# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



# **IMEMR Current Contents**

March 2010 Vol. 9 No. 1



ISSN: 2071-2510

Health Publications, Production & Dissemination Library & Health Literature Services

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

# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts

# **IMEMR** Current Contents

March 2010

Vol. 9 No. 1

# **Table of Contents**

ıbject Index	
Abdomen, Acute	1
Alkaline Phosphatase	1
Allergy and Immunology	1
alpha-Tocopherol	
Anemia	
Anemia, Sickle Cell	
Anesthesia, Spinal	
Animals, Domestic	
Anthropometry	
Anxiety	
Arteriovenous Malformations	
Arthritis, Infectious	
Ascites	
Asparaginase	
Aspergillosis	
Asthma	
Bacillus	
Bacillus thuringiensis	
Bell Palsy	
Benzoquinones	
beta-Thalassemia	
Biomedical Research	
Biomphlaria	
Blood Pressure	
Bone Substitutes	
Bottle Feeding	
Brain Abscess	
Brain Neoplasms	
Breast Neoplasms	
Breast Self-Examination	
Burning Mouth Syndrome	
Candidiasis, Chronic Mucocutaneous	
Carboxylic Ester Hydrolases	
Carcinoid Tumor	
Carcinoma, Acinar Cell	
Carcinoma, Ehrlich Tumor	
Carcinoma, Non-Small-Cell Lung	
Career Choice	
Carnitine	
Caseins	
Catha	
Catheterization, Central Venous	
Cell Physiological Phenomena	
Cerebellar Diseases	
Cerebral Hemorrhage	
Cerebral Palsy	
Cerebrospinal Fluid Shunts	16
Cesarean Section	
Chickens	
Child Abuse	
Chlamydia trachomatis	
Chromium Compounds	

Circumcision, Female	
Clarithromycin	
Clotrimazole	
Composite Resins	
Coronary Disease	20
Corynebacterium	
Cucumovirus	20
Cyclooxygenase Inhibitors	21
Dairy Products	21
Dental Implantation	22
Dental Implants Dental Veneers	
Depression	23
Depression, Postpartum	
Depth Perception Dermatitis, Atopic	
Dermalitis, Alopic	
Diabetes Mellitus	
Diabetes Mellitus, Type 1	25
Diabetes Mellitus, Type 2	25
Diabetes Meinus, Type 2	20
Diabetic 1 out	20
Diabetic Retinopathy	20
Diarrhea, Infantile	
Disabled Persons	28
Disinfection	
DNA	
Drug Toxicity	
Duodenum	
Dyslipidemias	
Dyspepsia	
Echinacea	
Education, Medical	
Education, Medical, Continuing	
Education, Medical, Undergraduate	31
Education, Nursing	32
Eggs	33
Electroencephalography	33
Electrolytes	
Endometriosis	33
Endosonography	34
Epilepsy	34
Factor V	35
Family Practice	
Fasciitis, Necrotizing	
Fasting	
Feces	35
Fingersucking	
Foreign Bodies	36
Forensic Dentistry	
Gastric Antral Vascular Ectasia	
Geniculate Bodies	
Genital Diseases, Female	
Gitelman Syndrome	
Guillain-Barre Syndrome	
Habits	
Hand Injuries	
Health Knowledge, Attitudes, Practice	
Health Promotion	
Heart Defects, Congenital	
Heart Diseases	39

Heart Neoplasms	.40
Helicobacter Infections	
Hematoma, Epidural, Cranial	.40
Hemosiderosis	
Hepatitis B	
Hepatitis B Vaccines	.41
Hepatitis, Autoimmune	
Hepatolenticular Degeneration	
Hernia, Diaphragmatic	
History of Medicine	
HIV Infections	
Hodgkin Disease	
Homocysteine	
Hypertension	
Hyperthyroidism	
Hypoplastic Left Heart Syndrome	15
Indomethacin	
Infertility, Male	
Injections	
Intercellular Signaling Peptides and Proteins	40
Intercential Signaling Peptides and Proteins	.40
Intracranial Aneurysm	
Job Satisfaction	
Ketogenic Diet	
Klebsiella Infections	
Labor, Induced	
Lasers, Solid-State	
Learning	
Leishmaniasis, Cutaneous	
Leukemia, Myelogenous, Chronic, BCR-ABL Positive	.49
Lipoprotein [a]	
Liver Neoplasms	.50
Liver Transplantation	.50
Lupus Erythematosus, Systemic	.51
Lycopersicon esculentum	.51
Lymphatic Diseases	.52
Lymphoma, Mantle-Cell	
Lymphoma, Non-Hodgkin	.52
Mammography	
Medication Errors	53
Medroxyprogesterone 17-Acetate	53
Meningitis	54
Meningococcal Infections	51
Meningococcal infections	
Menopause Mental Health Services	
Metabolic Syndrome X	
Metformin	
Methicillin-Resistant Staphylocaccus aureus	
Methylenetetrahydrofolate Reductase NADPH2	
Micronutrients	
Midazolam	-
Milk	
Misoprostol	
Models, Nursing	
Mouth Neoplasms	
Moyamoya Disease	
Multiple Myeloma	
Myasthenia Gravis	59
Myelitis, Transverse Myocardial Infarction	.60 .60
	.60 .60

National Health Programs	60
Natural Cytotoxicity Triggering Receptor 2	61
Neoplasms	61
Nerve Fibers, Myelinated	61
Neuronal Migration Disorders	62
Neurotransmitter Agents	62
Nocturnal Enuresis	62
Nurses	63
Nursing Education Research	63
Nursing Faculty Practice	
Occlusal Adjustment	64
Oculomotor Nerve	64
Odontogenic Cyst, Calcifying	
Oral Hygiene	
Orthodontics	
Oryza sativa	
Osteitis Deformans	
Osteoporosis, Postmenopausal	
Oxidative Stress	
Paranasal Sinus Diseases	00
Patient Rights	
Pefloxacin	
Pemphigoid Gestationis	
Penile Diseases	
Peptides, Cyclic	00
Peripheral Blood Stem Cell Transplantation	68
Pituitary Gland	
Plant Oils	
Pneumatosis Cystoides Intestinalis	
Pneumonia, Ventilator-Associated	70
Pneumothorax	70
POEMS Syndrome	
Polyradiculoneuropathy	71
Polyradiculoneuropathy Porphyria, Erythropoietic	71 71
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care	71 71 71
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance	71 71 71 72
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia	71 71 71 72 72
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy	71 71 71 72 72 72
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Pregnancy	71 71 72 72 72 72 73
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning	71 71 72 72 72 72 73 74
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Propofol	71 71 72 72 72 72 73 74 74
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Propofol Prostate-Specific Antigen	71 71 72 72 72 72 73 74 74 74
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales	71 71 72 72 72 73 74 74 74 74
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health	71 71 72 72 72 72 73 74 74 74 75 75
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery	71 71 72 72 72 72 73 74 74 74 75 75 75
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive	71 71 72 72 72 73 74 74 74 75 75 75 76
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery	71 71 72 72 72 73 74 74 74 75 75 75 76
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive	71 71 72 72 72 72 72 72
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura	71 71 72 72 72 73 74 74 74 75 75 75 76 76 76
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura Radial Artery	71 71 72 72 72 74 74 74 75 75 75 76 76 77
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations. Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales. Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura Radial Artery Referral and Consultation Renal Dialysis	71 71 72 72 72 74 74 74 75 75 75 76 76 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura Radial Artery Referral and Consultation Renal Dialysis	71 71 72 72 72 72 73 74 74 75 75 75 76 76 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura Radial Artery Referral and Consultation Referral and Consultation Respiratory Paralysis Role Playing	71 71 72 72 72 72 73 74 74 74 75 75 75 76 76 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia	71 71 71 72 72 72 73 74 74 75 75 76 76 76 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic	71 71 71 72 72 72 73 74 74 75 75 76 76 77 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic	71 71 72 72 72 72 73 74 74 74 75 75 76 76 77 77 77 77 77 77 78 78 78
Polyradiculoneuropathy	71 71 71 72 72 72 72 73 74 74 74 75 75 75 76 77 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic	71 71 72 72 72 73 74 74 75 76 76 77 77 77 77 77 77 77 78 78 78 79 79 79
Polyradiculoneuropathy	71 71 72 72 72 73 74 74 74 75 76 76 77 77 77 77 77
Polyradiculoneuropathy Porphyria, Erythropoietic Postnatal Care Postural Balance Pre-Eclampsia Pre-Eclampsia Pregnancy Premarital Examinations Problem-Based Learning Propofol Prostate-Specific Antigen Psychiatric Status Rating Scales Public Health Pulmonary Artery Pulmonary Artery Pulmonary Disease, Chronic Obstructive Purpura Radial Artery Referral and Consultation Respiratory Paralysis Respiratory Paralysis Role Playing Soto Canal Therapy Safety Management Salvia School Admission Criteria Schools, Medical Self Mutilation Seminoma	71 71 71 72 72 72 73 74 74 75 75 76 77 77 77 77 77
Polyradiculoneuropathy	71 71 71 72 72 72 73 74 74 74 75 75 75 76 76 77 77 77

