands of sand flies vectors from different species and origins. The salivary gland homogenate [SGH] of laboratory reared Egyptian phlebotomine sand flies, *P. papatasi*, *P. sergenti* and *P. langeroni* Sinai and El-Agamy strains respectively were compared with Spanish naturally caught *P. perniciosus* and *P. ariasi*, which were collected from a farm 20 km southwest of Barcelona. Polyacrylamide gel electrophoresis [PAGE] [SDS-PAGE] was done for compare-son. The electrophoresis profiles of SGH differed between all tested species. From 8-14 prominent proteins bands with molecular masses ranging from 8-70 kDa were visualized by Commassie blue gel code staining in each SGH. So, saliva composition varied between species and sub-species, and increased between different sub-genera and geographical areas. The data are important for the characterization of salivary proteins.

Schistosoma mansoni

## Immunology

### Application of adult worm and lung-stage antigens to immunize against schistosoma mansoni using cytokines as adjuvants.

Afifi, Mohammed A.; El Wakil, Hala S. I.; Abdel Ghaffar, Mohammed M.; Mohamed, Raafat T.

Beni-Suef Universities, Egypt - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 351-362 (26 ref.)

**Keywords:** Antigens, Helminth; Cytokines; Interleukin-4; Interferon Type II; Immunization; Mice; Vaccines

**Abstract:** Different *Schistosoma mansoni* antigens; adult worm antigen [SWAP] and lung-stage antigen [SLAP] together with different cytokine adjuvants [Interferon-gamma and Interleukin-4] were used to immunize mice against *S. mansoni*. Immunization program was directed towards the production of an intense immune response together with balanced T-helper1 and T-helper2 immune responses. The goal of immunization was not only to protect from infection but also to modulate the pathology inflicted by the parasite. Parameters like adult load, egg counts, anti-Schistosoma antibody titers and liver pathology were used to evaluate the different immunization scheme. SLAP antigen has proven to be a better antigen not only in protection but also in pathology modulation. SLAP plus IFN-gamma as an adjuvant was the best immunization regimen with almost 50% protection and a remarkable resolving of parasite pathology. Unexpectedly, IL-4 had a weak but observed adjuvant protective effect. The results is a step in the path for a *Schistosoma* vaccine that guides the immune system towards a balanced response targeting the pathology induced by the parasite rather than the parasite itself.

### Immunomodulation of pulmonary and hepatic granulomatous response in mice immunized with purified lung-stage schistosomulae antigen.

El Ahwany, Eman G.; Nosseir, Mona M.; Aly, Ibrahim R.

Theodor Bilharz Research Institute, Imbaba, Giza, Egypt - Department of Immunology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 335-350 (39 ref.)

**Keywords:** Immunization; Antigens, Helminth-Drug Effects; Granuloma; Lung; Liver; Immunoglobulin G; Immunoglobulin M; Antigens, CD4; Antigens, CD8; Mice-Vaccines

**Abstract:** The present objective was to investigate the possible effect of immunization protocol against *Schistosoma mansoni* infection using purified lung-stage schistosomulae antigen. Two experimental models [lung and liver] were used, each of 3 groups [Gs]: Immunized G. [10 mice] infected control G. [10 mice] and normal control G. [10 mice]. Hundred micro g of purified schistosomulae antigen followed by two booster doses each of 50 micro g antigen and at one week interval were injected intraperitoneally into Swiss albino mice three days prior to intravenous injection of 3000 viable *S. mansoni* eggs [lung model] or to exposure to 100 cercariae [hepatic model]. Mice were sacrificed 16 days post-injection [lung model] and 8 weeks post-infection [hepatic model]. Various parasitological parameters, histopathological assessments and immunological parameters were studied. The data revealed that immunization with purified lung-stage schistosomulae antigen induces protective effect against *S. mansoni* infection. The marked reduction in worm burden, egg load, granuloma diameter and collagen content were accompanied by increased percentage of degenerated ova and amelioration of the associated pathological changes in pulmonary and hepatic tissue. Increased levels of specific immunoglobulins particularly IgG and IgM and decreased ratio of T cell subsets [CD4+/CD8+] in granulomas of both models were also noticed.

### **INF-gamma, IL-5 and IGE profiles in chronic schistosomiasis mansoni Egyptian patients with or without hepatitis C infection.**

Makhlouf, Laila M.; Serwah, Abd El Hamid A.; Abdel Hamid, Alaa El Din S.; Hussein, Eman M.; Saad, Rania M. Suez Canal University, Ismailia, Egypt - Faculty of Medicine - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 177-196 (64 ref.)

**Keywords:** Chronic Disease; Hepatitis C, Chronic-Virology; Interferon Type II; Interleukin-5; Immunoglobulin E; Antibody Formation

**Abstract:** The immune response against clinical forms of chronic schistosomiasis mansoni patients with or without HCV infection was evaluated by assays the serum levels of IFN-gamma and IL-5 for estimate the cell mediated immunity and IgE level to estimate the humoral immunity. This study included three patient groups. G.I included 25 patients with intestinal schistosomiasis, G.II included 15 patients with hepatosplenic schistosomiasis and G.III included 40 patients hepatosplenic schistosomiasis co-infected with HCV. Control G.IV included 15 healthy persons with matched age and sex. The intestinal group had high IFN-gamma [92%], normal level of IL-5 and IgE. The immune response was mainly 100% Th-1 response. The hepatosplenic patients had high IFN-gamma [26.7%], IL-5 [86.7%] and IgE [73.3%]. The immune response was 73.4% Th-0, 13.3% Th-1 and 13.3% Th-2. The co-infected group had high IFN-gamma [62.7%], IL-5 [100%] and IgE [92.5%]. The immune response was 62.5% Th-0 and 37.5% Th-2 immunity. The shift to Th-0 and Th-2 immunity as well as associated depression of Th-1 in mixed group of patients may be playing a role in the persistence and severity of both diseases. Such immunity defects add to decrease challenge against HCV clearance.

## Schistosomiasis mansoni

### Drug Therapy

#### **Parasitological, hematological and ultrastructural study of the effect of Cox-2 inhibitor, pyocyanin pigment and praziquantel, on S. mansoni infected mice.**

Mohamed, Amara H.; Ezz El Din, Nashwa; Fahmy, Zeinab H.; El Shennawy, Amal M.; Hassan, Eman Cairo University, Giza, Egypt - Faculty of Veterinary Medicine - Department of Electron Microscopy (Haematology)

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 197-220 (48 ref.)

**Keywords:** Cyclooxygenase Inhibitors; Pseudomonas aeruginosa-Drug Effects; Praziquantel-Pharmacology; Parasitic Diseases, Animal; Mice; Drug Combinations; Microscopy, Electron; Leukocyte Count; Antigens, CD95

**Abstract:** The effect of cyclooxygenase-2 [COX-2] inhibitor, such [as meloxicam, and pyocyanin pigment of *Pseudomonas aeruginosa*] with and without praziquantel [PZQ] on worms, ova count, bone marrow and blood cells in 7 groups of *Schistosoma mansoni* infected mice was studied. The results revealed significant decrease of worm burden and ova count in all treated groups as compared to the infected untreated group, while those with combined treatment of PZQ and meloxicam or pyocyanin showed complete eradication of the worm with the highest reduction in the tissue egg load. EM showed extensive swelling and vesiculation of the tegument, completely implanted spines that overlie degenerated muscle layer were obvious in groups treated with either meloxicam or pyocyanin. Hematological study revealed significant increase [P 0.05] of total leucocytic count of PZQ treated group while that treated with either meloxicam or pyocyanin showed significant decrease [P 0.05], but in combination of PZQ with meloxicam or pyocyanin no significant difference as compared to the infected untreated group. The neutrophil was the main cell affected in groups treated with neither meloxicam nor pyocyanin alone with significant decrease [P 0.05], but with significant increase [P 0.05] in combination with PZQ as compared to the infected untreated group. Those treated with PZQ plus meloxicam showed significant increase as compared to that plus pyocyanin. Eosinophil count showed significant decrease [P 0.05] in all treated groups as compared to the infected untreated group. Inverse correlation between serum level of sFas and peripheral neutrophil count was detected. Ultrastructural study of the bone marrow explained the results as groups treated with meloxicam revealed dissociation between nuclear and cytoplasmic development in the neutrophils with cytoplasm maintaining primitive appearance despite maturation of the nucleus that is manifested by the persistent production of immature granules and the still orientation of Golgi cternae and the centriole around the nucleus. Groups treated with pyocyanin pigment revealed many abnormalities in neutrophils as hypogranularity or early apoptotic morphology changes as intense pen- nuclear chromatin aggregation or nucleus fragmentation .In peripheral

blood apoptotic morphology changes was detected in both groups treated with meloxicam or pyocyanin while most of cells of mice treated with PZQ were in an active state. Consequently, it is preferable to give meloxicam with PZQ for a short period of time [less side-effect] to eradicate *S. mansoni* worm completely but with continuous observation of the peripheral neutrophil count and function.

## Sciatic Nerve

### injuries

#### **Sciatic nerve injury due to buttock injection and the necessity of limited gluteal injection.**

Baghdadabadi, J. Afzaly; Hasanabadi, H.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 437-442 (24 ref.)

**Keywords:** Sciatic Neuropathy-prevention and control; Buttocks; Injections, Intramuscular-adverse effects; Sciatic Neuropathy-etiology; Electrophysiology

**Abstract:** The sciatic nerve injury due to buttock injection is a serious complication. This study is assessment of sciatic nerve injury after gluteal injection and results of measures taken by government and medical centers for prevention in Mashhad. This is a descriptive study in electrodiagnostic center of imarn Reza Hospital and hassan Abady clinic. During 72 months [1999.3.21-2005.3.21], which was divided into four stages [18 months x4], there were 83 injection-induced sciatic nerve injuries. Diagnostic tests were E.M.G and N.C.V. Data was analyzed by chi and T tests and utilizing SPSS software. The most common medicines for injection were unknown for patient [40%] Diclofenac and Piroxicam [38%] and 33.5% of patients were below 5 years old. 56.5% in left side and 62.5% in males. The damage 'was severe in 53% and in 60% proneal branch was affected. The number of patients from first to 4th stage was: 30-25-16-12. Significant decrease of damage for all ages specially in children under 5 years old was seen. The continuation of instruction by government and prevention of gluteal injection in children less than 5 years is necessary.

## Scoliosis

### Surgery

#### **Single-rod technique for the treatment of scoliosis - 5 years experience.**

El Sayed, Ahmed Hassan; Abdel Kader, Mostafa Saad; El Khadrawy, Tarek Aly

Alexandria University - Faculty of Medicine - Orthopaedic Surgery

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 69-74 (9 ref.)

**Keywords:** Spine-Abnormalities; Orthopedics; Follow-Up Studies; Treatment Outcome; Magnetic Resonance Imaging

**Abstract:** Scoliosis is a complex 3-dimensional and segmental deformity of the spine. Surgical treatment is indicated mainly for a growing child with increasing curve or in an already present severe deformity. Multi-segmental 3 dimensional correction gave better correction and fixation than the older systems. But it increased significantly the cost and difficulty of the procedure. Objective: To assess the results of using multisegmental fixation with a single rod for the treatment of scoliotic deformities. Subjects: There were 120 patients treated in this study by single rod technique for scoliosis of different aetiologies. There were 120 patients [Age: 5 to 18 years] treated by the single rod technique. The angle of the preoperative curve ranged from 45° to 110° with a mean of 61.4°. The curve flexibility ranged from 21% to 78% with a mean of 47.8%. The postoperative correction ranged from 47.4% to 85.7% with a mean correction of 64.7%, which was maintained until the final follow up [10-60 months, average = 42.6] without implant failure or pseudarthrosis. The use of a single rod for multisegmentalfixation for scoliotic deformities reduced the operative time, blood loss and cost. The implant was less bulky with increased surface area available for grafting which gives better fusion mass. The correction obtained was comparable with double rod technique.

## Sex Differentiation

#### **Sex differentiation in goat fetus.**

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**Iranian Journal of Veterinary Research** 2006; 7 (2): 65-69 (16 ref.)

**Keywords:** Sheep; Fetus

**Abstract:** Reproduction in domestic animals, as a major source of food and other products for human, has great importance and study of related subjects including sex differentiation and gonadogenesis during fetal life can solve many questions on normal development and various disorders of urogenital system. Since studies on sex differentiation in goat fetus are scarce, this study was performed. Twenty-five goat fetuses with 5-40 mm crown-rump lengths [CRL] were obtained from slaughter-house and fixed in 10% formalin solution immediately. The development and features of external genitalia of these fetuses as well as their sex differentiation were then examined. In externally indifferentiated fetuses, the cranial half of the body was cut away at the diaphragmatic level and serial sections, 6-micron thick, were prepared and the ovarian and testicular differentiation was studied. Results showed that considering the development of the external genitalia, external sex differentiation occurs at 31 mm CRL in male fetuses and at 33 mm CRL in female fetuses. Microscopic studies suggested that testicular tissue differentiation occurs at 23 mm CRL with formation of tunica albuginea and medullary cords. Ovarian tissue differentiation occurs at 38 mm CRL with

establishment of cortical and medullary regions.

## Sheep

### Study on the frequency of pregnant ewes slaughtered in Khorram Abad abattoir, Iran.

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**Iranian Journal of Veterinary Research** 2006; 7 (1): 55-58 (18 ref.)

**Keywords:** Pregnancy; Abattoirs; Incidence; Data Collection

**Abstract:** The aim of this survey was to evaluate the frequency of pregnant ewes slaughtered in Khorram Abad abattoir and estimation of their gestational age. Over a period of five months in fall and winter, a total number of 3046 uterine tracts were collected. Pregnancy was detected in 56.50% of ewes, 52.36% and 4.13% of which carried singleton and twins, respectively. The highest frequency of pregnancy was detected in January [65.63%] and the lowest frequency was detected in March [35.02%]. Among a total number of 1721 pregnant ewes, the most frequency of gestational age [34.68%] was recorded to be between 2 and 3 months of gestation, while 5.05% was detected to be above 121 days. Overall, the number of pregnant ewes with a gestational age over two months was considerable [59.83%]. It was concluded that reproductive waste resulting from slaughtering of pregnant animals is important in ewes in Khorram Abad and could be prevented by an improved antemortem examination.

## Shoulder

### pathology

### Prevalence of shoulder postural impairments in 10-12 years old primary students of Zahedan.

Akbari, Asghar; Gannad, Razieh

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**Journal of Medical Sciences** 2006; 6 (3): 332-337 (31 ref.)

**Keywords:** Shoulder Pain; Prevalence; Posture; Cross-Sectional Studies; Students; Weight Lifting-physiology

**Abstract:** The purpose of this study was to determine the prevalence of shoulder postural impairments in 10-12 years old primary school students of Zahedan in 2005. One hundred-fifty three students participated in this descriptive study through multi-stage clustering sampling. The Level of shoulders [cm] and the rounded shoulders [cm] were measured using checkered board and board with red line in its center, respectively. Scapular symmetry [cm] was measured using Kibler test. The level of dominant shoulder was higher than non-dominant shoulder in 89.7% of right-handed students. Scapular asymmetry was not seen in zero [p = 0.42] and 90 [p = 0.3] degrees of shoulder abduction in dominant shoulders of the right handed students. Rounded shoulders were seen in 56.2% of students. Although, rounded shoulders was more common in 10 years old [in 61.6%] [p = 0.002]. Shoulder depression was seen in 61.3% of students that carrying shoulder bag [p = 0.028]. Present results showed that long term settling in abnormal posture with regard to flexibility of musculoskeletal system resulted in rounded shoulders. Also, carrying shoulder bag can lead to shoulder depression. The results support the effectiveness of proper postural and writing training for preventing shoulder postural impairments.

## Skin Diseases

### Epidemiology

### Prevalence and pattern of skin disorders among female school children in Eastern Saudi Arabia.

Al Saeed, Wafa Y.; Al Dawood, Kasim M.; Bukhari, Iqbal A.; Bahnassy, Ahmed A.

King Faisal University - College of Medicine - Department of Family of Community Medicine

**Saudi Medical Journal** 2006; 27 (2): 227-234 (53 ref.)

**Keywords:** Skin Diseases-Diagnosis; Prevalence; Cross-Sectional Studies; Randomized Controlled Trials; Child; Schools

**Abstract:** To determine the prevalence and pattern of skin disorders among female schoolchildren in primary and intermediate schools in Al-Khobar city, Eastern Saudi Arabia. This is a cross-sectional study conducted in Al-Khobar city, Kingdom of Saudi Arabia during the period from January-March 2003. It involved 2239 female schoolchildren randomly selected from 30 regular public and private primary and preparatory schools. We used a multi-stage stratified random sampling technique with proportional allocation. We collected data using a pre-designed structured questionnaire and clinical examination. The prevalence of skin diseases among female schoolchildren in Al-Khobar city was 98.6%. The most common skin disease and conditions group was the pigmentary disorders [91.6%], followed by a group of dermatitis/eczema and related conditions [26.7%], and disorders of skin appendages [25.3%]. The common skin diseases and conditions in this study were melanocytic nevi [MN] [68%], post-inflammatory pigmentation [56.6%], scars [26.8%], acne [22.5%], dandruff [18.1%], pediculosis capitis [5.2%] and eczema [3.1%]. Postinflammatory hyper/hypo pigmentation was more common among primary schoolchildren, whereas MN, dandruff, keratosis pilaris, acne and folliculitis were significantly more common among preparatory schoolchildren. The prevalence of skin

disorders among female schoolchildren in Al-Khobar city was very high. Therefore, we recommended the introduction of a preventive health education program for schoolchildren at different levels and their families and teachers on skin diseases.

## Sleep

### **Prevalence of sleep problems and habits in a sample of Saudi primary school children.**

BaHammam, Ahmed; AlFaris, Eiad; Shaikh, Shaffi; BinSaeed, Abdulaziz

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King Saud University - College of Medicine, Sleep Disorders Center

**Annals of Saudi Medicine** 2006; 26 (1): 7-13 (33 ref.)

**Keywords:** Sleep Disorders-Epidemiology; Social Class; Cross-Sectional Studies; Questionnaires; Prevalence; Habits; Schools; Child

## Snails

### **Radiation Effects**

#### **Influence of photon beam irradiation on lymnaea natalensis snails infected with fasciola gigantica.**

Said, Doaa E.; Rostom, Yousry A.

Alexandria University, Alexandria, Egypt - Faculty of Medicine - Departments of Parasitology and Oncology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 315-327 (36 ref.)

**Keywords:** Lymnaea; Infection; Fasciola; Survival Rate; Life Expectancy; Larva-Growth and Development; Fascioliasis

**Abstract:** Lymnaea natalensis is the intermediate host of Fasciola gigantica in Egypt. The effect of photon beam irradiation on the ability of the laboratory reared L. natalensis to support the larval development of F. gigantica has been studied. 120 snails were divided into two groups: The control infected non irradiated group [GI] and the experimental infected irradiated group [GII]. The later group was subdivided into two subgroups: GIIa: snails irradiated before infection and GIIb: snails irradiated after infection. Photon beam irradiation had non significant effect on the survival rate between the all groups at the 30th day post infection. The life span, the number of infected snails and the length of the shedding period were significantly decreased in the two irradiated subgroups than the control group. The effect was more obvious on GIIb without significant difference. The number of metacercariae significantly decreased in the 2 irradiated subgroups than the control one. Also, it was significantly decreased in GIIb when compared with GIIa. So, photon beam irradiation has a great role on retarding larval development of F. gigantica inside the snail. This opens the way to a new strategy for fascioliasis control of in Egypt.

## Spermatozoa

### **Competition of zinc, cadmium and calcium for binding sites in sperm of the trout and carp.**

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University of Qom - Green Research Center

**Iranian Journal of Veterinary Research** 2006; 7 (2): 70-76 (36 ref.)

**Keywords:** Carps; Trout; Zinc; Cadmium; Calcium; Water Pollution

**Abstract:** Heavy metal pollutions of aquatic ecosystems have already raised many concerns on aquatic organisms' health and survival especially on their sperm. The effects of a single metal on sperm may be totally different from cocktail of several metals because of their interactions, so the effects of zinc, cadmium and calcium on the trout and carp sperms and their competition have been examined by incubation of different concentrations of cold heavy metals with a radioactive competing metal. The results showed that radioactive  $^{65}\text{Zn}$  and  $^{109}\text{Cd}$  were not displaced from the trout sperm by calcium even at 3000 ppm concentration but radioactive cadmium was displaced equally well by cadmium or zinc, with a decrease in pellet activity to 38 and 37% of control values [0 ppm concentration] at 3000 ppm concentration, respectively in trout. Calcium was replaced by non-radioactive and radioactive zinc and cadmium as well as by calcium. The findings confirmed that at least part of heavy metals toxicity [especially cadmium] on fish sperm could be due to displacement of essential zinc and calcium. Both trout and carp sperms showed a similar pattern.

## Spinal Fusion

### **Methods**

#### **Posterior C1-C2 plating: A novel technique for posterior C1-C2 fusion Preliminary results.**

El Saghir, Hesham

El-Hadra University Hospital, Alexandria; Egypt

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 65-68 (9 ref.)

**Keywords:** Bone Plates; Cervical Vertebrae; Bone Screws; Joint Instability; Atlanto-Axial Joint-Surgery; Follow-Up Studies; Treatment Outcome

**Abstract:** Posterior transarticular C1-C2 screw fixation is the most popular technique for instrumented atlantoaxial fusion. The construct is usually augmented by a sort of sublaminar C1-C2 wire fixation. In spite of this augmentation, construct failure with pseudarthrosis still can be encountered and presents a real challenge. To introduce a new technique for C1-C2 fusion in which a special plate is used for fixing the arch of C1 to the lateral mass of C2. The transarticular screw fixation is done through the caudal hole in the plate. The author designed a plate [Lotus Cervical Plate, LCP] for posterior C1-C2 fixation [Intraplant Company, Germany]. The proximal end of the plate is U-shaped. Fixation to the atlas is achieved by contouring the u-shaped end of the plate to seize the arch of C1. A locking mini-screw is inserted in the arch of C1. The transarticular C1-C2 screw fixation is done through the distal hole of the plate. The plate was applied in 10 patients with atlantodental instability due to rheumatoid arthritis. Two of them were revision cases and presented with pseudarthrosis and metal failure after attempted transarticular fixation [Magerl technique] augmented with sublaminar fixation. Two plates of suitable lengths were used for the C1-C2 fixation. A corticocancellous bone graft was fixed between the decorticated posterior arch of C1 and the lamina of C2. The period of follow up ranged between 12 months and 20 months [mean: 15.20 months, sd.2.49] The technique was safe. Fusion was evident 3 months after the operation. Apart from remodelling of the graft, no metal failure occurred. From the biomechanical point of view C1-C2 plating is stiffer than transarticular C1-C2 fixation even when the latter is augmented by sublaminar fixation. The introduced technique can supplant the traditional augmentation of Magerl technique using wire or cable particularly in severe C1-C2 instabilities.

## Splenic Rupture

### Etiology

#### Rupture of spleen in a mechanically ventilated patient with falciparum malaria admitted with pulmonary edema.

Ibrahim, Wanis H.; Kamha, Ahmed; Ghabdan, Wisam; Alkhal, Abdulatif  
Hamad General Hospital

**Saudi Medical Journal** 2006; 27 (1): 98-100 (12 ref.)

**Keywords:** Splenic Diseases-Etiology; Plasmodium malariae; Malaria-Complications; Respiratory Insufficiency; Positive-Pressure Respiration; Pulmonary Edema-Complications; Malaria, Falciparum

**Abstract:** Rupture of the spleen in malaria may constitute a diagnostic challenge to many clinicians particularly in non-endemic areas where experience with malaria is limited. Our aim is to increase the awareness among clinicians from non-endemic areas of serious malarial complications. We present a young American military man who was admitted to Hamad General Hospital and had 2 serious malarial complications, namely, acute pulmonary edema and rupture of the spleen. He was unusual compared with what was published previously in 4 main points: 1. The rupture of spleen occurred while the patient on mechanical ventilation and under the effect of sedation, which constituted a diagnostic challenge. 2. The 2 complications occurred in a patient with a low parasitemia. 3. The causative species for splenic rupture is Plasmodium falciparum, and 4. The first sample of peripheral blood smear for malarial parasite was negative. We treated him successfully and discharged home in a good condition.

## Stapes Surgery

#### Usage of homograft bone in stapedectomy KHMC experience.

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**Jordan Medical Journal** 2006; 40 (1): 29-34 (26 ref.)

**Keywords:** Otologic Surgical Procedures; Transplantation, Homologous; Bone Transplantation

**Abstract:** The objective of this study is to show the efficacy, safety and feasibility of Twenty subjects [12 males, 8 females] with a mean age of 32.6 years [age range 15-47 years] presented with unilateral 3 [15%] or bilateral 17 [85%] conductive hearing losses and were diagnosed as having otosclerosis. Stapedectomy was performed on each. In each case a homograft bone, prepared and sculptured at the Hough Ear Institute in Oklahoma, USA by the author, was then used as a prosthetic device to replace the diseased ossicle after its removal. The donated homograft bone proved to be safe with no transmission of disease: long lasting without infection, rejection, or resorption; and a good transmitter of sound with good closure of the air-bone gap. Of the 20 cases, 11 had complete closure of the air-bone gap [55%], 7 had closure air bone gap within 10 dB [35%] and 2 showed no improvement [10%]. Homograft human bone is the most logical choice for ossicular reconstruction because it is the closest transplantation material to the host histologically. Current fixatives and storage materials remove the immunogenicity and so do away with the host versus graft reaction.

## Statistics

#### Misconceptions in statistics.

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King Faisal Hospital - Dermatology Department

**Sudanese Journal of Dermatology** 2006; 4 (1): 1 (1 ref.)

**Keywords:** Developing Countries; Leishmaniasis-statistics and numerical data



## Stevia

### **Preliminary studies on stevia rebaudiana leaves : proximal composition, mineral analysis and phytochemical screening.**

Tadhani, Manish; Subhash, Rema

Sardar Patel University - Food Biotechnology Laboratory - Post Graduate Department of Home Science

**Journal of Medical Sciences** 2006; 6 (3): 321-326 (33 ref.)

**Keywords:** Plant Leaves; Minerals; Fatty Acids; Tanning; Alkaloids

**Abstract:** Stevia rebaudiana leaf was investigated for its proximal composition, mineral content and phytochemical screening. Further, fatty acid analysis of leaf oil was also carried out using gas chromatography. Protein, fat, carbohydrate and ash content were found to be 20.42, 4.34, 35.20 and 13.12 g% on dry weight basis, respectively. Mineral analysis showed that the high content of K, Ca, Mg, P, Na and S present in the leaf whereas cobalt, copper, iron, manganese, zinc, selenium and molybdenum found as trace amount. The phytochemical analysis revealed the presence of tannins in high concentration followed by alkaloids, cardiac glycosides, saponins, sterols and triterpenes, reducing compounds and anthraquinones. Cyanogenetic glycosides were found to be absent in the leaf. GC analysis of leaf oil indicated the presence of palmitic, plamitoleic, stearic, oleic, linoleic and linolenic acids. In conclusion therefore, leaves of Stevia rebaudiana as shown here do possess high content of protein, carbohydrate, K, Ca, Mg, P and some active chemical constituents like tannins, alkaloids, saponins as well as palmitic and linolenic acids.