Splenosis	
Staphylococcal Vaccines	
Stomach Neoplasms	
Thoracic Injuries	
Thyyrotoxicosis	
Торассо	
Tocotrienols	
Tonsillectomy	
Tooth Bleaching	
Tooth Erosion	
Triticum	
Tuberculosis	
Tuberculosis, Endocrine	
Tuberculosis, Multidrug-Resistant	86
Tuberculosis, Pulmonary	
Urethral Obstruction	
Varicocele	
Vascular Resistance	
Violence	-
von Willebrand Factor	
Waist Circumference	
Water	
Wounds and Injuries	
Yoghurt	
Appendix I: Author Index	
Appendix I: Author Index	
Appendix II: List of EMR Journals Indexed in IMEMR (by country)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country)	<b>115</b>
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) LEBANON (9)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6) MOROCCO (6)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6) MOROCCO (6)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6) MOROCCO (6) OMAN (3)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) LUBYAN ARAB JAMAHIRYA (6) MOROCCO (6) OMAN (3) PAKISTAN (67) PALESTINE (3)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6). MOROCCO (6). OMAN (3) PAKISTAN (67) PALESTINE (3) QATAR (4).	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) KUWAIT (4) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6) MOROCCO (6) OMAN (3) PAKISTAN (67) PALESTINE (3) QATAR (4) SAUDI ARABIA (27)	115 117 117 122 123 128 128 128 128 128 129 129 129 129 129 129 129 129
Appendix II: List of EMR Journals Indexed in IMEMR (by country)   BAHRAIN (3)   EGYPT (130)   IRAQ (29)   ISLAMIC REPUBLIC OF IRAN (136)   JORDAN (9)   KUWAIT (4)   LEBANON (9)   LIBYAN ARAB JAMAHIRYA (6)   MOROCCO (6)   OMAN (3)   PAKISTAN (67)   PALESTINE (3)   QATAR (4)   SAUDI ARABIA (27)   SUDAN (9)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country) BAHRAIN (3) EGYPT (130) IRAQ (29) ISLAMIC REPUBLIC OF IRAN (136) JORDAN (9) LEBANON (9) LIBYAN ARAB JAMAHIRYA (6) MOROCCO (6) OMAN (3) PAKISTAN (67) PALESTINE (3) QATAR (4) SAUDI ARABIA (27) SUDAN (9) SYRIAN ARAB REPUBLIC (10)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country)   BAHRAIN (3)   EGYPT (130)   IRAQ (29)   ISLAMIC REPUBLIC OF IRAN (136)   JORDAN (9)   KUWAIT (4)   LEBANON (9)   LIBYAN ARAB JAMAHIRYA (6)   MOROCCO (6)   OMAN (3)   PAKISTAN (67)   PALESTINE (3)   QATAR (4)   SAUDI ARABIA (27)   SUDAN (9)   SYRIAN ARAB REPUBLIC (10)   TUNISIA (9)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country)   BAHRAIN (3)   EGYPT (130)   IRAQ (29)   ISLAMIC REPUBLIC OF IRAN (136)   JORDAN (9)   KUWAIT (4)   LEBANON (9)   LIBYAN ARAB JAMAHIRYA (6)   MOROCCO (6)   OMAN (3)   PAKISTAN (67)   PALESTINE (3)   QATAR (4)   SAUDI ARABIA (27)   SUDAN (9)   UNISIA (9)   UNITED ARAB EMIRATES (3)	
Appendix II: List of EMR Journals Indexed in IMEMR (by country)   BAHRAIN (3)   EGYPT (130)   IRAQ (29)   ISLAMIC REPUBLIC OF IRAN (136)   JORDAN (9)   KUWAIT (4)   LEBANON (9)   LIBYAN ARAB JAMAHIRYA (6)   MOROCCO (6)   OMAN (3)   PAKISTAN (67)   PALESTINE (3)   QATAR (4)   SAUDI ARABIA (27)   SUDAN (9)   SYRIAN ARAB REPUBLIC (10)   TUNISIA (9)	

# **IMEMR** Current Contents

# Rationale

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

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

# Scope and Coverage

The **IMEMR Current Contents** is issued on a quarterly basis including the most recent 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 Subject Index

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

# Author Index

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

# List of EMR Journals by Country

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

# List of EMR Journals by Title

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

# **Computer facilities**

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

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

# Availability of photocopies

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

# Availability on the Internet

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

Antibodies, Antinuclear> Main Subject Heading	
immunology — Subheading	
<i>Title</i> ↑ Evaluation of anti-DS DNA antibodies in anti-nuclear antibody positive Omani patients.	
Alnaqdy, Adel; Al Busaidy, Juma; Hassan, Batool	
E-mail:aalwan@squ.edu.om	
Sultan Qaboos University - College of Medicine and Health Sciences - Department of Microbiology and Immunology	
Pakistan Journal of Medical Sciences 2007; 23 (2): 211-215 (22 ref.) First author's affiliation First author's affiliation No. of References Journal Title Pages Issue Descriptors Keywords: Arthritis, Rheumatoid-diagnosis; Lupus Erythematosus, Systemic-diagnosis; Enzyme-Linked Immunosorbent Assay; Crithidia; Fluorescent Antibody Technique	
Abstract	
$\uparrow$	
<b>Abstract:</b> To study the correlation between enzyme linked Immunosorbent assay [ELISA] and immunofluoresencent [IF] anti-dsDNA antibody measurement in different diseases. One hundred and forty sera from patients with systemic lupus erythematosus [SLE, n=40], rheumatoid arthritis [RA, n=30], disease control [n=40] and from healthy control subjects [n=30] were included. Using the ELISA, serum anti-dsDNA was detected in 24/40 [60%] SLE, 5/30 [16.6%] RA, 9/40 [22.5%] disease controls and 1/30 [3.3%] of normal healthy controls. When IF assay was employed, anti-ds DNA antibodies were detected in 16/40 [40%] SLE, 3/30 [10%] RA, 5/40 [12.5%] disease controls but none in the normal subjects. These results suggest that both ELISA and IF techniques can be used for the measurement of anti-ds DNA antibodies in clinical laboratories and, these antibodies are not unique to SLE.	

Figure (1): Sample of IMEMR citation

Subject Index

# Abdomen, Acute

#### diagnosis

#### Acute abdomen at El Obeid Hospital, Western Sudan.

Doumi, El Bushra Ahmed; Mohammed, Mohammed Ibrahim E-mail:elbushradoumi@hotmail.com

University of Kordofan - Faculty of Medicine and Health Sciences

Sudan Journal of Medical Sciences 2009; 4 (2): 137-140 (25 ref.)

Keywords: Abdomen, Acute-etiology; Abdomen, Acute-therapy; Treatment Outcome; Prospective Studies; Abdominal Pain; Appendicitis; Intestinal Obstruction; Duodenal Ulcer; Hernia; Cholecystitis

Abstract: Acute abdominal pain is the presenting complaint in emergency departments of all hospitals worldwide, resulting in a huge drain of human and non-human resources. To study the pattern, causes and management outcomes of patients presenting with acute abdomen to El Obeid Hospital, Western Sudan. This was a prospective study. All patients who presented with acute abdomen to tel Obeid Hospital, Western Sudan. This was a prospective study. All patients who presented with acute abdomen to tel University Surgical Unit at El Obeid Hospital between January 1999 and December 2000 were included. The patient characteristics, clinical features, investigations, management and postoperative care were recorded in a pre-designed sheet. There were 421 patients. 242 were males [57.5%]. Acute appendicitis was the commonest cause accounting for 63% of the patients, followed by acute intestinal obstruction 20.4% and abdominal trauma 11.6%. One third of the patients with acute appendicitis reported with complications. The majority of acute intestinal obstruction cases were due to obstructed and/or strangulated hernia. Acute Cholecystitis and perforated duodenal ulcers were not common. Perforated typhoid ulcers and tuberculosis peritonitis were less frequent but had high mortality. The overall mortality was 8.5% and those deaths occurred mostly in patients presenting late with generalized peritonitis. Acute abdomen was a common surgical emergency at El Obeid Hospital, Western Sudan. The leading causes were acute appendicitis, acute intestinal obstruction and abdominal trauma. Awareness of the seriousness of the condition and better hospital facilities and care may reduce an unacceptable high mortality.

# Alkaline Phosphatase

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

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

E-mail:Lumallaf1971@yahoo.com

University of Mousl - Histology and Embryology - Department of Anatomy

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

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

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

# Allergy and Immunology

### education

Requirements for physician competencies in allergy: key clinical competencies appropriate for the care of patients with allergic orimmunologic diseases A position statement of the World Allergy Organization.

Kaliner, Michael A.; Del Giacco, Sergio; Crisci, Carlos D.; Frew, Anthony J.; Liu, Guanghui; Maspero, Jorge; Moon, Hee Bom; Nakagawa, Takemasa; Potter, Paul C.; Rosenwasser, Lanny J.

Egyptian Journal of Pediatric Allergy and Immunology [The] 2009; 7 (1): 33-38 (17 ref.)

**Keywords:** Physicians; Knowledge; Professional Competence; Patient Care; Schools, Medical; Immunoglobulin E; Hypersensitivity; Clinical Competence; Attitude

# alpha-Tocopherol

#### pharmacology

# Biochemical study to study the effect of alpha-tocopherol on the glycemic profile in streptozotocin induced diabetic rats.

Mehboob, Khadija; Naveed, Abdul Khaliq; Mehboob, Zara; Ahmed, Ejaz

Army Medical College - Demonstrator Department of Biochemistry and Molecular Biology

Medical Forum Monthly 2009; 20 (1): 9-13 (18 ref.)