## Stibenes

### **Resveratrol activates the kinase-G system in human coronary smooth muscle cells via a nongenomic, estrogen-independent mechanism.**

El Mowafy, A.M.; Abou Zeid, Laila A.

Mansoura University - Faculty of Pharmacy - Department of Medicinal Chemistry

**Journal of Basic and Applied Sciences** 2006; 2 (2): 71-78 (32 ref.)

**Keywords:** Antioxidants; Myocytes, Smooth Muscle; Receptors, Estrogen

**Abstract:** Resveratrol [RSVL], a polyphenolic phytoestrogen in grapes, confers multifaceted cardiovascular benefits. The cellular and molecular basis of RSVL actions has been largely undefined. Currently, in human coronary smooth muscle cells [HCSMCs], RSVL markedly [3.2 fold] enhanced cGMP formation [EC<sub>50</sub>: 1.8 µM] and stimulated kinase-G activity [4 fold]. By contrast, RSVL had no effect on cAMP or PKA activity in these cells. The RSVL-enhanced cGMP/kinase-G activity was not abrogated by either of the phosphodiesterase-inhibitors [zaprinast, 10 µM, IBMX, 0.5mM], the nitric oxide synthase-inhibitor [L-NMMA, 10 µM], or the soluble guanylyl cyclase [sGC]-inhibitor [ODQ, 10 µM]. In membrane preparations from HCSMCs, RSVL activated GC in the particulate-, but not in the soluble- membrane fraction. Similar effects were due to the specific particulate-GC [pGC] agonist atrial natriuretic peptide [ANP, 0.1-1 µM]. By contrast, the nitric oxide donor, SNAP [1-10 µM] stimulated GC only in the soluble fraction. Responses to RSVL were insensitive to the estrogen receptor blockers, tamoxifen and ICI-182,780. Conversely, pretreatment with the PKC activator, PMA [0.1 µM], a known desensitizer of pGC, markedly blunted the RSVL-enhanced GC-activity. These findings demonstrate that RSVL triggers a pGC-mediated stimulation of protein kinase-G in human coronary smooth muscle cells. This pathway appears to be independent of the conventional estrogen machinery and supports both vasodilatory and anti-atherogenic actions for RSVL.

## Superior Vena Cava Syndrome

### **Diagnosis**

#### **Pregnancy complicated by superior vena cava thrombosis and pulmonary embolism in a patient with behcet disease and the use of heparin for treatment .**

Kale, Ahmet; Akyildiz, Levent; Akdeniz, Nurten; Kale, Ebru

Dicle University - School of Medicine - Department of Obstetrics and Gynecology

**Saudi Medical Journal** 2006; 27 (1): 95-97 (10 ref.)

**Keywords:** Behcet Syndrome-Complications; Thrombosis-Etiology; Thrombosis-Therapy; Heparin-Therapeutic Use; Vena Cava, Superior-Pathology; Pregnancy; Pulmonary Embolism

**Abstract:** Behcet disease is a multisystemic vasculitis of unknown origin. Vascular involvement has been considered to result from systemic vasculitis, occurs in 5-10% of these patients. We report a 34-year-old pregnant woman complicated by superior vena cava thrombosis, and pulmonary embolism in a patient with Behcet disease.

## Surgical Wound Infection

### **An experimental study on surgical wound contamination from distant infective source in rabbits.**

Sarrafzadeh Rezaei, F.; Yousefbaigi, Gh.; Shariati, A.

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**Iranian Journal of Veterinary Research** 2006; 7 (1): 29-33 (22 ref.)

**Keywords:** Wound Healing; Rabbits; Staphylococcus aureus

**Abstract:** Surgical wound infections are usually encountered due to the endogenous rather than the exogenous infective sources. The objective of this study was to evaluate the effect of a distant inoculated infective source on the contamination of surgical wounds. Thirty White New Zealand rabbits divided randomly into three control and three treatment equal groups. In treatment groups 24 hrs before surgical intervention *Staphylococcus aureus* was injected subcutaneously in right thigh. In model animals, skin and muscles were incised 1 cm to the right of the vertebral column and sutured, immediately. The relative frequency of staphylococcal contamination of tissue specimens at 24 and 48 hrs after surgery in treatment groups were 20% and 60%, respectively. Statistical analysis did not show any significant differences in the rate of contamination between control and treatment groups at aforementioned times [P>0.05]. However, comparison at 72 hrs after surgery, showed that the rate of contamination in treatment group is significantly more than control ones [P = 0.004]. The presence of *S. aureus* in wounds of treatment animals at 72 hrs after surgery, suggested that microorganisms lodged in any part of body other than wound region could contaminate it, which could be important in wound healing.

## Textile Industry

### **Cotton dust exposure, respiratory symptoms and PEFR in textile workers.**

Ghasemkhani, M.; Firoozbakhsh, S.; Azam, K.; Ghardashi, F.  
Tehran University of Medical Sciences - School of Public Health - Department of Occupational Health  
**Journal of Medical Sciences** 2006; 6 (3): 458-462 (23 ref.)

**Keywords:** Cotton Fibre; Dust; Cross-Sectional Studies; Data Collection; Signs and Symptoms, Respiratory; Occupational Diseases

**Abstract:** The purposes of this study was to measurement cotton dust levels in air workplace, Prevalence of respiratory symptoms and determine of changes in Peak Expiratory Flow Rate [PEFR] before and after during workday among textile workers. This study was done among 31 workers carding and blowing rooms. Using a short questionnaire for demographic characteristics, medical record were collected in a modified questionnaire of Occupational Safety and Health Administration [OSHA] and 12 air samples were collected of work area. The PEFR was measured with a peak flow meter. The mean cotton dust levels in carding and blowing rooms were 0.39 +/- 0.03 and 0.20 +/- 0.01 mg m<sup>-3</sup>, respectively. The mean age and year's employment were 45 +/- 7.97 and 12.5 +/- 6.28, respectively. Thirty three percent of the workers were smoking. The prevalence of respiratory symptoms increased with age and employment years and there were found significantly between age and employment years with cough, phlegm, dyspnea [p<0.05, 0.05, 0.05, respectively]. The mean PEFR before and after during workday were 362.9 +/- 147.8 and 305.8 +/- 147.5, respectively and subjects had found significantly [p<0.0001]. The decline in PEFR was significantly associated with years employment [p<0.05], whereas with age and cotton dust levels were found to be non significant. One explanation for the lack of age and cotton dust levels effects in workers may be due to the low number of subjects and samples, respectively. Technological improvement has resulted in reduction of cotton dust exposure levels and respiratory symptoms.

## Thiosulfate Sulfurtransferase

### **Biochemical properties and biological functions of the enzyme rhodanese in domestic animals.**

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University of Shiraz - School of Veterinary Medicine - Department of Biochemistry  
**Iranian Journal of Veterinary Research** 2006; 7 (2): 1-13 (119 ref.)

**Keywords:** Animals, Domestic; Cyanides-toxicity; Sulfurtransferases

**Abstract:** The enzyme rhodanese [thiosulfate: cyanide sulfurtransferase] is a ubiquitous enzyme and its activity is present in all living organisms. Many functions including cyanide detoxification, formation of iron-sulfur centers and participation in energy metabolism have been attributed to this enzyme. The enzyme catalyzes the transfer of a sulfur atom from sulfane containing compounds [such as thiosulfate] to thiophilic anions [such as cyanide]. The sulfhydryl group of cysteine-247 in the molecule of rhodanese participates in a double displacement of sulfur transfer mechanism. In this review attempt will be made to summarize the latest information available on the molecular properties and the pattern of distribution of rhodanese in different tissues of domestic animals and to combine these different lines of research to arrive at a plausible explanation regarding the biological function of this important enzyme in living organisms.

## Thyroid Gland

### immunology

#### **Thyroid autoantibodies in chronic urticaria.**

Faridhosseni, R.; Ghaffari, J.; Rafatpanah, H.; Jabbary, F.; Taghari, M.; Shzkery, M.T.  
**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 373-378 (19 ref.)

**Keywords:** Urticaria-immunology; Autoantibodies-immunology; Autoantibodies-blood; Chronic Disease; Skin Tests; Iodide Peroxidase; Enzyme-Linked Immunosorbent Assay

**Abstract:** Urticaria is characterized by the appearance of pruritic erythematous. It commonly involves the trunk and extremities. Acute urticaria is a very common Clinical problem occurring in as many as 10-20% of the population

Chronic urticaria Persists more than 8 weeks and may occur in individuals of any age. We evaluated thyroid autoantibodies in chronic urticaria in which allergy skin prick test was Negative and serum IgE was within normal limits. We studied antiperoxidase and antithyroglobulin antibodies in 60 patients with chronic urticaria, aged 14 to 64 years Old, 47 women [78.3%] and 13 men [23.17%], by the ELISA method. We also did CBC, ALT AST, Cr, S/E, ESR, BUN, HBSAg, Anti HCV and H. pylori antibodies, thyroid function test that were negative. All tests were within normal limits, and 57 [95%] were normal thyroid function tests. But in 22 cases [36.6%] the results of autoantibodies were as follows: Antiperoxidase in 3 cases [13/6%], Antithyroglobulin in 9 cases [41%], Both autoantibodies in 10 cases [45.4%], Total 22 cases [36.6%]. Sixteen patients out of 22 received 0.1mg Levothyroxin daily for 2 months. Remaining 6 patients were treated only antihistamin to serve of control group .70% out of 16 treated with Levothyroxin showed complete or partial response to treatment. This - shows that there is an association between thyroid Autoantibodies and chronic urticaria. The interesting outcome of this study is that the majority of cases were Euthyroid, 57 cases [95%].

## Thyroid Neoplasms

### Epidemiology

#### New trends in the clinicopathological features of differentiated thyroid cancer in Central Jordan.

Shomaf, Maha S.; Younes, Nidal A.; Albsoul, Nader M.; Musmar, Ayman A.; Al Zaheri, Mohammed M.; Tarawneh, Musleh S.; Sroujeh, Ahmad S.

University of Jordan - Faculty of Medicine - Department of Pathology

**Saudi Medical Journal** 2006; 27 (2): 185-190 (32 ref.)

**Keywords:** Thyroid Neoplasms-Therapy; Neoplasm Metastasis; Carcinoma-Epidemiology

**Abstract:** To investigate the current trends in presentation and distribution of differentiated thyroid cancer [DTC] at the largest referral hospital for endocrine cancers in Central Jordan. We analyzed the clinical features, management and outcome of 110 patients diagnosed with thyroid carcinoma at Jordan University Hospital, Amman, between 1996 and 2001. Papillary carcinoma was diagnosed in 87 patients [80%], follicular carcinoma in 3 patients [2.7%], Hurthle cell carcinoma in 8 patients [7.3%], medullary carcinoma in 5 [4.5%], and anaplastic carcinoma in 4 patients [3.6%], metastatic cancer in 2 patients and lymphoma in one patient. Time course analysis showed an increasing trend in surgery for thyroid cancer from 28 cases in 1986-1991 to 48 in 1996-2001. As time advanced, the incidence of locally invasive disease and lymph node involvement markedly increased over the last 5 years of the study [from 28-62%]. All patients with follicular carcinoma were diagnosed in the period 1986-1994. After thyroidectomy and a follow up period of 2-15 years, 10 patients died of their disease, 4 of these died within one year from anaplastic thyroid carcinoma. The dramatic decline in the incidence of follicular thyroid carcinoma combined with the increase in the advanced forms of thyroid cancer in Central Jordan may suggest a possible environmental factor in thyroid carcinogenesis in this region. We suggest a larger scale studies and steps to investigate the etiologic factors for thyroid carcinogenesis in Central Jordan.

## Tibia

### Abnormalities

#### Correction of tibia vara using Ilizarov technique.

Fadel, Mohamed; Hosny, Gamal; El Tabie, Ashrf

El-Minia University - Department of Orthopedic Surgery

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 16-20 (25 ref.)

**Keywords:** Reconstructive Surgical Procedures; Orthopedics; Tomography, X-Ray Computed; Ilizarov Technique; Follow-Up Studies; Treatment Outcome

**Abstract:** Fifty-two lower limbs of 44 patients with tibia vara were treated with the Ilizarov external fixator. Eight patients were bilaterally affected. Their mean age was 12 years and 6 months. Their main complaint was pain on walking and cosmeses. They were assessed clinically and radiologically. CT scanogram was done for lower limb discrepancy. Ilizarov external fixator was applied and gradual correction was performed. Varus tibiofemoral angle, procurvatum, recurvatum, lower limb discrepancy, and knee range of motion were measured preoperatively; postoperatively and at last follow up. Three patients showed residual deformity. There were no neurovascular complications, delayed union, or nonunions. The Ilizarov method provides deformity correction and secure early weight bearing with no serious complications.