Keywords: Blood Glucose; Streptozocin; Diabetes Mellitus, Experimental; Hypoglycemic Agents; Antioxidants; Rats, Sprague-Dawley

Abstract: This study was aimed to assess the anti-hyperglycemic effects of alpha-tocopherol. We assessed the hypothesis that administration of exogenous antioxidant alpha-tocopherol can restore a more balanced glucose homeostasis. The objective of the study was to evaluate the anti-hyperglycemic activity of Alpha-tocopherol in Streptozotocin induced diabetic rats. Albino rats of Sprague Dawley variety were divided into 3 groups of 30 each. Group-1 was the control group which was neither diabetic nor was provided with alpha-tocopherol, group-2 served as the diabetic control, which was made diabetic by an intraperitoneal injection of Streptozotocin but was fed with usual rodent feed while group-3 was the experimental group which was both diabetic and was also treated with alpha-tocopherol produced a significant reduction in FBG in the STZ induced diabetic rats.

# Anemia

### complications

#### The effect of maternal anemia on anthropometric measurements of newborns.

Telatar, Benin; Comert, Serdar; Vitrinel, Ayca; Erginoz, Ethem; Akin, Yasemin

Cerrahpasa Medical Faculty - Departments of Family Medicine and Pediatrics

Saudi Medical Journal 2009; 30 (3): 409-412 (12 ref.)

**Keywords:** Anemia-epidemiology; Pregnancy Complications, Hematologic; Fetal Weight; Hemoglobins; Anthropology; Cross-Sectional Studies; Prospective Studies

Abstract: To evaluate the relation between maternal prenatal hemoglobin concentration and neonatal anthropometric measurements. All pregnant women who gave birth at the Obstetrics Department of Dr. LK Kartal Training and Research Hospital, Istanbul, Turkey, from January 1, 2005 to December 31, 2006, and their newborns were included in this prospective, cross-sectional study. The newborns' weight, height, head, and chest circumference were recorded. Mothers with hemoglobin concentration less than 11 g/dl were evaluated as anemic. The anemic mothers were then grouped into 3 categories according to the corresponding hemoglobin concentration: mild [10.9-9.0 g/d]], moderate [8.9-7.0 g/d]], and severe anemic [less than 7 g/d]]. The anthropometric measurements of newborns from non-anemic and anemic mother groups were compared. Of the 3688 pregnant women, 1588 [43%] were found to be anemic. Among the anemic mothers, 1245 had mild [78.5%], 311 had moderate [19.5%], and 32 [2%] had severe anemia. The anthropometric measurements [height, weight, head and chest circumference] of newborns of anemic and non-anemic mother groups showed a statistically significant difference [p=0.036, p=0.044, p=0.013, and p=0.002]. There was a statistically significant difference in height, weight, and chest circumference of newborns of severe anemic and mild anemic mothers [p=0.017, p=0.008 and p=0.02]. The height [1.1 cm], weight [260 g], head [0.42 cm], and chest [1 cm] circumference of neonates in the severe anemic group is less than the mild anemic group. Anemia during pregnancy affect the anthropometric measurements of a newborn. Severe anemia had significant negative effect on neonatal anthropometric measurements.

# Anemia, Sickle Cell

### epidemiology

# The prevalence of sickle cell anemia in Saudi children and adolescents. A community-based survey.

Al Qurashi, Mansour M.; Al Mendalawi, Mahmood D. Ministry of Health - Al Yamama Hospital Saudi Medical Journal 2009; 30 (3): 452 (5 ref.) Keywords: Prevalence; Neonatal Screening; Child; Adolescent

# Anesthesia, Spinal

#### adverse effects

Spinal hematoma as a result of spinal anesthesia for cesarean section.

Erk, Gulcan; Taspinar, Vildan; Akay, Melih; Gokcil, Zeki

E-mail:gulcanerk@hotmail.com Ankara Numune Training and Research State Hospital - Department of Anesthesiology Neurosciences 2009; 14 (2): 182-183 (5 ref.) Keywords: Hematoma, Subdural, Spinal; Neurologic Manifestations; Cesarean Section; Bupivacaine-therapeutic use; Methylprednisolone-therapeutic use; Magnetic Resonance Imaging; Anesthesia, Conduction

# Animals, Domestic

Lipoprotein Ibpase mRNA expression in different tissues of farm animals.

El Kattawy, Azza M.; El Shazly, Samir A.; KAhilo, Khatid A.; Hassan, Ibrahim F.; Abo Zeid, Tarek

Kafrel Sheikh University - Faculty of Vet. Med - Department of Biochemistry

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 107-116 (16 ref.)

Keywords: Lipoprotein Lipase-genetics; Cattle; Triglycerides-blood; Adipose Tissue; Testis; Heart; Liver; Polymerase Chain Reaction; Electrophoresis, Agarose Gel; RNA, Messenger

Abstract: Lipoprotein lipase [LPL] controls triacylglycerol partitioning between adipose tissues and muscles, so it is important enzyme for fattening of animals. The present work was planned to clarify the use of polymerase chain reaction [PCR] for detection of LPL mRNA expression in different tissues representing internal organs of male Friesian cows. The obtained results revealed that, LPL mRNA was expressed in all tested tissues, and the highest expression was encountered in testis [1.03]. The expression in heart, liver, kidney, adrenal gland, spleen were 0.92, 0.77, 0.76, 0.73, and 0.70 respectively. The lowest expression was found in adipose tissue [0.64]. It could be concluded from the present study that, expression of LPL mRNA differs according to the type of tissue. The highest expression was found in testis which may confirm the role of LPL in the process of spermatogenesis.

# Anthropometry

#### Anthropometric measurements of term neonates from a state hospital in Turkey.

Telatar, B.; Comert, S.; Vitrinel, A.; Erginoz, E.

Dr Lutfi Kirdar Kartal Education and Research Hospital - Department of Paediatrics

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1412-1419 (13 ref.)

Keywords: Term Birth; Infant, Newborn; Birth Weight; Reference Values; Cross-Sectional Studies; Body Weight

Abstract: To determine regional percentile values and compare them with currently used national and international curves, we determined the birth weight, height and head and chest circumference of 3688 term neonates born in a state hospital in the Anatolian part of Istanbul, Turkey. Mean birth weight, height and head and chest circumference were 3334 [SD 494] g, 48.3 [SD 2.2] cm, 34.4 [SD 1.3] cm and 32.8 [1.9] cm respectively. For both boys and girls, the current Turkish national percentile curves overestimate the birth weight, height and head circumference at the 10[th] percentile. For boys, the national curves and those from the USA underestimate birth weight of neonates above the 90th percentile.

# Anxiety

### epidemiology

#### Anxiety and depression levels of outpatients and inpatients in a private hospital.

Karaoglu, Nazan; Karaoglu, Mehmet A.

E-mail:drnkaraoglu@gmail.com

Selcuk University - Meram Medical Faculty - Department of Medical Education and Informatics

Neurosciences 2009; 14 (2): 191-192 (5 ref.)

Keywords: Depression-epidemiology; Outpatients; Inpatients; Hospitals; Prevalence; Cross-Sectional Studies; Questionnaires

# **Arteriovenous Malformations**

### diagnosis

#### Acute onset headache and hemiparesis in a young adult.

Fatehi, Farzad; Zare, Mohammad; Basiri, Keivan; Saadatnia, Mohammad

E-mail:farzad\_fatehi@yahoo.com

Isfahan University of Medical Sciences - Medical Education Research Center - Neurology Department Neurosciences 2009; 14 (2): 200-201 (4 ref.)

Keywords: Arteriovenous Malformations-therapy; Headache; Muscle Weakness; Nausea; Vomiting; Paresis; Tomography, X-Ray Computed; Magnetic Resonance Angiography

# Arthritis, Infectious

### diagnosis

#### Septic arthritis of the knee joint secondary to prevotella bivia.

Salman, Salman A.; Baharoon, Salim A.

King Abdulaziz Medical City - King Fahad National Guard Hospital - Department of Medicine

Saudi Medical Journal 2009; 30 (3): 426-428 (15 ref.)

Keywords: Knee Joint; Prevotella-pathogenicity; Arthritis, Infectious-therapy

Abstract: Prevotella bivia is an obligatory anaerobic, gram-negative rod, which often produces a detectable beta-Lactamases. To date, there has been only 3 descriptions of septic arthritis secondary to this microorganism in a patients pre-existing sever joint disease like rheumatoid arthritis and osteoarthritis or after joint prosthesis. We are reporting the first case of septic arthritis due to Prevotella bivia in a patient with no pre-existing joint symptoms.

# Ascites

### etiology

#### Etiological pattern of ascites in patients admitted in medical units.

Ahsaan, Akram: Abbas, Ghulam: Taseer, liaz-ul-Haque Senior Registrar Medical Unit II

Medical Forum Monthly 2009; 20 (1): 19-24 (19 ref.)

Keywords: Liver Cirrhosis-complications; Hepatitis B-epidemiology; Hepatitis C-epidemiology; Gastrointestinal Hemorrhage; Fever; Jaundice; Abdominal Pain; Edema; Dyspnea; Peritonitis, Tuberculous; Heart Failure; Nephrotic Syndrome

Abstract: Ascites is a very common problem in medical wards. It is the most common complication of cirrhosis of liver which is very alarming problem in this society due to increased transmission of hepatitis B and Hepatitis C virus. To determine the etiological diagnosis in patients presenting with ascites and the frequency of Hepatitis B and Hepatitis C in patients of ascites due to hepatic cirrhosis. It was a descriptive study with convenience non probability sampling technique. The study was performed on cases with ascites presenting at Bahawal Victoria Hospital, Bahawalpur in all four medical units from December 2006 to May 2007 for a period of 6 months. A total of 50 patients with ascites were studied for the different causes of ascites, their clinical presentations and the frequency of Hepatitis B and C and the data obtained were statistically analyzed with descriptive statistic. There were 37 males and 13 females, with manage of 58.8 +/- 15.9 years. Liver cirrhosis accounted for 84% of cases [hepatitis B cirrhosis 38%, hepatitis C cirrhosis 42%, both 4%] followed by peritoneal tuberculosis 6%, malignancy 6%, congestive heart failure 2%, and nephrotic syndrome 2%. As regards the clinical presentation, 25 patients presented with gastrointestinal bleeding due to esophageal varices, 20 with fever, 18 with jaundice, 7 with abdominal tenderness, 4 with breathlessness, 3 with abdominal masses, 2 with generalized edema and 1 patient of ascites was asymptomatic. The study concluded that in this area the most common cause of ascites is the liver cirrhosis. Hepatitis B and C infections are playing this havoc role. The common clinical presentations seen were gastrointestinal bleeding and fever.

# Asparaginase

### isolation and purification

#### Purification and characterization of vigna unguiculata cultiver asparaginase.

Ali, Ehab M. Mohamed

Tanta University - Faculty of Science - Biochemistry Division, Chemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 145-161 (43 ref.)

Keywords: Seeds; Asparagine; Plants; Molecular Weight; Glutamine; Antineoplastic Agents, Phytogenic; Electrophoresis

Abstract: Asparaginase [EC 3.5.1.1] activity was determined in non germinating seeds and germinating seeds of five Egyptian cowpea [Vigna unguiculatd] cultivars [Kareem 7, Dokki 331, Kafer El-Sheikh 1, Kaha 1 and Fodder]. The specific activities of germinating seeds asparaginase in different cultivars were higher than the specific activities of non germinated seeds of these cultivars. Asparaginase was purified from Fodder cultivar germinating seeds [the highest specific activity] and resolved into three peaks with asparaginase activities by DEAE sepharose, designated by asp I, asp II and asp III. The molecular weight of asp II was 70 kDa for native enzyme using gel filtration. By using SDS-PAGE electrophoresis, asp II had molecular weight about 35 kDa suggesting that a dimeric structure for asp II. Asp II had a Km value 1.25 mM for asparagine and a pH optimum at 8.0. Asp II had a temperature optimum and heat stability at 40 °C. The fodder cultivar asp II activity was specific for L-asparagine and did not hydrolyze D-asparagine. It is not specific for L-glutamine. Ni[2+] and Co[2+] had activator effects on asp II but other metals ions had inhibitory effect.

# Aspergillosis

#### diagnosis

#### Invasive gastrointestinal aspergillosis in an immunocompromised host.

Hasosah, Mohammed Y.; Enemuo, Valantine

E-mail:myhasosah@yahoo.com

King Abdulaziz Medical City - National Guard Hospital - Department of Pediatric Gastroenterology Saudi Medical Journal 2009; 30 (3): 439-440 (4 ref.)

**Keywords:** Aspergillosis-therapy; Gastrointestinal Diseases; Immunocompromised Host; Graft vs Host Disease; Antineoplastic Combined Chemotherapy Protocols; Antifungal Agents-therapeutic use; Endoscopy, Gastrointestinal; Tomography, X-Ray Computed

# Asthma

### diagnosis

#### Airway allergy and skin reactivity to aeroallergens in Riyadh.

Almogren, Adel

E-mail:almogren@ksu.edu.sa

King Saud University - College of Medicine and King Khalid University Hospital - Department of Pathology, Immunology Unit

Saudi Medical Journal 2009; 30 (3): 392-396 (36 ref.)

Keywords: Rhinitis-diagnosis; Allergens; Skin Tests; Spores, Fungal; Pyroglyphidae; Cynodon; Lolium; Chenopodium album; Prosopis; Cross-Sectional Studies; Retrospective Studies

**Abstract:** To determine the pattern of skin prick test reactivity to aeroallergens in patients with asthma and rhinitis [airway allergy] residing in Riyadh region. This is a retrospective cross-sectional study based on data analysis of skin prick test results of individuals with clinical diagnosis of airway allergy. Allergy skin prick test result data of 139 Saudi nationals from Riyadh region tested at King Khalid University Hospital between January 2003 and March 2004 was analyzed retrospectively. This group comprised of 53% females and 47% males, with a mean ageof 27 +/- 12 years. A set of aeroallergens extracts for both indoor and outdoor allergens including fungal spores was used to test the patients. Seventy-five percent [105] of patients reacted to one or more allergen extracts. The most frequently reacting indoor allergens was house dust mite [77.8%] followed by the cat [33.6%] and cockroach [19.2%]. Among the outdoor allergens Prosopis juliflora was tested positive in 72.1%, Bermuda grass in 53.8%, Chenopodium album in 47.1%, Rye grassin 36.5% and Salsola kali in 36.5%. A significant proportion of patients were also found reacting to Moulds [18.2%] and Aspergillus fumigates [18.2%] extracts. Sensitivity to one or more aeroallergens was common in patients, indicating high level of aeroallergen sensitization inpatients with airway allergy residing in Riyadh region.

### epidemiology

# Epidemiological study of school performance and asthma medications among asthmatic Egyptian school children.

Tageldin, Mohamed A.; Aly, Gamal S.; Mostafa, Salah; Khalil, Hany

Ain Shams University - Medical Section of Institute of Postgraduate Childhood Studies - Chest Department

Egyptian Journal of Pediatric Allergy and Immunology [The] 2009; 7 (1): 23-32 (14 ref.)

Keywords: Child; Schools; Cross-Sectional Studies; Severity of Illness Index; Epidemiologic Studies; Asthma-therapy Abstract: Childhood asthma is a major health problem in Egypt and worldwide. Barriers to reducing the burden of asthma include symptom-based rather than disease-based approaches, tendency of care to be [acute] rather than [regular] and cultural attitudes towards drugs and drug delivery systems. To measure the disease effect on school performance and to map asthma medications with respect to types, routes and course of use. This cross sectional study involved 206 Cairene asthmatic school children, enrolled from the school students' health insurance facility of El-Matareya Teaching Hospital and the pediatric outpatient clinic of Saint Mark Charity Hospital representing different social classes and residential locations. Their ages ranged between 5 and 15 years and they comprised 100 males and 106 females. They were assessed clinically and by peak expiratory flowery. Parents or caregivers were interviewed about disease symptoms, school achievement and attendance and medications used including relievers and controllers, route and course of use, whether continuously, intermittently and/or during attacks. Asthma had a strong impact on school achievement and school absence; 77.3% of study population reported school absence due to asthma and 41.3% reported weak to average school achievement. School performance was associated with asthma severity; the majority of moderate asthmatics [64.6%] had average and weak school performance. Number of days of school absence demonstrated highly significant relation with asthma seventy; 43.6% of moderate asthmatics had 5-6 absent days/month and 33.4% had 3-4 absent days/month. Combined beta 2-agonists and xanthenes was the most commonly used [54.8%] reliever therapy followed by beta 2-agonists alone [44.2%] while corticosteroids were the most common controllers used [97.6%]. Therapy was taken mainly by oral than inhalation route. Other medications like cromolyns, anti-histamines, anti-leukotrienes and anti-cholinergics were rarely used. Both rectal and injection routes were rarely used also. Asthma has a social burden on asthmatic children as it affects both school achievement and school attendance. Medical management of asthma in Egyptian children still lags behind available medical knowledge. Patients' and health care givers' education is a cornerstone in improving the current status of asthma management in Egypt.

# Bacillus

#### genetics

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

Abed, Kawther; Hassan, Hussam Z.

Riyadh University of Girls - Faculty of Education - Botany Department

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

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

Abstract: Twelve Bacillus spp. isolates gathered from different locations at Saudi Arabia were finger printed by random amplified polymorphic DNA [RAPD] markers. The results revealed high levels of polymorphism among the studied isolates. Of many 10-mer random primers screened, five gave distinct and reproducible polymorphic DNA amplification patterns. The primers are A3, B6, B10, B11 and C12. The number of the generated bands was primer and genotype dependent. A total of 36 amplified polymorphic DNA bands were generated across the studied isolates with 9 bands being unique. All primers gave a number of unique bands that used for discrimination of some isolates. No primer was able to generate a unique banding pattern for all the studied isolates. However, combinations of all data derived from the RAPD profiles generated by the five utilized primers produced a unique fingerprint for each isolate. Similarity coefficients among the studied isolates were estimated after pooling all the gained data. The levels of similarity between the studied isolates showed low values. It reached the highest value of 0.938 between the two isolates N1 and M2. The generated dendrogram clustered the three isolates E1, N2 and M2 together and located W1 in a separate cluster.

# Bacillus thuringiensis

#### enzymology

#### Purification and characterization of marine Bacillus thuringiensis N2 urease.

El Bessoumy, Ashraf; El Sharouny, Ebaa; Olam, Zakia; Mothana, Azal

Alexandria University - Faculty of Science - Biochemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 61-78 (32 ref.)