## Tibial Fractures

### Surgery

#### Management of tibial plafond fractures with ilizarov external fixator.

Hewaidy, Ayman Ibrahim Fathy

Ain Shams University, Cairo - Department of Orthopedic Surgery

**Pan Arab Journal of Orthopaedic and Trauma [The]** 2006; 10 (1): 21-28 (24 ref.)

**Keywords:** Orthopedics; Ilizarov Technique; Fracture Fixation, Internal; Follow-Up Studies; Treatment Outcome

**Abstract:** Eighteen tibial plafond fractures in eighteen patients were treated with the Ilizarov external fixator. Twelve patients [66.7%] were males and six [33.3%] were females, and the average age was 36.5 years [range, 23 to 52 years]. The mechanism of injury included thirteen motor-vehicle accidents [72.2%] and five falls from a height [27.8%]. Eleven fractures [61%] were closed and seven [39%] were open [five grade, and two grade]. The fractures were classified according to AO classification system. There were four type A1, three type A2, three type B2, four type C2, and four type C3 fractures. Associated injuries occurred in 6 patients [33.3%] and included an abdominal injury [2 patient], a second long bone fracture [3 patients], and a proximal fracture in the same tibia [one patient]. Open reduction and internal fixation of the fibula fracture was performed in 8 patients [44.5%] using a tubular plate. The ankle joint was crossed with a hindfoot half ring in the type C fractures [44.5%]. Minimal internal fixation with interfragmentary screws was performed in 6 fractures [33.3%]. The average follow-up was 30.5 months [range 24 to 36 months]. All fractures united. The average time of healing was 4.5 months [range, 2.5-6 months]. Seven fractures [39%] were excellent, five [27.8%] good, three [16.6%] fair, and three [16.6%] poor according to the functional ankle score. Pin track infection occurred in four patients [22.2%]. Minimal skin necrosis around the wound was observed in two patients [11%]. Malunion in the form of 15° valgus occurred in one fracture [5.5%]. Two patients [11%] had shortening of their legs ranging between 1 to 2 cm.

## Toxoplasmosis, Animal

### Immunology

#### **Molecular identity of the electrophoretic pattern and the major cross-reacting immunogens of toxoplasma gondii (RH strain) and neospora caninum.**

Eid, R. A. A.; Barakat, A. M. A.; Hassan, H. M.

Animal Health Research Institute, Dokki, Giza, Egypt - Department of Parasitology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 139-148 (42 ref.)

**Keywords:** Protozoan Infections, Animal; Rabbits; Neospora-Immunology; Antigens; Electrophoresis, Agar Gel; Immunoblotting; Cross Reactions

**Abstract:** The complex electrophoretic profile of the antigenic components of *Toxoplasma gondii* and *Neospora caninum* was studied. *T. gondii* [RH strain] trophozoite's antigens were resolved by gel electrophoresis under denaturing condition. Resolved polypeptides were tested by immunoblotting against hyper-immune serum prepared in Boscat rabbits. Immunoblot analysis revealed 6 reactive bands, which are 158, 111, 102, 86, 55 and 33 kDa, out of 10 antigenic bands of the parasite. Concerning *N. caninum* trophozoite's antigens, immunoblot analysis revealed 5 reactive bands, which are 159, 119, 106, 97 and 39 kDa, out of 8 antigenic bands of the parasite. Cross reactivity trials between the 2 parasites explore 3 cross-reactive bands, indicating high antigenic similarity in between.

## Trigonella

### Adverse Effects

#### **Efficacy of trigonella foenum-graecum (fenugreek) on third stage larvae and adult fecundity of musca domestica.**

Abdel Halim, Azza S.; Morsy, Tosson A.

Research Institute of Medical Entomology, The General Organization for Institutes and Teaching Hospitals, Dokki, Giza

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 328-334 (18 ref.)

**Keywords:** Plant Preparations-Administration and Dosage; Houseflies; Fertility; Larva

**Abstract:** The insecticidal efficacy of *Trigonella foenum-graecum* [fenugreek] on the 3rd stage larvae of *Musca domestica* and adult fecundity was evaluated under controlled laboratory conditions. The concentrations from 25% to 100% completely killed the larvae. 5%, 2% and 1% caused mortality percent of 44.4, 33.3 and 22.2 respectively. Less concentration of fenugreek was not tried. On the other hand, the fecundity of the emerged adults was 20%, Zero% and 28.6%. On the other hand, only one control larva died and the nine emerged adults were fertile. So, fenugreek at low concentration not only has a larvicidal action against house fly larvae but also affected the adult fecundity.

## Trimethoprim-Sulfamethoxazole Combination

#### **Co-trimoxazole prescription at the outpatient service of a secondary health facility in Ibadan, Nigeria.**

Fehintola, F.A.; Ganiya, A.A.; Akinmasure, O.; Oduntan, H.A.; Adeyinka, J.O.

University of Ibadan - College of Medicine - Department of Pharmacology and Therapeutics

**Journal of Medical Sciences** 2006; 6 (3): 416-419 (12 ref.)

**Keywords:** Sulfamethoxazole-therapeutic use; Retrospective Studies; Malaria-drug therapy; Pneumocystis carinii-drug therapy; Outpatient Clinics, Hospital

**Abstract:** Malaria and respiratory tract infection sometimes co-exist compelling use of antibacterial and antimalarial drugs. Assessment of prescribing patterns avails us the opportunity of monitoring and if necessary, suggest modifications in prescribing practices of medical practitioners so as to make medical care rational and cost effective. A retrospective assessment of pattern of prescription at a government owned secondary health facility. The age, sex, the drugs prescribed to each patient were recorded and prescriptions involving cotrimoxazole were further analyzed.

Antibacterial drugs were commonly prescribed being more commonly prescribed for male than female patients. Cotrimoxazole prescription accounted for about 1% only of the total 18075 and 6% of all antibacterial drugs used but was used in about 30% of all cases of respiratory tract infections requiring antibacterial drugs. Misuse of antibacterial agents and irrational drug combinations are not uncommon, there is need for regular education amongst health care providers in our area of study.

## Tuberculosis

### diagnosis

#### **Comparison of ultrasonographic measurement of the tuberculin skin test with the result of manual reading.**

Sharifi Mood, Batool; Savadkouhi, Fariba; Salehi, Masoud; Hatami, Malihe; Sarhaddi, Parviz

Zahedan University of Medical Science - Department of Infectious Diseases

**Journal of Medical Sciences** 2006; 6 (3): 389-392 (15 ref.)

**Keywords:** Tuberculin Test; Cross-Sectional Studies; Ultrasonography

**Abstract:** This study was conducted in order to determine the ultrasonographic [US] finding of tuberculin skin test and to compare with the result of manual reading. One hundred of hospital staff, in Zahedan a city in Southeast of Iran, were enrolled in this study. A 5-tuberculin unit [TU] PPD Mantoux test was administered to all healthy subjects by two experienced nurses and was applied to the left forearm. At 48 and 72 h, all PPD skin tests were measured by two independent readers and one Radiologist by High-resolution US examinations. Then results was analysed and comparison on results was made. A difference with  $p < 0.05$  was considered significant. Fifteen cases had no induration measurable either manually or by US at 48 and 72 h. At 48 and 72 h, 12, 13 cases had induration between 1-4 mm by the first reader and 11, 13 had also induration between 1-4 mm as reported by the second reader. At 48 and 72 h 18, 19 cases had an induration between 5-9 mm by the first reader and at these times, 20, 23 cases had an induration between 5-9 mm by the second reader. At 48 and 72 h, 36, 35 cases had an induration between 10 to 14 by the first reader and at these times, 35, 32 of healthy subjects had induration between 10-15 by the second reader. At 48 and 72 h, 17, 15 cases, had a PPD skin test more than 15 mm, by two manual readers. On US, only 2 cases who had no induration by two readers at 48 and 72 h, showed an induration between 3.5 to 4.5 mm. There was no significant difference between reader 1 and reader 2 with US reader at 48 and 72 h [ $p < 0.05$ ]. Also, there was no significant difference between two manual readers at 48 and 72 h, [ $p = 0.1$ ,  $p = 0.09$ ]. Result showed that manual finding of TST can be simply and objectively measured in the subjects who should start prophylactic antituberculous especially in children less than 6 year who have a history of contact with tuberculous patients or in patients who should start on tuberculosis treatment immediately.

## Urinary Calculi

### therapy

#### **The effect of tamsulosin in facilitating of juxtavesical stones' passage.**

Keshvary, M.; Taghavi, R.; Arab, D.

**Medical Journal of Mashhad University of Medical Sciences** 2006; 48 (90): 425-430 (15 ref.)

**Keywords:** Sulfonamides-therapeutic use; Nifedipine-therapeutic use; Lithotripsy; Colic-etiology

**Abstract:** We evaluated the effectiveness of tamsulosin and nifedipine during watchful waiting in patients with juxtavesical ureteral stone. Between Oct 2003 and Feb 2004, 382 patients with renal colic referred to our center which 64 patients suffered from juxtavesical stone less than 1 cm where enrolled in the study and were randomly divided into 3 groups. The average sizes of the stones were 6.7 mm, 6.4 mm, 6.8 mm in Groups 1, 2, 3. Group 1 [20 Patients] received daily oral treatment of 0.4 mg tamsulosin and group 2 [20 Patients] received 20 mg nifedipine daily oral therapy, group 3 [24 Patients] were used as controls. The patients were treated about 4 weeks and the patients were every 1 week and sonography was done for 4 weeks and whenever the stone was expelled, we discontinued the drug. Information about stones passage and time and complication was noted. Statistical analyses were performed with using the K. test. We had 35 males and 29 females patients mean age of 38 years. According to patients age, sex and stone size there was no significant difference between 3 groups. The stone passage rate was 90% [8 Patients], 75% [14 Patients] and 45% [11 Patients] in groups 1, 2, 3 respectively. The difference in group 1 and 2 with respect to group 3 was significant. Average expulsion time was 16 days, 20 days and 18 days in 3 groups respectively. A statistically significant difference was noted between group 1 and 3. Two patients from group 1, five patients from group 2 and thirteen patients from group 3 underwent transureteral lithotripsy. Tamsulosin and nifedipine administration in renal colic due to juxtavesical calculi increased the stone expulsion rate, reduced expulsion time and decreased need for hospitalization and endoscopic procedures.

## Urine

### Microbiology

#### **Examination of urine for bacteria and parasites among elder persons in the rural area, in Dammam district.**

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King Faisal University - College of Medicine - Department of Microbiology

**Journal of the Egyptian Society of Parasitology** 2006; 36 (1): 297-304 (34 ref.)

**Keywords:** Urine-Parasitology; Aged; Rural Population; Blood Glucose; Escherichia coli; Pseudomonas; Trichomonas vaginalis; Diabetes Mellitus

**Abstract:** The asymptomatic bacteria and parasites in urines were studied in elder persons living in the rural areas of Dammam District. Complete history taking, clinical examination, urine analysis and culture, blood glucose level and haemoglobins in gm were performed for 43 elders of both sexes. The bacteria detected in urine in a descending order were Klebsiella sp., Staphylococcus sp., Escherichia coli and Pseudomonas sp. The parasites detected were only Trichomonas vaginalis in three diabetic females. No doubt, regular urine examination is a must for the elders in rural areas.

## Vaginal Diseases

### Etiology

#### Does vaginal douching affect the risk of vaginal infections in pregnant women?.

Sakru, Nermin; Inceboz, Tonay; Inceboz, Umit; Zeren, Isil; Karakus, Melahat; Kirca, Uzeyir

Trakya University Medical School Hospital - Department of Microbiology and Clinical Microbiology

**Saudi Medical Journal** 2006; 27 (2): 215-218 (16 ref.)

**Keywords:** Vaginal Diseases-Therapy; Vaginal Diseases-Adverse Effects; Pregnancy; Pregnancy Complications, Infectious

**Abstract:** To evaluate the relationship between vaginal douching and vaginal infections among women in early pregnancy. We conducted this study in the Department of Gynecology and Obstetrics, Family Planning Center, Dr. E. Hayri Ustundag Hospital, Izmir, Turkey, between March 2003 and December 2004. We examined the vaginal swabs of 129 women, asking for termination of pregnancy in a family-planning center as both wet-preparations and cultures for vaginal microorganisms, and recorded the informations on women's vaginal douching habit. Among 129 women examined, 80 had at least one type of vaginal microorganisms. Of 67 vaginal douche users, 48 [71.6%] had at least one type of vaginal organisms, whereas of 62 nonusers, only 32 [51.6%] had microorganism, although age, educational status, coital frequency, age at the first intercourse were not statistically different between the vaginal douche-users and non-users. Especially, Group B Streptococcus [GBS], Enterococcus spp. and Candida spp. were found more frequent in vaginal douche-user women. We found that vaginal douching tends pregnant women to genital tract the incidence of vaginal infections, especially those caused by Enterococcus spp. and GBS. As such infections may render such women to high risk in terms of perinatal mortality and morbidity, it would be appropriate to discourage vaginal douching in pregnant women.

## Ventilators, Mechanical

### Adverse Effects

#### Ventilator-associated pneumonia in surgical emergency intensive care unit.

Ertugral, Bulent M.; Yildirim, Ayse; Ay, Pinar; Oncu, Serkan; Cagatay, Atahan; Cakar, Nahit; Ertekin, Cemalettin; Ozzut, Halit; Eraksoy, Haluk; Calangu, Semra

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**Saudi Medical Journal** 2006; 27 (1): 52-57 (40 ref.)