Keywords: Urease; Electrophoresis, Polyacrylamide Gel; Chromatography, Gel; Molecular Weight; Cysteine; Methionine; Tryptophan

**Abstract:** Urease was purified to homogeneity from Bacillus thuringiensis N2 using different purification steps namely, 55% acetone precipitation, DEAE-Sephadex ASO anion exchange column and Sephadex G120-200 gel filtration chromatography. The enzyme was purified 95.27 fold and showed a final specific activity of 10.48 U/mg proteins with a yield 56%. Sodium dodecylsulfate polyacrylamide gel electrophoresis [SDS/PAGE] of the purified enzyme revealed a single protein band of 97.4 KDa molecular weight. The enzyme showed thermal stability at 50°C and has maximum activity at 25°C, pH 8 and incubation period of 15 min. A line weaver- a Burk analysis gave a Km of 2.94 mM and Vmax of 25 micro mol/ml/min. The urease activity was enhanced by addition of CuCI[2]. The enzyme proved to be rich in cysteine, methionine and tryptophan while it contained low amounts of glycine, alanine, and beta-alanine.

# Bell Palsy

### epidemiology

#### Epidemiology of Bell's palsy in Isfahan, Iran.

Movahedian, Bijan; Ghafoornia, Maryam; Saadatnia, Mohammad; Falahzadeh, Ahmadreza; Fateh, Ali Isfahan University of Medical Sciences - Department of Oral and Maxillofacial Surgery **Neurosciences** 2009; 14 (2): 186-187 (5 ref.) **Keywords:** Hemifacial Spasm; Diabetes Mellitus; Coronary Artery Bypass; Facial Paralysis; Retrospective Studies; Cranial Nerves; Facial Verve: Facial Verve Diseases

# **Benzoquinones**

### therapeutic use

#### Thymoquinone inhibits germination of dermatophyte arthrospores.

Al Jabre, Salih Hamad M.; Randhawa, Mohammad A.; Alakloby, Omar M.; Alzahrani, Alhusain J. King Faisal University - College of Medicine - King Fahd Hospital of the University Saudi Medical Journal 2009; 30 (3): 443-445 (7 ref.) Keywords: Nigella sativa; Arthrodermataceae-isolation and purification; Trichophyton; Benzoquinones-pharmacology

# beta-Thalassemia

Splenectomized versus non-splenectomized thalassemia patients with thalassemia major.

Morsy, Mohamed Mofeed; Hubail, Zakariya Sohag University - Sohag Faculty of Medicine - Department of Pediatrics Saudi Medical Journal 2009; 30 (3): 450 (2 ref.) Keywords: Ventricular Dysfunction-diagnosis; Splenectomy; Ultrasonography, Doppler, Duplex

#### Splenectomized versus non-splenectomized patients with thalassemia major. Echocardiographic comparison.

Morsy, Mohamed Mofeed F.; Al Mendalawi, Mahmood D. Sohag University - Sohag Faculty of Medicine - Department of Pediatrics Saudi Medical Journal 2009; 30 (3): 451 (10 ref.) Keywords: Anthropometry; Splenectomy; Growth Disorders-etiology; Echocardiography

### blood

#### Oxidative criteria and somebone turnover markers in beta-thalassemic patients.

Abdel Maksoud, Awatif M.; Nasr, Mona Ramadan; Ramadan, Kholoud S.; Mabrouk, Naglaa Abdul Zaher; Ismaeil, Wafaa Muhammad

E-mail:Kheffha@yahoo.com

National Nutrition Institute - Clinical Nutrition Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 93-106 (47 ref.)

**Keywords:** Oxidative Stress; Osteocalcin-blood; Alkaline Phosphatase-blood; Calcium-blood; Phosphorus-blood; Malondialdehyde-blood; Nitric Acid-blood; Superoxide Dismutase-blood; Selenium; Zinc; Antioxidants; Vitamin E

Abstract: Bone disease in beta-thalassemic patients has multifactorial etiology; increased iron stores and peroxidative stress are involved factors. This study aimed to investigate the relationship between some bone turnover markers and some oxidants, antioxidants parameters of beta-thalassemic patients. The study included 50 patients were diagnosed as beta-thalassemia major aged between 3 and 40 years, 30 males and 20 females compared to 34 normal controls of same age and sex ratio. The patients and the controls were divided into 2 groups: group Al </= 18 years compared to their controls group BI and group A2 > 18 years compared to their controls group B2. All were subjected to full clinical examination and laboratory analysis of their blood and urine for bone turnover markers; osteocalcin [OC], bone specific alkaline phosphatase [BAP] and urinary deoxypyridinoline [DPD] Also parathormone [PTH], serum calcium [Ca] and phosphorus [Ph]. Oxidants and antioxidants determined were; plasma Malondialdehyde [MDA], nitric oxide [NO], blood reduced glutathione [GSH], erythrocyte Cu- Zn Superoxide dismutase [SOD]. Serum levels of copper [Cu], zinc [Zn], selenium [Se], vitamin E and total antioxidant capacity [TAOC] were also determined. The results showed significant increase in urinary DPD and decrease in serum OC, BAP and PTH in thalassemic groups compared to controls. Also, the results revealed significant elevation in plasma MDA, NO, SOD and serum Cu and TAOC especially in group AI. While there was significant decrease in GSH, serum Zn, Se, and vitamin E. Plasma OC was positively correlated with serum iron and NO and negatively correlated with plasma TAOC in thalassemic patients within age group 3 </= 18 years. On other hand, plasma BAP level was positively correlated with the frequency of transfusion. Moreover, a significant inverse correlation of plasma PTH with blood GSH and plasma Vit.E were observed in thalassemic patients within age group 18 </= 40. Furthermore, a significant positive correlation of plasma OC with height, DPD with age and Ph. were seen too in the same group. Also, plasma DPD was negatively correlated with NO in thalassemic patients within age group 18 </= 40. In Conclusion, there are disturbance in bone turnover markers in beta-thalassemic patients which favor increased bone resorption and decreased bone formation. These markers have to some extent correlations with oxidant-antioxidant parameters in those patients.

# **Biomedical Research**

### methods

#### Understanding clinical research results.

Essali, Mohamed Adib

E-mail:adib-essali@hotmail.com

Center of Psychiatry

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

**Keywords:** Statistics as Topic; Research Design; Randomized Controlled Trials as Topic; Confidence Intervals **Abstract:** Most physicians are phobic of statistics and numbers and usually skip reading the "methods" and "results" sections of published papers. Moreover, a main difficulty faced by clinicians conducting research project is data analysis. Epidemiologists have developed clinically meaningful, easy to apply and to understand, methods for clinical research data analysis. These methods are briefly described in this paper which also contains a summary description of different researchers are referred to other resources for information about designing studies, writing study protocols and avoiding potential biases and confounders.

# Biomphlaria

#### analysis

# Potential relation ibetween the appearance of biomphalaria alexandrina- biomphalaria glabrata hybrid in the irrigation system and the evolution of resistance to praziquntel lyeatment in Egypt. Ramzy. Fatem: William. Samia: Maher, Menerva

Theodor Bilhatz Research Institute - Parasitology and Malacology Departments

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

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

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

# **Blood Pressure**

Blood pressure of primary-school children of Eghbalieh city, Islamic Republic of Iran.

Mahyar, A.; Ebrahemi, M.; Shahsavari, A.; Rahmani, Y.

E-mail:Abolfazl473@yahoo.com

Qazvin University of Medical Sciences University - Department of Paediatrics

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1449-1454 (16 ref.)

Keywords: Hypertension; Prevalence; Reference Values; Students; Schools

**Abstract:** This study determined the percentiles of systolic and diastolic blood pressure and the prevalence of hypertension among 789 primary-school children aged 7-12 years in the city of Eghbalieh, Islamic Republic of Iran. Mean systolic and diastolic blood pressure increased with increasing age in both sexes. There was no significant difference between mean systolic pressure in boys and girls overall, but a significant difference was found between boys and girls in 3 age groups. The prevalence of systolic and diastolic hypertension overall was 6.5% and 12.8% respectively. The mean systolic and diastolic blood pressure of boys and girls in all age groups were significantly lower than the Second Task Force on Blood Pressure Control in Children scale.

# **Bone Substitutes**

### therapeutic use

Histological evaluation of the effects of bioglass, hydroxyapatite, or demineralized freeze-dried bone, grafted alone or as composites, on the healing of tibial defects in rabbits.

Kucukkolbasi, Hasan; Mutlu, Necip; Isik, Kubilay; Celik, Ilhami; Oznurlu, Yasemin

Baskent University - Faculty of Dentistry, Histology and Embryology

Saudi Medical Journal 2009; 30 (3): 329-333 (25 ref.)

**Keywords:** Ceramics-therapeutic use; Durapatite-therapeutic use; Bone Substitutes-adverse effects; Bone Transplantation; Transplantation, Heterologous; Rabbits; Tibia

**Abstract:** To compare the effectiveness of bioactive glass [BG], natural hydroxyapatite [HA], and demineralized freeze-dried bone [DFDB] in bone defects. All animal experiments were conducted in Faculty of Veterinary Medicine, Selcuk University, Konya, Turkey, under the Selcuk University Guidelines for Animal Experimentation, in 2005. Eighteen New Zealand rabbits were used for the experiment. Four cavities were prepared on right and left tibias. The cavities on the right tibia were filled with either BG, HA or DFDB. One cavity was left empty as a control. The cavities on the other tibial bone were grafted with HA+BG, HA+DFDB, BG+DFDB and HA+BG+DFDB composites. Histological examinations were performed at first, third, and sixth postoperative months. According to histomorphometric findings, the mixture containing HA+BG+DFDB obtained the best histological results [p < 0.05]. The composite graft of HA, BG and DFDB is more effective than when used as individual agents.

# **Bottle Feeding**

#### Faecal contamination of feeding bottles contents, among artificially fed children.

Musa, H.A.; Holi, M.A.; Hussein, M.E.; Shikeiri, A.B.

National Ribat University - Department of Microbiology

Sudan Journal of Medical Sciences 2009; 4 (2): 133-135 (23 ref.)

**Keywords:** Food Contamination; Feces; Bacteria; Diarrhea; Child; Escherichia coli-isolation and purification; Shigellaisolation and purification; Drug Resistance, Microbial; Trimethoprim-Sulfamethoxazole Combination; Amoxicillin-Potassium Clavulanate Combination; Infant Food; Bottle Feeding

Abstract: This study was carried out to investigate the bacterial contamination of feeding bottles contents in artificially fed children presenting with diarrhoea at the Paediatric outpatient clinic in Khartoum Hospital. Hundred bottle-fed infants presenting with diarrhoea were included in the study. Specimens were collected from the contents of the feeding bottles and the faeces of children. Hundred and ten bacterial species were isolated from the contents. E. coli was the commonest isolate [33 [30%]]. Different other bacterial species were also isolated with very high-count [1X10[6] - > 15X10[5]/ml]. Twenty-one enteric pathogens were isolated from the stool specimens [Enter pathogenic E. coli [7] and Shigella species [14]]. The antibiotic sensitivity of the E. coli and Shigella species showed high resistance to co-trimoxazole [57.5%, 53.3% respectively] and to co-amoxiclav [85% - 53.3% respectively]. Awareness to the hazards of the feeding bottles among the community should be raised and breast feeding should be encouraged.

# **Brain Abscess**

# radiography

Disproportionate correlation between imaging and outcome in an infant with cerebral abscess.

Tabatabaeifar, S.M.; Seddighi, A.; Seddighi, A.S.

E-mail:invincible19152@yahoo.com

Shahld Beheshti Medical University - Shohada Hospital

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 67-70 (17 ref.)

**Keywords:** Brain Abscess-surgery; Brain Abscess-drug therapy; Treatment Outcome; Tomography, X-Ray Computed; Magnetic Resonance Imaging; Cerebrospinal Fluid-microbiology; Infant

Abstract: Brain abscesses represent organized foci of suppuration within the parenchyma. Here we report a 3 monthold girl with a very huge complicated cerebral abscess, and the course of treatment given. The patient's recovery was excellent. The follow up MRI showed only subtleporencephalic changes as the only parenchymal sequelae, which may be due to CNS plasticity in infants.

# Brain Neoplasms

# diagnosis

#### Unusual radiological characteristics of teratoid/rhabdoid brain tumor in children.

Nsoor, Nariman

E-mail:narimannsour@yahoo.com

King Hussein Medical Centre - Department of Radiology

Sudan Journal of Medical Sciences 2009; 4 (2): 195-198 (10 ref.)

**Keywords:** Rhabdoid Tumor-diagnosis; Teratoma-diagnosis; Radiography; Infant, Newborn; Central Nervous System; Diagnosis, Differential; World Health Organization; Immunohistochemistry; Magnetic Resonance Imaging; Tomography, Spiral Computed; Medulloblastoma

Abstract: We report a case of atypical teratoid rhabdoid brain tumor is a 4 months old male child, who presented with unusual radiological findings that can be confused with other brain tumors, sowe highlight these unusual imaging features to aid in making correct diagnosis.

# Breast Neoplasms

### Female nurses and breast self-examination: can they play a role in early detection of breast cancer?

Abu Salem, Osama; Hassan, Montaha Abdulla

E-mail:osama65@gmail.com

Royal Medical Services

Jordan Medical Journal 2009; 43 (1): 55-60 (12 ref.)

Keywords: Early Detection of Cancer; Nurse's Role; Breast Self-Examination; Questionnaires

Abstract: In the past 20 years, breast cancer incidence in the world has had a dramatic increase of 50-100%, which strongly supports the need for breast cancer prevention, and screening programs. The purpose of this study was to identify and investigate the knowledge and practice of breast self-examination [BSE]. In addition to examining the factors influencing the compliance of [BSE] among female nurses as nurses can promote monthly BSE. The study was conducted in the period between January and December 2002. [80] Female nurses from Prince Rashid Military Hospital constituted the study population. The questionnaire contained items on the demographic characteristics of the respondents, knowledge of breast cancer, attitudes toward BSE and questions regarding the practice of BSE. The analysis included descriptive statistics to examine the association between BSE and the person's medical history, knowledge of BSE and attitudes toward BSE. The results of the study indicated that 52% of the sample studied

performs BSE. Approximately, 30% of those who perform BSE said they learned information regarding BSE during their work experience. A significant correlation was found between higher levels in work experience and BSE practice. Except for age, no significant correlation was found between the socio-demographic factors and BSE practice. The sample showed a strong belief in breast lump as a causing factor of breast cancer and this had a significant correlation was found between nurses work experience and their practice of BSE as working nurses. Studies like these can enhance the knowledge regarding BSE among nurses and other medical professionals.

#### diagnosis

#### Diagnosis of breast cancer: is there any protocol which is applicable worldwide?

Musa M.I, Mohamed T.; Khair, Randa Z.A.

E-mail:toumandrandaatlas@hotmail.com

University of Khartoum - Department of Surgery

Sudan Journal of Medical Sciences 2009; 4 (2): 157-161 (21 ref.)

Keywords: Pathology; Cytology; Prospective Studies; Sensitivity and Specificity; Female; Ultrasonography, Mammary; Mammography; Biopsy, Fine-Needle

**Abstract:** To study the accuracy of cytopathology and to evaluate it as diagnostic pathological tool in breast diseases. A prospective study in the period between Jan. 2006 and Feb. 2008. Data were analysed using the SPSS. Sensitivity, specificity and accuracy were calculated and compared to literature. Total number of reports was 542, 271 for each cytopathology and histopathology. The overall mean age was 41.0 + 15.3 [ranging between 14- 80] years. The overall sensitivity, specificity and accuracy of cytopathology were 56.1, 80.9 and 63.8% respectively while those of histopathology were 93.5, 83.5 and 89.7% respectively. FNAC has low sensitivity, specificity and accuracy.

#### epidemiology

#### Epidemiology of breast cancer in the Islamic Republic of Iran: first results from a populationbased cancer registry.

Sadjadi, A.; Nouraie, M.; Ghorbani, A.; Alimohammadian, M.; Malekzadeh, R.

Tehran University of Medical Sciences - Shariati Hospital - Digestive Disease Research Centre

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1426-1431 (24 ref.)

Keywords: Registries; Population; Retrospective Studies; Incidence; Health Surveys; Age Distribution

**Abstract:** This study presents the first population-based report on breast cancer in the Islamic Republic of Iran using data derived from a cancer registry. A retrospective study was conducted to find all new breast cancer cases in 5 provinces covered by the cancer registry during the 5-year period 1996-2000. There were 2421 cases recorded in the 5 registries. The age-standardized incidence rate [ASR] was 16.2 per 100 000 person-years. In contrast to more developed countries, the ASR of breast cancer was low, with the lowest rate seen in Ardabil province.

#### genetics

# Multiparametric flow cytometric analysis of estrogen receptor: a study on Egyptian breast cancer patients.

El Khayat, Zakaria A.; El Gerzawi, Shadia M.; Hosny, Omneya M.S.; Sidhom, Gloria G.; Zaghloul, Ashraf S.; El Deftar, Mervat M.; El Toukhy, Safinaz E.

Medical Biochemistry - Department National Research Center [NRC]

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 31-46 (44 ref.)

Keywords: Cytogenetic Analysis; Flow Cytometry; Receptors, Estrogen; Immunohistochemistry; Prognosis; Receptors, Progesterone

Abstract: Precise prognostication of breast cancer based on immunohistochemical features is a challenging assay. Thus, there is a need for more sophisticated prognostic determinants. This work aims to investigate the sensitivity of flow cytometry for the accurate evaluation of steroid receptor positive, tumor cells in formalin-fixed paraffin embedded tissue sections. These sections from forty breast cancer patients were subjected to multi-parametric flow cytometric analysis for simultaneous assessment of estrogen receptor and DNA content analysis as well as immunohistochemical staining for steroid receptors. Moreover, tumor markers were estimated in the preoperable sera of these patients. About fifty-seven percent of tumors were aneuploid. Seven tumors were interpreted positive for ER by FCM and negative by IHC. Flow cytometric results were confirmed by the traditional prognostic factors. Higher levels of insulinlike growth factor-1 occurred predominantly in aneuploid tumors with lymph nodal metastasis and positively immunostained for both estrogen and progesterone receptors. Multiparametric flow cytometric analysis may allows the detection of specific subset of patients that would otherwise escapes detection.

# Breast Self-Examination

# Comparing the effect of teaching breast self-examination by peers and health care personnel on students knowledge and attitude.

Akbarzadeh, M.; Zangiabadi, M.; Moattari, M.; Tabatabaei, H.