**Keywords:** Pneumonia-Etiology; Pneumonia-Epidemiology; Intensive Care Units; Length of Stay; Cross Infection; Risk Factors; Multiple Trauma-Mortality; Survival Analysis; Respiration, Artificial-Adverse Effects; Prospective Studies; Cohort Studies

**Abstract:** To investigate the incidence, risk factors and the etiology of ventilator-associated pneumonia [VAP] in surgical emergency intensive care unit [ICU] patients. We conducted this prospective cohort study in the surgical emergency ICU of Istanbul Medical Faculty between December 1999 and May 2001. We included 100 mechanically ventilated patients in this study. We diagnosed VAP according to the current diagnostic criteria. We identified the etiology of VAP cases by both quantitative cultures of endotracheal aspiration and blood cultures. To analyze the predisposing factors for the development of VAP, we recorded the following variables: age, gender, acute physiology and chronic health evaluation [APACHE] II score, Glasgow coma scale [GCS], sequential organ failure assessment [SOFA] score, serum albumin level, duration of mechanical ventilation [MV] prior to the development of VAP, and underlying diseases. We determined the VAP incidence rate as 28%. We found the APACHE II score and the duration of MV to be statistically significant variables for the development of VAP. There were no significant differences regarding age, gender, GCS, SOFA score, albumin level, or underlying diseases for the development of VAP. The isolated bacteria among VAP cases were as follows: Staphylococcus aureus [n=12, 43%], Acinetobacter spp. [n=6, 21%], coagulase-negative Staphylococci [n=4, 15%], Pseudomonas aeruginosa [n=3, 10.7%] and Klebsiella pneumoniae [n=3, 10.7%]. Ventilator-associated pneumonia is a common infection, and certain interventions might affect the incidence of VAP. The ICU clinicians should be aware of the risk factors for VAP, which could prove useful in identifying patients at high risk for VAP, and modifying patient care to minimize the risk of VAP.



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MORPHOLINES (therapeutic use)
- Asvadi Kermani, I**  
BLOOD TRANSFUSION (adverse effects)
- Ataee, R.A.**  
CHOLERA (etiology)
- Atalar, Mehmet H.**  
ENCEPHALOMYELITIS, ACUTEDISSEMINATED (Diagnosis)
- Awad, Manal**  
ARTHRITIS, JUVENILE RHEUMATOID(diagnosis)
- Awidi, Abdalla**  
HEMOPHILIA A
- Ay, Pinar**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Aydemir, Akin**  
MUSCULOSKELETAL DISEASES (etiology)
- Aydin, Serpil**  
DOMESTIC VIOLENCE
- Aydin, Sevin**  
CHORIONIC VILLI (Pathology)
- Ayen, E.**  
OOCYTES
- Aygenel, Sahender G.**  
METHEMOGLOBINEMIA (Chemically Induced)
- Azab, Manar S.**  
AIR POLLUTION, INDOOR
- Azam, K.**  
TEXTILE INDUSTRY

- Azar, Masoud Shayesteh**  
FRACTURE FIXATION, INTRAMEDULLARY
- Azizi, F.**  
BABESIA (immunology)
- Babaei, H.**  
OOCYTES  
SHEEP
- Babaeie, Gh.**  
HEPATITIS B VIRUS
- Babazadeh Habashi, B.**  
BUFFALOES
- Bachelioğlu, Meltem**  
EAR, EXTERNAL (Anatomy and Histology)
- Baghbannejad, A.**  
CRYPTOSPORIDIUM
- Baghdadabadi, J. Afzaly**  
SCIATIC NERVE (injuries)
- Bahadorkhan, Gh.**  
INTRACEREBRAL HEMORRHAGE (etiology)
- BaHamam, Ahmed**  
SLEEP
- Bahnassy, Ahmed A.**  
SKIN DISEASES (Epidemiology)
- Bahoosh, G.R.**  
GENE REARRANGEMENT
- Bahrami, A.**  
BLOOD DONORS
- Bakheshwain, Saadia M.**  
CROSS INFECTION (Epidemiology)
- Balali, M.**  
LEAD (blood)
- Baleela, Reem M.**  
ESOPHAGEAL NEOPLASMS (Surgery)
- Banani, Seyyed Javad**  
ECHOCARDIOGRAPHY, TRANSESOPHAGEAL
- Banankhojasteh, S.M.**  
SEX DIFFERENTIATION
- Barakat, A. M. A.**  
TOXOPLASMOSES, ANIMAL (Immunology)
- Bardsiri, H. Sheikh**  
BLOOD TRANSFUSION
- Barouni, I.M.**  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)
- Barqawi, Musa**  
HEMOPHILIA A
- Bashir, Adil H.H.**  
BASAL CELL NEVUS SYNDROME (diagnosis)
- Bassam, Taher**  
OVARY (Pathology)
- Bassiouni, Randa**  
GALACTOSEMIAS (diet therapy)
- Batavani, R.A.**  
SHEEP
- Bawazeer, Mohammed A.**  
ARTERIOVENOUS FISTULA (Surgery)
- Bawazir, Saleh A.**  
ATTITUDE OF HEALTH PERSONNEL
- Bayramlar, Huseyin**  
AMBLYOPIA (Complications)
- Begum, Farzana**  
NUMERICAL ANALYSIS, COMPUTER-ASSISTED
- Begum, Nurun N.**  
CORNEA (Microbiology)
- Bekheet, Iman William**  
CARDIOVASCULAR DISEASES (etiology)
- Belbraouet, Slimane**  
DIABETES MELLITUS, TYPE 2 (Blood)
- Belch, J.J.F.**  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)
- Bendahmane, Malika**  
DIABETES MELLITUS, TYPE 2 (Blood)
- Berahmani, G.**  
BLOOD TRANSFUSION (adverse effects)
- Berjis, N.**  
NOISE
- Bessiso, Mohammed S.**  
MENINGITIS, BACTERIAL (Epidemiology)
- Bhansali, Anil**  
ENDOMETRIOSIS (Diagnosis)
- Bharathi, P.**  
COLCHICINE (isolation and purification)
- Bhat, Mohammad H.**  
ENDOMETRIOSIS (Diagnosis)
- Bin Abbas, Bassam S.**  
DIABETES MELLITUS, TYPE 1 (Drug Therapy)
- BinSaeed, Abdulaziz**  
SLEEP
- Bira, B.**  
NOISE
- Birinci, Hakki**  
DIABETIC RETINOPATHY (Surgery)
- Bouzari, M.**  
INFLUENZA IN BIRDS (epidemiology)
- Broshtilova, Valentina**  
STATISTICS  
PLATELET AGGREGATION INHIBITORS(adverse effects)
- Budkowska, A.**  
HEPATITIS C ANTIGENS
- Bukhari, Iqbal A.**  
SKIN DISEASES (Epidemiology)
- Bukhari, Iqbal A.**  
CARCINOMA, BASAL CELL
- Bukhary, Zakeya A.**  
AORTITIS (Pathology)
- Cagatay, Atahan**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Cakar, Nahit**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Calangu, Semra**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Cathey, John T**  
INFORMATION STORAGE AND RETRIEVAL
- Cetiner, Sedat**  
ODONTOGENIC CYSTS (Genetics)
- Cetinkaya, Fevziye**  
ECHINOCOCCOSIS (Epidemiology)
- Cetintas, Sibel K.**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Chakkaravarthi, S.**  
COLCHICINE (isolation and purification)
- Cheraghi, M.**  
AIR POLLUTION
- Ciralik, Harun**  
MELANOMA, AMELANOTIC (Diagnosis)

- Coban, Yusuf K.**  
MELANOMA, AMELANOTIC (Diagnosis)
- Cobanoglu, Umit**  
CHORIONIC VILLI (Pathology)
- Daba, Mohamad Hesham Y.**  
METOCLOPRAMIDE (Pharmacology)
- Dadras, H.**  
FOOD CONTAMINATION
- Dahab, Gamal M.**  
METOCLOPRAMIDE (Pharmacology)
- Dalimi Asl, A.H.**  
PEST CONTROL, BIOLOGICAL
- Daneshjou, Khadije**  
LISTERIA INFECTIONS
- Darwish, Ahmed B.**  
RODENT DISEASES (Parasitology)  
PHLEBOTOMUS
- Dastgiri, Saeed**  
RESEARCH DESIGN
- David, M.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Davies, Neal M.**  
COLITIS
- Dehdari, M.**  
MILK
- Dehkhoda, R.**  
BLOOD TRANSFUSION (adverse effects)
- Dehyadegari, Mohammad A.**  
CANDIDIASIS (Drug Therapy)
- Delavari, M.**  
BLOOD TRANSFUSION
- Demirel, Birol**  
EAR, EXTERNAL (Anatomy and Histology)
- Dokuztug, Ferda**  
MUSCULOSKELETAL DISEASES (etiology)
- Dolatkhah, R.**  
BLOOD TRANSFUSION (adverse effects)
- Dorrah, Ahmad O.**  
INTESTINAL DISEASES, PARASITIC
- Dutta, Pinaki**  
ENDOMETRIOSIS (Diagnosis)
- Dwairi, Mohammad**  
HEMOPHILIA A
- Dzoyem, J.P.**  
DERMATOMYCOSES (therapy)
- Ebraheem, Mahmoud H.**  
CULICIDAE  
CULEX
- Ebrahimi, A.**  
PYELONEPHRITIS
- Ebrahimi, M.**  
SPERMATOOZOA
- Ebrahiminejad, A.**  
CRANIOCEREBRAL TRAUMA
- Efe, Emine**  
QUALITY OF LIFE
- Ehsaei, M.**  
INTRACEREBRAL HEMORRHAGE (etiology)
- Eid, R. A. A.**  
TOXOPLASMOSIS, ANIMAL (Immunology)
- Eid, Suhair**  
HEMOPHILIA A
- Eissa Laila A.**  
DIABETIC RETINOPATHY (PhysioPathology)
- Eissa, Maha M.**  
LEISHMANIASIS, CUTANEOUS (Immunology)
- El Ahwal, Abdalla**  
MYIASIS (Parasitology)
- El Ahwany, Eman G.**  
SCHISTOSOMA MANSONI (Immunology)
- El Aiady, Ahmed A.**  
MALNUTRITION (complications)
- El Akawi, Zeyad J.**  
LUNG NEOPLASMS (Genetics)
- El Ansary, Mahmoud**  
CARCINOMA, HEPATOCELLULAR (Blood)
- El Bagar, Shaban**  
MYIASIS (Parasitology)
- El Bahy, Mohamed M.**  
FECEES (Parasitology)
- El Barghathi, Adam**  
MYIASIS (Parasitology)
- El Bashier, Zeinab M.**  
CULEX
- El Bassiony, Ghada M.**  
DIPTERA (Genetics)
- El Bassyouni, Hala T.**  
GALACTOSEMIAS (diet therapy)
- El Baz, Rizk A.**  
RHEUMATIC FEVER (genetics)
- El Beltagy, Atef K.**  
ARTHROPLASTY, REPLACEMENT, HIP
- El Besh Bishi, Samar N.**  
AIR POLLUTION, INDOOR
- El Dardiry, Marwa A.**  
FECEES (Parasitology)
- El Deeb, Khamis**  
LEGG-PERTHES DISEASE (Therapy)
- El Ghobary, Ahmed**  
KIDNEY FAILURE, CHRONIC (blood)
- El Haggiagi, M. B.**  
CRYPTOSPORIDIOSIS (Epidemiology)
- El Hassan, A.M.**  
MADURELLA
- El Kadi, Mohammad A.**  
INTESTINAL DISEASES, PARASITIC
- El Kashef, Hassan A.**  
BRAIN (Metabolism)
- El Khadrawy, Tarek Aly**  
SCOLIOSIS (Surgery)
- El Khateeb, Mohammed**  
FAMILIAL MEDITERRANEAN FEVER
- El Khizzi, Noura A.**  
CROSS INFECTION (Epidemiology)
- El Masrafawy, Hala**  
RHEUMATIC FEVER (genetics)
- El Mowafy, A.M.**  
STIBENES
- El Nagggar, Mostafa H.**  
RODENT DISEASES (Parasitology)  
PHLEBOTOMUS
- El Nagggar, Soheir M.**  
FECEES (Parasitology)
- El Nahas, Hala A.**  
AIR POLLUTION, INDOOR

- El Raai, Ahmed**  
CARCINOMA, HEPATOCELLULAR (Blood)
- El Saghir, Hesham**  
SPINAL FUSION (Methods)
- El Saleh, Abdul Rahman**  
ANESTHESIA, INHALATION
- El Sallakh, S.A.**  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)
- El Sawaf, Bahira M.**  
RODENT DISEASES (Parasitology)  
PHLEBOTOMUS
- El Sayed, Ahmed Hassan**  
SCOLIOSIS (Surgery)
- El Sebaei, Saud E.**  
CULEX  
CULEX
- El Shananwani, Faten M.**  
CARCINOMA, HEPATOCELLULAR (Blood)
- El Shanti, Hatem**  
FAMILIAL MEDITERRANEAN FEVER
- El Shazly, Atef M.**  
FASCIOLIASIS (Diagnosis)  
AIR POLLUTION, INDOOR
- El Shennawy, Amal M.**  
SCHISTOSOMIASIS MANSONI (Drug Therapy)
- El Sherbeny, Amira A.**  
DIABETIC RETINOPATHY (PhysioPathology)
- El Sherbiny, Gehad T.**  
ANIMALS, DOMESTIC (Parasitology)
- El Subbagh, Hussein I.**  
BRAIN (Metabolism)
- El Tabie, Ashrf**  
TIBIA (Abnormalities)
- El Wakil, Hala S. I.**  
SCHISTOSOMA MANSONI (Immunology)
- Elghoroury, E.A.**  
NITRIC OXIDE (blood)
- Elkoush, Abida A.**  
BLOOD TRANSFUSION (Adverse Effects)
- Elsaid, Mahmoud F.**  
MENINGITIS, BACTERIAL (Epidemiology)
- Elshafie, Sittana S.**  
MENINGITIS, BACTERIAL (Epidemiology)
- Elshamaa, M.F.**  
NITRIC OXIDE (blood)
- Elsharawy, Mohamed A.**  
ASCITES (Surgery)
- Emam, Hanaa M.**  
QUALITY OF LIFE
- Engin, Kayihan**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Eraksoy, Haluk**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Ertekin, Cemalettin**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Ertugral, Bulent M.**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Eskandari, S.**  
FOOD CONTAMINATION
- Esmail Zadeh, L.**  
GROWTH
- Esmaeili, M.**  
CIRCUMCISION
- Etoa, F.X.**  
DERMATOMYCOSES (therapy)
- Evazie, Ziaeei, J.**  
BLOOD TRANSFUSION (adverse effects)
- Ezz El din, Ashraf E.**  
FRACTURES, COMMUNUTED (Surgery)
- Ezz El Din, Nashwa**  
SCHISTOSOMIASIS MANSONI (Drug Therapy)
- Ezzat, Afaf**  
GALACTOSEMIAS (diet therapy)
- Fabijanec, Damir**  
EAR, EXTERNAL (Anatomy and Histology)
- Fadel, Mohamed**  
TIBIA (Abnormalities)
- Fahal, A.H.**  
MADURELLA
- Fahmy, Zeinab H.**  
SCHISTOSOMIASIS MANSONI (Drug Therapy)
- Fakharian, E.**  
GIARDIASIS (drug therapy)
- Falah, Mostafa**  
HEMOPHILIA A
- Fallah, Z.**  
CHOLERA (etiology)
- Falsolaiman, H.**  
HEART FAILURE, CONGESTIVE
- Faqih, Ahmad M.**  
ANEMIA, IRON-DEFICIENCY
- Farag, Hassan A.**  
BRAIN (Metabolism)
- Farahbakhsh, Mostafa**  
HEALTH SERVICES
- Faraji, M.**  
CAUDA EQUINA (pathology)
- Faranoosh, M.**  
GENE REARRANGEMENT
- Fard, Amir Hossein**  
MYCOBACTERIUM TUBERCULOSIS
- Farhat, A.SH.**  
LEAD (blood)
- Farid, Y.A.**  
NITRIC OXIDE (blood)
- Faridhosseni, R.**  
THYROID GLAND (immunology)
- Farivar, Taghi Naser Pour**  
MYCOBACTERIUM TUBERCULOSIS
- Farokhi, Z.**  
CHROMIUM (adverse effects)
- Farseh, R.**  
BLOOD TRANSFUSION
- Farshad, Shohreh**  
CANDIDIASIS (Drug Therapy)
- Farzadnia, M.**  
MENINGITIS (etiology)
- Fasuri, Sameer**  
HEMOPHILIA A
- Fateen, Ekram M.**  
GALACTOSEMIAS (diet therapy)
- Fathy, Fouad M.**  
LEISHMANIASIS, CUTANEOUS (Immunology)  
MYIASIS (Parasitology)

- Fayed, Hamed M.**  
CULICIDAE  
CULEX
- Fedorowicz, Zbys**  
INFORMATION STORAGE AND RETRIEVAL
- Fehintola, F.A.**  
TRIMETHOPRIM-SULFAMETHOXAZOLECOMBINATION
- Ferzli, George**  
PULMONARY SURFACTANT-ASSOCIATEDPROTEIN B  
(Deficiency)
- Firoozbakhsh, S.**  
TEXTILE INDUSTRY
- Flamerzi, Amina A.**  
MENINGITIS, BACTERIAL (Epidemiology)
- Forest, M.G.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Fouad, Abdel Motaal M.**  
METOCLOPRAMIDE (Pharmacology)
- Fouad, Mohmoud Ali Hassan**  
AIR POLLUTION, INDOOR  
BIOMPHALARIA (Drug Effects)
- Gadkariem, Elrashed A.**  
BRAIN (Metabolism)
- Galal, Fatma H.**  
CULICIDAE  
CULEX
- Gamal El Din, Hesham**  
MALNUTRITION (complications)
- Gangi, R.**  
LUMBAR VERTEBRAE (abnormalities)
- Ganguly, Shyam S.**  
IMMUNOGLOBULINS (Blood)
- Ganiya, A.A.**  
TRIMETHOPRIM-SULFAMETHOXAZOLECOMBINATION
- Gannad, Razieh**  
SHOULDER (pathology)
- Ghabdan, Wisam**  
SPLENIC RUPTURE (Etiology)
- Ghaemmaghani, S.S.**  
MAREK DISEASE (diagnosis)
- Ghaffari, J.**  
THYROID GLAND (immunology)
- Ghaffari, Samad**  
EXERCISE TEST
- Ghardashi, F.**  
TEXTILE INDUSTRY
- Ghasemkhani, M.**  
TEXTILE INDUSTRY
- Ghazavi, Z.**  
NURSES
- Ghofranipoor, F.**  
PUBERTY
- Gholami, S.**  
PANCREAS (anatomy and histology)  
CRYSTALLINS
- Gholizadeh, H.R.**  
BLOOD TRANSFUSION
- Ghorashi, S.A.**  
MAREK DISEASE (diagnosis)
- Ghorbani, G.H.**  
MEASLES (immunology)
- Ghorbanpoor, M.**  
MYCOBACTERIUM PARATUBERCULOSIS
- Golchin, M.**  
BLOOD TRANSFUSION (adverse effects)
- Gomaa, Howayda E.**  
MALNUTRITION (complications)
- Goyen, Mathias**  
MAGNETIC RESONANCE IMAGING (Methods)
- Gucin, Zuhai**  
OVARIAN NEOPLASMS (Diagnosis)
- Gunduz, Abuzer**  
AMBLYOPIA (Complications)
- Gurel, Selim**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Habib, Syed S.**  
DIABETES MELLITUS, TYPE 2 (Therapy)
- Habibi, E.**  
ANTHROPOMETRY
- Hachicha, M.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Hadadin, Esam**  
HEMOPHILIA A
- Haghighi, M.**  
GENITALIA, FEMALE (abnormalities)
- Haghnejad, F.**  
GENE REARRANGEMENT
- Haimidieh, A.A.**  
GENE REARRANGEMENT
- Haji Hajikolaei, M.R.**  
MYCOBACTERIUM PARATUBERCULOSIS
- Hallage, M.**  
LUMBAR VERTEBRAE (abnormalities)
- Haridy, Fouad M.**  
ANIMALS, DOMESTIC (Parasitology)
- Harlak, Ali**  
ANAL CANAL (Injuries)
- Hasanabadi, H.**  
SCIATIC NERVE (injuries)
- Hasanato, Rana M.W.**  
ANEMIA, SICKLE CELL (Metabolism)
- Hashemi, Seyyed Hamid**  
BURNS (epidemiology)
- Hashemitabar, Gh. R.**  
ECHINOCOCCOSIS (diagnosis)
- Hashemnia, Sh.**  
CATS (anatomy and histology)
- Hashemzadeh Farhang, H.**  
BABESIA (immunology)
- Hassan, El Zaher**  
ARTHROPLASTY, REPLACEMENT, HIP
- Hassan, Eman**  
SCHISTOSOMIASIS MANSONI (Drug Therapy)
- Hassan, H. M.**  
TOXOPLASMOSIS, ANIMAL (Immunology)
- Hassan, Mohamed R.**  
LEG BONES (Injuries)
- Hassan, Mostafa I.**  
CULEX
- Hatami, Malihe**  
TUBERCULOSIS (diagnosis)
- Hayati, Masumeh**  
CANDIDIASIS (Drug Therapy)
- Haysalehi, E.**  
ANTHROPOMETRY



- Hazaveei, S.M.**  
DIABETES MELLITUS, TYPE 1
- Hegazy, Eman H.**  
LEISHMANIASIS, CUTANEOUS (Immunology)
- Heidari, S.**  
BLOOD TRANSFUSION (adverse effects)
- Heidari, Zahra**  
ANTHROPOMETRY
- Hesheng, Luo**  
COLORECTAL NEOPLASMS (Genetics)
- Hewaidy, Ayman Ibrahim Fathy**  
TIBIAL FRACTURES (Surgery)
- Heydari, G.H.**  
NUTRITION (education)
- Heydari, Q.**  
NUTRITION (education)
- Hiari, Mohammed Ali**  
STAPES SURGERY
- Hijazi, Said**  
ADRENAL HYPERTROPHY, CONGENITAL
- Hosny, Gamal**  
TIBIA (Abnormalities)
- Hossienpour Panahi**  
BLOOD TRANSFUSION (adverse effects)
- Houseini, E.**  
MACULAR DEGENERATION (etiology)
- Huessain, Mohamed Y.**  
ESOPHAGEAL NEOPLASMS (Surgery)
- Hunaity, Afnan**  
PROTEUS MIRABILIS (growth and development)
- Husban, Saleem**  
BLOOD VESSELS (injuries)
- Hussain, Eman D.**  
LEISHMANIASIS, CUTANEOUS (Immunology)
- Hussein, Eman M.**  
SCHISTOSOMA MANSONI (Immunology)
- Hussein, Muna H.**  
CEREBELLAR ATAXIA (Etiology)
- Ibrahim, Wanis H.**  
SPLENIC RUPTURE (Etiology)
- Imail, Alaa**  
CARCINOMA, HEPATOCELLULAR (Blood)
- Inceboz, Tonay**  
VAGINAL DISEASES (Etiology)
- Inceboz, Umit**  
VAGINAL DISEASES (Etiology)
- Iqab, Tayel**  
BLOOD VESSELS (injuries)
- Irabor, Pamela Faith I.**  
CERVIX UTERI (Ultrasonography)
- Iranpour, Farhad**  
MENISCI, TIBIAL (Injuries)
- Iravani, S.**  
INFLUENZA IN BIRDS (epidemiology)
- Islam, Adeel A.**  
BLOOD TRANSFUSION (Adverse Effects)
- Issever, Halim**  
MUSCULOSKELETAL DISEASES (etiology)
- Izdyar, M.**  
GENE REARRANGEMENT
- Jabalamel, Khashayar**  
MENISCI, TIBIAL (Injuries)
- Jabbary, F.**  
THYROID GLAND (immunology)
- Jaber, Saad F.**  
BLOOD VESSELS (injuries)
- Jaber, Soad M.**  
MEASLES (Immunology)
- Jafari, A.**  
EPILEPSY (diagnosis)
- Jafari, Peyman**  
ACNE VULGARIS (Psychology)
- Jahantigh, M.**  
HEART DISEASES (drug effects)
- Jahed, B.**  
BLOOD TRANSFUSION, AUTOLOGOUS
- Jahromi, S.A. Torab**  
BLOOD DONORS
- Jami, Nazia**  
ECOSYSTEM
- Jangiaghdam, H.**  
CRANIOCEREBRAL TRAUMA
- Japoni, Aziz**  
CANDIDIASIS (Drug Therapy)
- Javanian, M.**  
NOCARDIA INFECTIONS
- Jihong, Chen**  
COLORECTAL NEOPLASMS (Genetics)
- Johns, E.J.**  
RECEPTORS, ADRENERGIC, ALPHA-1
- Jun, Liu**  
COLORECTAL NEOPLASMS (Genetics)
- Kabbani, A.**  
ENBUCRILATE (Adverse Effects)
- Kafi Abad, S. Amini**  
HEPATITIS B VIRUS
- Kailani, Mona**  
HEMOPHILIA A
- Kalali, A.M.**  
NOCARDIA INFECTIONS
- Kalantari, A.**  
CHROMIUM (adverse effects)
- Kale, Ahmet**  
SUPERIOR VENA CAVA SYNDROME(Diagnosis)
- Kale, Ebru**  
SUPERIOR VENA CAVA SYNDROME(Diagnosis)
- Kambal, Abdel Mageed M.**  
CORNEA (Microbiology)
- Kamha, Ahmed**  
SPLENIC RUPTURE (Etiology)
- Kara, Wafa Mohamed**  
CRYPTOSPORIDIOSIS (Epidemiology)
- Karakus, Melahat**  
VAGINAL DISEASES (Etiology)
- Kargar Moakhar, R.**  
MAREK DISEASE (diagnosis)
- Karimi Torshizi, M.A.**  
GROWTH
- Karimi, Hossein**  
PARESIS (physiopathology)  
CEREBROVASCULAR ACCIDENT(physiopathology)
- Karimi, I.**  
INFLUENZA IN BIRDS (epidemiology)  
PYELONEPHRITIS