E-mail:akbarzadehmarzieh@yahoo.com

Fars University of Medical Sciences - School of Nursing and Midwifery of Hazrate Fatemeh - Department of Midwifery IJME - Iranian Journal of Medical Education 2009; 8 (2): 195-203 (29 ref.)

Keywords: Health Personnel; Education; Students; Knowledge; Attitude; Breast Neoplasms

Abstract: Training breast self-examination by peers provides an appropriate situation in order to form proper health behaviors during the adolescence age. The aim of this study was to compare the effect of training breast selfexamination by peers and health care personnel on students' knowledge and attitude. In this quasi-experimental study, 112 students from two schools of dentistry and management of Shiraz University of Medical Sciences were selected randomly and were allocated in two groups. They were taken a pre-test and two post-tests. Data gathering tool was an assessment test evaluating their knowledge about breast cancer and self-examination and their attitude toward breast self-examination. Four or five students from each class were selected and trained as peer instructors. Students of the first group were trained by peers and the students in the second group were instructed by health care personnel separately using booklet. At the end of educational sessions, the first post-test, and after 6 weeks, the second post-test were taken. Statistical analysis was performed using paired t-test and independent t-test, repeated measure ANOVA. and factor analysis test. There was a significant difference between knowledge and attitude scores of the two groups immediately after education, so that, the mean score of knowledge in the group trained by peers was higher than the one educated by health care personnel. But, no significant difference was observed between the attitude scores of the two groups, 6 weeks after education. Comparing the knowledge and attitude scores, before, immediately after and 6 weeks after education showed a significant difference in each group. The efficacy of training breast self-examination by peers is higher than by health care personnel. It is recommended to employ this educational method more, especially in training self-examination.

# **Burning Mouth Syndrome**

### drug therapy

#### The effect of citalopram and colonazpam on burning mouth syndrome.

Ebrahimi, H.; Pourshahidi, S.; Tadbir, A. Andisheh

E-mail:hooman.ebrahimi@yahoo.com

Shiraz University of Medical Sciences - School of Dentistry - Department of Oral Medicine

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 31-34 (24 ref.)

**Keywords:** Citalopram-therapeutic use; Clonazepam-therapeutic use; Antidepressive Agents; Anti-Anxiety Agents; Cross-Sectional Studies; Disease Management; Pain Measurement

Abstract: Psychosocial factors are thought to play a role in burning mouth syndrome [BMS] and several therapeutic approaches for BMS are based on this consideration. This paper evaluated the efficacy of the combined systemic administration of citalopram and clonazepam, as anti-depressant and anti-anxiety drugs, in the management of burning mouth syndrome and reduction of the burning sensation. In this cross-sectional study, 80 subjects suffering from idiopathic burning mouth syndrome were enrolled. The patients underwent a thorough clinical examination. Oral symptoms before and after treatment were assessed using a Visual Analogue Scale. The mean duration of burning in our patients was 7 months. Systemic combination of citalopram [20 mg/daily] and clonazpam [0.25 mg/daily] was prescribed for all of them for 8 weeks. Then, the data were analysed, using Student's t-test. Of the 62 patients who completed the protocol, 38 reported complete remission of the oral burning sensation. However, 20 patients reported a little improvement, and four of them reported no improvement. These data suggest that citaloperam with colonazpam is effective in patients with BMS.

# Candidiasis, Chronic Mucocutaneous

### diagnosis

# Chronic mucocutaneous candidiasis associated with osteogenesis imperfecta: a case report.

Pakfetrat, A.; Sanatkhani, M.; Bidram, F.; Baghaee, B.

Mashhad University of Medical Science - School of Dentistry, Dental Research Center - Department of Oral Medicine Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 41-44 (8 ref.)

Keywords: Osteogenesis Imperfect a-diagnosis; Dentin genesis Imperfect a-diagnosis; Radiography, Panoramic Abstract: A male patient aged 6.5 years [patient No.1] is reported with chief complaint of white lesions in his mouth from birth, which was finally diagnosed as chronic mucocutaneous candidacies [CMC]. Clinical, radio graphical and histopathological examinations revealed dentin genesis imperfect a associated with Osteogenesis imperfect a in both the patient and his sister [patient No.2]. The importance of early diagnosis and treatment of both diseases is discussed in this report.

# Carboxylic Ester Hydrolases

### blood

# Serum arylesterase activity is negatively correlated with inflammatory markers in patients with acute coronary syndromes.

Senturk, Tunay; Sarandol, Emre; Gullulu, Sumeyye; Erdinc, Selda; Ozdabakoglu, Osman; Ozdemir, Bulent; Baran, Ibrahim; Arslan, Sinan; Aydinlar, Ali

E-mail:tunaysenturk@hotmail.com

Uludag University - School of Medicine - Department of Cardiology Saudi Medical Journal 2009; 30 (3): 334-339 (30 ref.)

**Keywords:** Aryldialkylphosphatase-blood; Acute Coronary Syndrome-diagnosis; Myocardial Infarction; Angina, Unstable; Acute-Phase Proteins; C-Reactive Protein; Oxidative Stress; Cross-Sectional Studies

Abstract: To examined whether serum paraoxonase [PON1] and aryl esterase [ARE] activities are correlated with inflammatory biomarkers [procalcitonin and high sensitivity C-reactive protein [hs-CRP] in patients with acute coronary syndrome [ACS]. This cross-sectional study was conducted at the Departments of Cardiology and Biochemistry, Uludag University School of Medicine, Bursa, Turkey, from April 2007 to December 2007. Seventy-eight consecutive patients with ACS and 39 healthy controls were investigated. Acute coronary syndrome patients were divided into 3 groups according to their clinical presentation: unstable angina pectoris [UAP][Braunwald III-B, n=25], non-ST elevation myocardial infarction [NSTEMI] [n=18], and ST-elevation myocardial infarction [STEMI] [n=35]. Serum PON1/ARE activities were measured spectrophotometrically. Levels of procalcitonin and hs-CRP were measured by immunoassay. Paraoxonase/ARE activities and high-density-cholesterol levels was seen. Among ACS patients, serum ARE activity correlated inversely with baseline and 48-hour procalcitonin [r=-0.577, p=0.009, and r=-0.642, p=0.019] and hs-CRP levels [r=-0.614, p=0.03, and r=-0.719, p=0.044]. Serum ARE activity is reduced in ACS patients and inversely correlated with inflammatory markers.

# Carcinoid Tumor

### complications

Small bowel obstruction caused by a carcinoid tumour.

El Shallaly, Gamal E.H.A.; Jelli, Kawther A.

E-mail:gamalshallaly@hotmail.com

Alzaem Alazhari University - Department of Surgery

Sudan Journal of Medical Sciences 2009; 4 (2): 199-203 (11 ref.)

Keywords: Intestinal Obstruction-diagnosis; Intestine, Small; Appendicitis; Cholecystitis; Irritable Bowel Syndromediagnosis; Carcinoid Tumor-diagnosis; Carcinoid Tumor-therapy; Abdominal Pain

**Abstract:** We present a rare case of carcinoid tumour presenting as a small bowel obstruction in a young male patient. Pitfalls of diagnosis, including confusion with irritable bowel syndrome are highlighted. The current management strategies of this tumour are reviewed.

# Carcinoma, Acinar Cell

### diagnosis

#### Acinic cell carcinoma of the salivary glands: a literature review.

Al Zaher, Nabil; Obeid, Amani; Al Salam, Suhail; Al Kayyali, Bassam Sulaaiman

E-mail:nalzaher@hotfnail.com

King Faisal Specialist Hospital and Research Centre - Department of Otolaryngoiogy

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 259-264 (59 ref.)

**Keywords:** Carcinoma, Acinar Cell-epidemiology; Carcinoma, Acinar Cell-surgery; Salivary Gland Neoplasms; Parotid Gland-radiation effects; Parotid Neoplasms; Risk Factors; Biopsy, Fine-Needle; Radiotherapy; Neoplasm Metastasis; World Health Organization; Tomography, X-Ray Computed; Magnetic Resonance Imaging

Abstract: Acinic cell carcinoma [ACC] is a low-grade malignant salivary neoplasm that constitutes approximately 17% of primary salivary gland malignancies. In the head and neck region, the parotid gland is the predominant site of origin and women are usually more frequently diagnosed than men. Previous radiation exposure and familial predisposition are some of the risk factors for ACC. A slowly enlarging mass lesion in the tail of the parotid gland is the most frequent presentation. The diagnosis is usually confirmed with a fine needle aspiration biopsy, and surgical excision is the main treatment of this malignant neoplasm. Other treatment modalities such as radiotherapy may be indicated in some cases. ACC has a significant tendency to recur, to produce metastases [cervical lymph nodes and lungs], and may have an aggressive evolution. Therefore, long-term follow-up is mandatory after treatment.

# Carcinoma, Ehrlich Tumor

### drug therapy

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

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

Cairo University - Faculty of Agriculture - Department of Genetics

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

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

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

# Carcinoma, Non-Small-Cell Lung

### therapy

Improved compliance with adjuvant vinorelbine and cisplatin in non-small cell lung cancer.

Aljubran, Ali; Leighl, Natasha; Pintilie, Melania; Burkes, Ronald

E-mail:ajubran@kfshrc.edu.sa

King Faisal Specialist Hospital and Research Centre - Department of Oncology, MBC 64

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 265-271 (24 ref.)