- Kasraian, L.**  
BLOOD DONORS
- Kaymakioglu, Nihat**  
ANAL CANAL (Injuries)
- Kazemi, H.**  
MUSCLES (injuries)
- Kazemi, T.**  
HEART FAILURE, CONGESTIVE
- Kazemnejad, Anoshirvan**  
ACQUIRED IMMUNODEFICIENCY SYNDROME(Diagnosis)
- Kebriaei, A.**  
NUTRITION (education)  
PRIMARY HEALTH CARE (Standards)
- Kechia, F.A.**  
DERMATOMYCOSES (therapy)
- Keikha, Fatemeh**  
BARVOVIRUS B19, HUMAN
- Kervancioglu, Mehmet**  
ECHOCARDIOGRAPHY
- Kervancioglu, Piraye**  
ECHOCARDIOGRAPHY
- Keshvary, M.**  
URINARY CALCULI (therapy)
- Khadadah, Mousa E.**  
ASTHMA (Chemically Induced)
- Khademi, Gh.R.**  
LEAD (blood)
- Khaled, Boumediene M.**  
DIABETES MELLITUS, TYPE 2 (Blood)
- Khalid, Amina J.**  
CARCINOMA, BASAL CELL
- Khalid, Kamran**  
ABDOMEN, ACUTE (Epidemiology)
- Khalil, Ashraf A.**  
BRAIN (Metabolism)
- Khalil, Eltahir Awad G.**  
CEREBELLAR ATAXIA (Etiology)
- Khalili, Manijeh**  
HEPATITIS B (Transmission)
- Khalilian, Ali R.**  
FRACTURE FIXATION, INTRAMEDULLARY
- Khallaf, Fathy Gaber**  
CALCANEUS (Injuries)
- Khan, Ather Ali**  
HEAT
- Khan, Nasiruddin**  
MOON
- Khan, Rafeeq Alam**  
ANTITUSSIVE AGENTS
- Khan, Waseem Ahmed**  
NUMERICAL ANALYSIS, COMPUTER-ASSISTED
- Khandaghi, Reza**  
GUILLAIN-BARRE SYNDROME (Epidemiology)
- Kharabsheh, Sa'ad H.**  
ANEMIA, IRON-DEFICIENCY
- Kharabsheh, Suleiman M.**  
CORONARY DISEASE (Diagnosis)
- Khasravi, Sohila**  
HIV INFECTIONS
- Kheir, Musa M.**  
MALARIA, FALCIPARUM (Drug Therapy)
- Kheradmand, A.**  
OOCYTES  
SHEEP
- Khorshidi, A.**  
GIARDIASIS (drug therapy)
- Khosravipoor, G.**  
GENE REARRANGEMENT
- Khoury, Nabil A.**  
CURCUMA (Chemistry)
- Kiadaliri, K.**  
BLOOD TRANSFUSION, AUTOLOGOUS
- Kirca, Uzeyir**  
VAGINAL DISEASES (Etiology)
- Kojouri, Gh.A.**  
COBALT (deficiency)
- Korish, Aida A.**  
COLD
- Kose, Nezire**  
DEPRESSIVE DISORDER
- Krayem, Aymen B.**  
NAPHTHOQUINONES (Pharmacology)
- Kumar, Vijay**  
ENDOMETRIOSIS (Diagnosis)
- Kurt, Meral**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Kurul, Naciye**  
OBESITY (Blood)
- Lai, Shih Wei**  
METABOLIC SYNDROME X (Epidemiology)
- Lauenstein, Thomas C.**  
MAGNETIC RESONANCE IMAGING (Methods)
- Lin, Chih Hsueh**  
METABOLIC SYNDROME X (Epidemiology)
- Liu, Chiun Shon**  
METABOLIC SYNDROME X (Epidemiology)
- Lohoue, P.J.**  
DERMATOMYCOSES (therapy)
- Lontsi, D.**  
DERMATOMYCOSES (therapy)
- Maarefdust, Z.**  
BLOOD TRANSFUSION
- Madkour, Mona Ezzat**  
CARDIOVASCULAR DISEASES (etiology)
- Maghsudlu, M.**  
BLOOD DONORS
- Mahboudi, Fereidoun**  
ACQUIRED IMMUNODEFICIENCY SYNDROME(Diagnosis)
- Mahmoudpour, A.**  
BLOOD TRANSFUSION (adverse effects)
- Mahmodi, M.**  
LEISHMANIASIS, CUTANEOUS
- Mahmoud, A.H.**  
BASAL CELL NEVUS SYNDROME (diagnosis)
- Mahzounieh, M.R.**  
INFLUENZA IN BIRDS (epidemiology)  
PYELONEPHRITIS
- Makhlouf, Laila M.**  
SCHISTOSOMA MANSONI (Immunology)
- Maljaie, H.**  
BLOOD TRANSFUSION (adverse effects)
- Mallick, Mohammad S.**  
OMENTUM

- Mangoud, Amal M.**  
FASCIOLIASIS (Diagnosis)  
CULEX
- Mansor, Ahmad K.**  
RHEUMATIC FEVER (genetics)
- Mansouri, Majed**  
ANTIPHOSPHOLIPID SYNDROME(Complications)
- Mansouri, S.H.**  
PANCREAS (anatomy and histology)
- Manzar, Shabih**  
MAN-MACHINE SYSTEM
- MAR, Abdel Rahman**  
BASAL CELL NEVUS SYNDROME (diagnosis)
- Marchie, Tobechukwu T.**  
CERVIX UTERI (Ultrasonography)
- Mashayekh, A.**  
BLOOD TRANSFUSION, AUTOLOGOUS
- Masomi, Gh.**  
IRON
- Mazaheri, M. Amidi**  
PUBERTY
- Mazharinia, Nazila**  
ACNE VULGARIS (Psychology)
- Mehrabani, Davood**  
CANDIDIASIS (Drug Therapy)
- Mehrabi, T.**  
NURSES
- Memar, B.**  
MENINGITIS (etiology)
- Mentes, Oner**  
ANAL CANAL (Injuries)
- Mewoyeka, O.O.**  
REPRODUCTION (drug effects)
- Michel, Magad Y.**  
LEISHMANIASIS, CUTANEOUS (Immunology)
- Miri Moghaddam, Ebrahim**  
BARVOVIRUS B19, HUMAN
- Miric, Dinko**  
EAR, EXTERNAL (Anatomy and Histology)
- Mirza, Talat**  
ANTITUSSIVE AGENTS
- Mishal, Aly A.**  
BREAST FEEDING
- Modir, V.**  
NEURAL CONDUCTION
- Moghaddam Pour, M.**  
INFLUENZA IN BIRDS (prevention and control)
- Moghaddam, A.**  
BLOOD TRANSFUSION (adverse effects)
- Mohajeri, M.**  
LEISHMANIASIS, CUTANEOUS
- Mohamed, Amera H.**  
SCHISTOSOMIASIS MANSONI (Drug Therapy)
- Mohamed, Raafat T.**  
SCHISTOSOMA MANSONI (Immunology)
- Mohammad pour, A.A.**  
MECKEL DIVERTICUUM (anatomy and histology)  
BRAIN (anatomy and histology)
- Mohammad, Khairy A.**  
CULEX
- Mohammadi, M.**  
PEST CONTROL, BIOLOGICAL
- Mohammed, Ayda R.**  
MALARIA, FALCIPARUM (Drug Therapy)
- Mohebbi Fani, M.**  
MILK
- Mohri, M.**  
IRON (therapeutic use)
- Mokhtari, Z**  
GIARDIASIS (drug therapy)
- Molaei, M.M.**  
CATS (anatomy and histology)  
CRYPTOSPORIDIUM
- Momayez, R.**  
INFLUENZA IN BIRDS (prevention and control)
- Momtazmanesh, N.**  
GIARDIASIS (drug therapy)
- Momib, Mohammad El Salahy M. M.**  
AIR POLLUTION, INDOOR
- Monsavi, M.**  
MACULAR DEGENERATION (etiology)
- Morel, Y.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Morshedi, D.**  
MAREK DISEASE (diagnosis)
- Morsy, Ayman T. A.**  
FASCIOLIASIS (Diagnosis)
- Morsy, Tosson A.**  
CULEX  
ANIMALS, DOMESTIC (Parasitology)  
TRIGONELLA (Adverse Effects)
- Mortazaei, S.**  
NOISE
- Mortazavi, Y.**  
GENE REARRANGEMENT
- Moslemi, S.**  
NUTRITION (education)
- Motamedi, Gh.R.**  
PEST CONTROL, BIOLOGICAL
- Moud, Batul Sharifi**  
MYCOBACTERIUM TUBERCULOSIS
- Mousavi Orimi, Gh**  
PANCREAS (anatomy and histology)
- Mowafi, Hany A.**  
ANESTHESIA, INHALATION
- Mowla, Ashkan**  
ECHOCARDIOGRAPHY, TRANSESOPHAGEAL
- Mro, Sultan A.**  
DIABETES MELLITUS (Physiopathology)
- Mroueh, Salman**  
PULMONARY SURFACTANT-ASSOCIATEDPROTEIN B (Deficiency)
- Mugahi, Mohammad Husein**  
ANTHROPOMETRY
- Munavvar, A.S.**  
RECEPTORS, ADRENERGIC, ALPHA-1
- Muqim, Abdulaziz T.**  
ASTHMA (Chemically Induced)
- Musa, Ahmed M.**  
CEREBELLAR ATAXIA (Etiology)
- Musmar, Ayman A.**  
THYROID NEOPLASMS (Epidemiology)
- Nabavi, L.**  
BABESIA (immunology)
- Naderi, Mohammad**  
MYCOBACTERIUM TUBERCULOSIS

- Nadia, H.A.**  
BASAL CELL NEVUS SYNDROME (diagnosis)
- Naeem, Rana Khalid**  
NUMERICAL ANALYSIS, COMPUTER-ASSISTED
- Nahar, Ibrahim K.**  
ASTHMA (Chemically Induced)
- Nahid, S.**  
MILK
- Najmabadi, H.**  
GENE REARRANGEMENT
- Nasah, Mohammad H. Karimi**  
FRACTURE FIXATION, INTRAMEDULLARY
- Nassar, Ibrahim A.**  
FRACTURES, COMMINUTED (Surgery)
- Naveed, Abdul K.**  
DIABETES MELLITUS, TYPE 2 (Therapy)
- Nazem, F.**  
DIABETES MELLITUS, TYPE 1
- Nazem, Khalilollah**  
MENISCI, TIBIAL (Injuries)
- Nazer, A.H.K.**  
FOOD CONTAMINATION
- Nemati, H.**  
NEURAL CONDUCTION
- Nematollahi Mahani, S.N.**  
OOCYTES
- Nicolino, M.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Nikarfar, A.R.**  
BLOOD TRANSFUSION (adverse effects)
- Nikdoost, M.**  
EXERCISE TOLERANCE
- Nikniyaz, Alireza**  
HEALTH SERVICES
- Nikseresht, Ali Reza**  
ECHOCARDIOGRAPHY, TRANSESOPHAGEAL
- Nisar Ur Rahman**  
DILTIAZEM (Pharmacokinetics)
- Nosseir, Mona M.**  
SCHISTOSOMA MANSONI (Immunology)
- Nozadi, M.**  
NEURAL CONDUCTION
- Nusier, Mohamad**  
LUNG NEOPLASMS (Genetics)
- Oduntan, H.A.**  
TRIMETHOPRIM-SULFAMETHOXAZOLE COMBINATION
- Ogbeide, Ehimwenma**  
CERVIX UTERI (Ultrasonography)
- Oge, Ihsan**  
DIABETIC RETINOPATHY (Surgery)
- Ogoinja, Stanley Z.**  
CERVIX UTERI (Ultrasonography)
- Olaleye, S.B.**  
REPRODUCTION (drug effects)
- Oncu, Serkan**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Osonuga, O.A.**  
REPRODUCTION (drug effects)
- Otoibhi, Oisaremen E.**  
CERVIX UTERI (Ultrasonography)
- Oubaidat, Ali**  
BLOOD VESSELS (injuries)
- Oygur, Tulin**  
ODONTOGENIC CYSTS (Genetics)
- Ozbakkaloglu, Beril**  
HEPATITIS, VIRAL, HUMAN (Virology)
- Ozer, Tahir M.**  
ANAL CANAL (Injuries)
- Ozer, Zeynep C.**  
QUALITY OF LIFE
- Ozere, Mehmet**  
CHORIONIC VILLI (Pathology)
- Ozkan, Lutfi**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Ozzut, Halit**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Pamukcu, Gul**  
METHEMOGLOBINEMIA (Chemically Induced)
- Panahi, M.**  
BRUCELLOSIS (diagnosis)
- Parhizgari, Gh.**  
CRYSTALLINS
- Parizadeh, M.J.**  
LEAD (blood)
- Paziar, Faramar**  
ARTERIOVENOUS SHUNT, SURGICAL
- Philomina, D.**  
COLCHICINE (isolation and purification)
- Pilehchian Langroodi, R.**  
PEST CONTROL, BIOLOGICAL
- Poopak, B.**  
GENE REARRANGEMENT
- Porzand, H.**  
EXERCISE TOLERANCE
- Pourfathollah, A.A.**  
GENE REARRANGEMENT
- Pourzand, C.**  
GENE EXPRESSION
- Qari, Mohammed H.**  
ANTIPHOSPHOLIPID SYNDROME (Complications)
- Qarqash, Wisam**  
ANEMIA, IRON-DEFICIENCY
- Qublan, Hussein S.**  
CESAREAN SECTION, REPEAT (Adverse Effects)
- Qureshi, Muhammad Shahid**  
MOON
- Radfar, M.H**  
CRYPTOSPORIDIUM
- Radic, Mislav**  
EAR, EXTERNAL (Anatomy and Histology)
- Radwan, Mahasen A.**  
ANTIMONY (Pharmacokinetics)
- Raesolmohadesin, M.**  
LEISHMANIASIS, CUTANEOUS
- Rafatpanah, H.**  
THYROID GLAND (immunology)
- Rafighdoost, A.**  
EXERCISE TOLERANCE
- Ragab, Mohamed**  
ARTHRITIS, JUVENILE RHEUMATOID (diagnosis)
- Ragab, Shadia H.**  
MALNUTRITION (complications)
- Rahbari, S.**  
BABESIA (immunology)

- Rahimi, Jamilah S.**  
NAPHTHOQUINONES (Pharmacology)
- Rahimi, Sh.**  
GROWTH
- Rahmannejhad, H.**  
DIABETES MELLITUS, TYPE 1
- Rajab, Zadeh A.**  
BLOOD TRANSFUSION (adverse effects)
- Rajabiyoun, M.**  
ECHINOCOCCOSIS (diagnosis)
- Raji, Y.**  
REPRODUCTION (drug effects)
- Ramadan, Abdel Rahman M.A.**  
LICHEN PLANUS
- Ramahi, Mohammad**  
HEMOPHILIA A
- Ranjbar, R.**  
SEX DIFFERENTIATION
- Ranjbar, S.**  
CRYSTALLINS
- Rashdan, Nagwa A.**  
CULEX  
CULICIDAE  
CULEX  
CULEX
- Rashidi, Homeira**  
HEPATITIS B (Transmission)
- Raslan, H.**  
LUPUS ERYTHEMATOSUS, SYSTEMIC
- Rasmy, Hanaa**  
LUPUS ERYTHEMATOSUS, SYSTEMIC
- Ravanshad, Mehrdad**  
ACQUIRED IMMUNODEFICIENCY SYNDROME(Diagnosis)
- Razi, Muhammad S.**  
DIABETES MELLITUS, TYPE 2 (Therapy)
- Refae, Hesham H.**  
ARTHRITIS (Surgery)
- Riera, Cristina**  
SALIVA (Chemistry)
- Rokni, F.**  
NOCARDIA INFECTIONS  
MENINGITIS (etiology)
- Roohvand, F.**  
HEPATITIS C ANTIGENS
- Rostami, A.**  
CATS (anatomy and histology)
- Rostom, Yousry A.**  
SNAILS (Radiation Effects)
- Roupe, Kathryn A.**  
COLITIS
- Rowley, D.**  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)  
ARTHROPLASTY, REPLACEMENT, HIP(Adverse Effects)
- Saad, Rania M.**  
SCHISTOSOMA MANSONI (Immunology)
- Sabahi, Farzaneh**  
ACQUIRED IMMUNODEFICIENCY SYNDROME(Diagnosis)
- Saberivand, A.**  
GENITALIA, FEMALE (abnormalities)
- Sabetian, R.**  
DIABETES MELLITUS, TYPE 1
- Sadat, S.M.**  
HEPATITIS C ANTIGENS
- Sadeghi Bazargani, Homayoun**  
HEALTH SERVICES
- Sadeghi, M.R.**  
MAREK DISEASE (diagnosis)
- Sadri, Gh.**  
IRON
- Sadrudin, Shireen**  
ANTITUSSIVE AGENTS
- Sageheb, Hamid Reza**  
ANTHROPOMETRY
- Sahin, Izzet**  
ECHINOCOCCOSIS (Epidemiology)
- Said, Doaa E.**  
LEISHMANIASIS, CUTANEOUS (Immunology)  
SNAILS (Radiation Effects)
- Sajjadi, Majid**  
FRACTURE FIXATION, INTRAMEDULLARY
- Sakati, Nadia A.**  
DIABETES MELLITUS, TYPE 1 (Drug Therapy)
- Sakery, M.T.**  
LEISHMANIASIS, CUTANEOUS
- Sakr, Mamdouh, R.**  
MALNUTRITION (complications)
- Sakru, Nermin**  
VAGINAL DISEASES (Etiology)
- Salahi, R.**  
ECHOCARDIOGRAPHY, TRANSESOPHAGEAL
- Saleem, Mohd M.**  
INTESTINAL OBSTRUCTION (Etiology)
- Salehi Tabar, R.**  
MAREK DISEASE (diagnosis)
- Salehi, Masoud**  
TUBERCULOSIS (diagnosis)  
HIV INFECTIONS
- Saliman, Belal A.**  
PHLEBOTOMUS
- Samadi, Nasrin**  
MENINGIOMA (Pathology)
- Samdani, Azam**  
CALCINOSIS (Etiology)
- Samiei, Sh.**  
HEPATITIS B VIRUS
- Samini, F.**  
INTRACEREBRAL HEMORRHAGE (etiology)  
CAUDA EQUINA (pathology)
- Samman, Yaseen S.**  
NAPHTHOQUINONES (Pharmacology)
- Sanad, Magda M.**  
HYMENOLEPIASIS (Drug Therapy)
- Sanei Moghaddam, Esmail**  
HIV INFECTIONS  
HEPATITIS B (Transmission)
- Sanlidag, Tamer**  
HEPATITIS, VIRAL, HUMAN (Virology)
- Sardari, K.**  
MUSCLES (injuries)
- Sarhaddi, Parviz**  
TUBERCULOSIS (diagnosis)
- Sari, A. Esmaeili**  
AIR POLLUTION
- Sarrafzadeh Rezaei, F.**  
SURGICAL WOUND INFECTION
- Sarrafzadeh, F.**  
IRON (therapeutic use)

- Sasmaz, Sezai**  
MELANOMA, AMELANOTIC (Diagnosis)
- Savadkouhi, Fariba**  
TUBERCULOSIS (diagnosis)
- Sedaghat, M.R.**  
MACULAR DEGENERATION (etiology)
- Seif El Nasr, Mohamed S.**  
FASCIOLIASIS (Diagnosis)
- Seifi, H.A.**  
IRON (therapeutic use)
- Seraihy, Amal**  
LUPUS ERYTHEMATOSUS, SYSTEMIC(Etiology)
- Serwah, Abd El Hamid A.**  
SCHISTOSOMA MANSONI (Immunology)
- Settin, Ahmad A.**  
RHEUMATIC FEVER (genetics)
- Seyfiabad Shapouri, M.R.**  
BABESIA (immunology)
- Shaaban, Lamia A.**  
FETAL DEATH
- Shaban, A. O.**  
CRYPTOSPORIDIOSIS (Epidemiology)
- Shafiei, A.**  
IRON
- Shagholian, M.**  
PYELONEPHRITIS
- Shah, Fayaz A.**  
DIABETES MELLITUS (Physiopathology)
- Shahgholi, E.**  
GENE REARRANGEMENT
- Shaiegan, M.**  
HEPATITIS B VIRUS
- Shaikh, Shaffi**  
SLEEP
- Shamad, Mahdi**  
PERIODICALS
- Shamad, Mahdi M.A.**  
DRUG HYPERSENSITIVITY
- Shamsian, A.K.**  
LEISHMANIASIS, CUTANEOUS
- Sharaf, E.A.E.A.**  
NITRIC OXIDE (blood)
- Shariat, Hamid**  
ECHOCARDIOGRAPHY, TRANSESOPHAGEAL
- Shariati, A.**  
SURGICAL WOUND INFECTION
- Sharifi Mood, Batool**  
TUBERCULOSIS (diagnosis)  
HIV INFECTIONS  
BARVOVIRUS B19, HUMAN  
HEPATITIS B (Transmission)
- Sharifi, Sh.**  
BLOOD TRANSFUSION
- Sharquie, Khalifa E.**  
ACNE VULGARIS (Drug Therapy)
- Shehab, Diaa K.**  
ASTHMA (Chemically Induced)
- Shekarforoush, S.S.**  
MILK
- Shishani, Kawkab**  
AIR POLLUTION
- Shojaei, B.**  
CATS (anatomy and histology)
- Shomaf, Maha S.**  
THYROID NEOPLASMS (Epidemiology)
- Shooshtari, M. Mahmoodian**  
BLOOD DONORS
- Shoukry, Nahla M.**  
INTESTINAL DISEASES, PARASITIC  
RODENT DISEASES (Parasitology)  
PHLEBOTOMUS
- Shugaba, A.I.**  
APPENDIX (anatomy and histology)
- Shzkery, M.T.**  
THYROID GLAND (immunology)
- Sibiany, Abdulrahman**  
ANTIPHOSPHOLIPID SYNDROME(Complications)
- Siddiqui, Ahsan K.**  
ANESTHESIA, INHALATION
- Simsek, Abdulrahman**  
ANAL CANAL (Injuries)
- Singh, S.P.**  
APPENDIX (anatomy and histology)
- Siraj O. Wali**  
NAPHTHOQUINONES (Pharmacology)
- Smith, Sylvia B.**  
DIABETIC RETINOPATHY (PhysioPathology)
- Sohrabi, Bahram**  
EXERCISE TEST
- Solaymani, M.**  
MYCOBACTERIUM PARATUBERCULOSIS
- Soleimani, F.**  
BLOOD TRANSFUSION (adverse effects)
- Solliemani, H.**  
AGED
- Soliman, Belal A.**  
RODENT DISEASES (Parasitology)
- Soliman, Mohamed E.**  
AIR POLLUTION, INDOOR
- Sroujeh, Ahmad S.**  
THYROID NEOPLASMS (Epidemiology)
- Subhash, Rema**  
STEVIA
- Suliman, M. Taifour**  
EPIDERMAL NECROLYSIS, TOXIC
- Syed, Naeem Ahmed**  
HEAT
- Tabatabaie, S.M.**  
BLOOD TRANSFUSION
- Tabrizi, Djafarsadegh**  
HEALTH SERVICES
- Tadhani, Manish**  
STEVIA
- Taghari, M.**  
THYROID GLAND (immunology)
- Taghavi, A.**  
GIARDIASIS (drug therapy)
- Taghavi, R.**  
URINARY CALCULI (therapy)
- Taghikhani, A.**  
CRANIOCEREBRAL TRAUMA
- Tahat, Yousef**  
CESAREAN SECTION, REPEAT (AdverseEffects)
- Talaiezhadeh, Abdolhassan**  
ARTERIOVENOUS SHUNT, SURGICAL

- Talari, M.R.**  
GIARDIASIS (drug therapy)
- Talari, S.A.**  
GIARDIASIS (drug therapy)
- Talebian, A.**  
GIARDIASIS (drug therapy)  
HEPATITIS B VIRUS
- Talebkhan Garoussi, M.**  
LEPTOSPIROSIS
- Tangmouo, J.G.**  
DERMATOMYCOSES (therapy)
- Tarabadi, F.A.**  
HEPATITIS B VIRUS
- Tarawneh, Musleh S.**  
THYROID NEOPLASMS (Epidemiology)
- Tardy, V.**  
ADRENAL HYPERPLASIA, CONGENITAL
- Tavakool Afshari, J.**  
ECHINOCOCCOSIS (diagnosis)
- Tavana, Mehrabi A.**  
CHOLERA (etiology)
- Tayebi, L.**  
AIR POLLUTION
- Tayebi, N.**  
MENINGITIS (etiology)
- Teng, Xiao Wei**  
COLITIS
- Tirani, M.**  
IRON
- Torabi, S.**  
BLOOD TRANSFUSION (adverse effects)
- Tufan, Turgut**  
ANAL CANAL (Injuries)
- Tuncer, Cudi M.**  
ECHOCARDIOGRAPHY
- Turan Ozdemir, Senem**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Tyrrell, R.M.**  
GENE EXPRESSION
- Ul Haq, Rizwan**  
ANTITUSSIVE AGENTS
- Umar, M.B.T.**  
APPENDIX (anatomy and histology)
- Uppal, Singh S.**  
ASTHMA (Chemically Induced)
- Usama, A.M.**  
BASAL CELL NEVUS SYNDROME (diagnosis)
- Uz Zaman, Rifat**  
HEPATITIS C (epidemiology)
- Vajhi, A.**  
CATS (anatomy and histology)
- Varess, Bela**  
MADURELLA
- Varjabedian, Kahar Garo**  
NEMATODA (Ultrastructure)
- Vosough, P.**  
GENE REARRANGEMENT
- Vseghi, T.**  
THIOSULFATE SULFURTRANSFERASE
- Wahba, Mahmoud**  
SALIVA (Chemistry)
- Wahib, Ali A.**  
FASCIOLIASIS (Diagnosis)
- Waked, Emam**  
CARDIOVASCULAR DISEASES (etiology)
- Wazir, Javed F.**  
PNEUMOCYSTIS CARINII (Ultrastructure)
- Woei, Wong Jia**  
DILTIAZEM (Pharmacokinetics)
- Yaesh, Suhad**  
ADRENAL HYPERPLASIA, CONGENITAL
- Yagci, Gokhan**  
ANAL CANAL (Injuries)
- Yahyavi, S.H.**  
GENE REARRANGEMENT
- Yaman, Ozan**  
ECHINOCOCCOSIS (Epidemiology)
- Yanez, Jaime A.**  
COLITIS
- Yazar, Suleyman**  
ECHINOCOCCOSIS (Epidemiology)
- Yazdchi, Mohammad**  
GUILLAIN-BARRE SYNDROME (Epidemiology)
- Yeboah, Edward A.**  
CORNEA (Microbiology)
- Yenilmez, Engin**  
CHORIONIC VILLI (Pathology)
- Yerci, Omer**  
CARCINOMA, SIGNET RING CELL (Pathology)
- Yildirim, Ayse**  
VENTILATORS, MECHANICAL (Adverse Effects)
- Yilmaz, Ayse**  
MUSCULOSKELETAL DISEASES (etiology)
- Younes, Khaled**  
KIDNEY FAILURE, CHRONIC (blood)  
CARDIOVASCULAR DISEASES (etiology)
- Younes, Nidal A.**  
THYROID NEOPLASMS (Epidemiology)
- Yousefbaigi, Gh.**  
SURGICAL WOUND INFECTION
- Yousefi Mashouf, Rasoul**  
BURNS (epidemiology)
- Yucetas, Sule**  
ODONTOGENIC CYSTS (Genetics)
- Yuen, K.H.**  
DILTIAZEM (Pharmacokinetics)
- Yulkug, Esin**  
CHORIONIC VILLI (Pathology)
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