Keywords: Chemotherapy, Adjuvant-adverse effects; Cisplatin-therapeutic use; Cisplatin-adverse effects; Vinblastineanalogs and derivatives; Patient Compliance-statistics and numerical data; Neutropenia; Retrospective Studies

Abstract: Poor compliance has been a common feature in clinical trials of adjuvant chemotherapy for NSCLC with only 48% to 69% of patients completing all planned cycles. We retrospectively evaluated compliance and toxicity of platinum-based chemotherapy in the 2 years following recent reports of successful adjuvant chemotherapy trials for NSCLC. Patients who received adjuvant chemotherapy after complete resection of NSCLC between May 2003 and May 2005 were analyzed retrospectively. Patient demographics, ECOG status, stage, pathologic subtype and type of surgery were recorded. The number of chemotherapy cycles, delays, dose reducttions and change of chemotherapy were reported. Fifty patients were identified. The median age was 62 years [38% stage I, 18% stage II, 30% stage III and 14% had multiple primary tumors of variable stages]. Twenty percent were ECOG PS2; Only 12% had undergone pneumonectomy. Forty-one patients [82%] started cisplatin/vinorelbine [three switched to carboplatin because of nephrotoxicity, and one switched to carboplatin/paclitaxel because of fatigue and vomiting]. Three patients received other cisplatin-based combinations; six received carboplatin-based treatment [one each because of advanced age and cardiac dysfunction and 4 because of preexisting neuropathy]. Eighty percent completed all treatment; 40% required a dose reduction and 58% required delays in treatment. Six events of febrile neutropenia were reported in 5 patients and 5 patients required admission for toxicity. There were no toxic deaths. Multivariate analysis showed no effect of age, gender, extent of surgery or ECOG status on compliance, need for treatment modification or toxicity. Compared to historical trials, adjuvant platinum-based chemotherapy for resected NSCLC is now accepted by patients and physicians with a high degree of compliance.

# Career Choice

# Psychometric properties of a persian version of the specialty indecision scale: a Preliminary study.

Hadadgar, A.; Yousefie, A.R.; Sabouri, M.; Richard, G.

E-mail:hadadgar@edc.mui.ac.ir

Isfahan University of Medical Sciences - Educational Development Center - Department of Medical Education IJME - Iranian Journal of Medical Education 2009; 8 (2): 229-237 (17 ref.)

Keywords: Decision Making; Psychometrics; Students, Medical; Translating; Questionnaires; Cross-Sectional Studies Abstract: Diagnosis and management of specialty choice indecision is an important part of career guidance and support for medical students. Determining causes of indecision and resolving them helps students to make an optimum decision. The aim of this study was to determine the psychometric properties of a Persian version of the specialty indecision scale as an on-line questionnaire for medical student and graduates of Isfahan University of medical sciences, and also to determine the attitude of the participants towards this guestionnaire. In this cross-sectional study, using Richard's specialty indecision questionnaire, the Iranian version of the questionnaire for clinical specialty indecision was developed. Face validity and cultural validity were confirmed by educational experts, and translation, back translation method, respectively. Then, the participants completed the online version of the questionnaire. Afterward, the questionnaire's items were factor analyzed. At the end, Subjects were asked about the questionnaire [clarity of the questionnaire, attractiveness of the website, user friendliness of the questionnaire, number of personal questions]. Fifty eight subjects participated in this study. The reliability of the questionnaire was acceptable [0.84]. Two questions were omitted and five were revised. Items were grouped in 4 factors [general indecisiveness, postponing, barriers, and lack of determination] one of which [barriers] was similar to the American version. The subjects were also satisfied with online guestionnaire and 100% of them thought completion of the tool was useful. This study showed that conducting a web based specialty indecision questionnaire is possible. It had differences with the American version both in number of factors and the items placement. These differences are justifiable in terms of the differences in cultural backgrounds and residency admission processes in the two countries. Also, lack of attention to translating the questions and inadequacy of sample size could be other reasons for these differences. With regard to the fact that there are no career counselors in Iranian universities, operating a web based career guidance system, along with introducing a counselor, may help medical students in specialty choice decision making.

# Carnitine

### therapeutic use

#### Effect of L-carnitine on serum lipid profile in Iraqi diabetics.

Al Farha, Manal Abd Al Monim; Bashi, Ahmed Yahya Dallal

University of Mosul - College of Pharmacy - Department of Medical Pharmacy

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 212-216 (43 ref.)

Keywords: Diabetes Mellitus; Lipids-blood; Triglycerides; Cholesterol; Cholesterol, HDL; Cholesterol, LDL; Dietary Supplements

Abstract: To assess the effect of L-carnitine administration, as an additional useful supplement, on serum lipid profile in type 2 diabetics. Fifty-four patients [32 males, 22 females] aged 25-70 years, with type 2 diabetes mellitus who were attending Al-Waffa Diabetic Clinic, Mosul, Iraq; during the period from 1[st] October 200s to 31st March 2006 were included in this study. L-carnitine was given to each of these diabetics for 45 days in a dose of 550 mg, in form of tablets in two doses orally, in addition to their other hypoglycaemic drugs. Blood samples were taken from each patient for the measurement of serum triglyceride [TG], total cholesterol [TC], high density lipoprotein-choiesteroi [HDL-C], and calculation of low density lipoprotein-cholesterol [LDL-C], Non-HDL-C and TC: HDL-C [atherogenic index, Al]. Four measurements were taken: before the first administration of L-carnitine, then after 15, 30 and 45 days from the commencement of the study. Mean TC showed a significant decrease [p < 0.001] between the four intervals with a mean of 8.55 mmol/L before starting L-carnitine administration, and 6.47, 5.99 and 5.5 mmol/L after 15,30 and 45 days respectively from the commencement of the study. There is also a significant decrease [p < 0.001] in 16 between these four intervals with means of 2.17 mmol/L before administrating L-carnitine, and 1.81,1.55 and 1.41 mmol/L after 15,30 and 45 days from the commencement of the study respectively. In addition, a significant increase [p < 0.001] in HDL-C was found between these four intervals with means of 1.25 mmol/L before administrating L-carnitine, and 1.44, 1.71 and 1.56 mmoi/L after 15,30 and 45 days from starting carnitine administration respectively. The Al was also significantly decreased [p < 0.001] with a mean of 7.72 before of administration of carnitine and 3 after finishing the period of 45 days from carnitine administration. The LDL-C was significantly decrease [p < 0.001] with a mean of 6.88 mmol/L before administering L-carnitine, and 4.21, 3.73 and 3.45 mmol/L after 15, 30 and 45 days from the commencement of the study respectively. The Non-HDL-C was significantly decreased [p < 0.001] with a mean of 7.17 mmol/L before starting carnitine administration and 3.83 mmol/L after 45 day from starting carnitine administration. Lcarnitine can be useful as an additional dietary supplement and pharmaceutical agent that has an improving effect on serum lipid profile in type 2 diabetics.

# Caseins

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

Al Batayneh, Ola.B.

E-mail:olabt@hotmail.com

Jordan University of Science and Technology [JUST] - Faculty of Dentistry - Department of Preventive Dentistry

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

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

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

# Catha

### adverse effects

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

Al Aghbari, Khaled; Al Selwi, Abd Al Hafid; Askar, Faiza S.

E-mail:Dr\_Khaled\_Alahbari@yahoo.com

Sana'a University - Department of Medicine

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

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

Abstract: Although the risk factors for acute MI were studied thoroughly in different countries worldwide, few studies in our country had been done, and cover only limited aspects of acute myocardial infarction [MI], for this reason we start this study to determine the general characters and risk factors of Yemeni patients presented with acute [MI]; and to highlight on the possible role of Khat chewing as potential risk factor for [MI] in our country in addition to its possible effect in changing its circadian rhythm. The study was prospective; hospital based descriptive study including all patients admitted with the diagnosis of acute MI to the 3 main general hospitals in Sana'a city in the period from 1

October 2005 to 30 September 2006. Name, age, gender, residence, habits, time of onset of chest pain and previous history or family history of ischemic heart disease [IHD] was taken. Body mass index [BMI] and blood pressure were recorded, fasting lipid profile and blood sugar were measured. The data was collected and then analyzed using SPSS system. During the study period, 264 patients were admitted with a mean age of 50 years, all of them were married with predominant male gender 84%. Risk factors observed in our study were Khat chewing in 90.15%, smoking in 72%, hypertension in 21%, obesity in 15.96%, hyperlipidemia in 27%, diabetes mellitus [DM] in 24% and past history of ischemic heart disease was found in 13%. We notice that the onset of chest pain in most of our patients was in the afternoon 34% and early night hours 24%, which is opposite to the usual circadian rhythm of acute MI in other parts of the world which is predominant in the early morning. Yemeni patients sustained acute MI are younger than western people or even other Arab countries. Common risk factors as hypertension, DM and hyperlipidemia were noticed only in minority of our patients. Smoking is a common risk factor after Khat chewing habit which was proposed as new risk factor. Circadian rhythm of acute MI in Yemen is differing from other part of the world.

# **Catheterization, Central Venous**

### utilization

#### Percutaneous central venous catheterization in children, is it efficient?

Sarayrah, Majed; Habaibeh, Emad; Nabulsi, Basem; Al Nsoor, Nariman; Khreisha, Hussein; Sboo, Ibraheem <u>E-mail:drmajedsar@hotmail.com</u>

King Hussein Medical Center - Department of General Surgery

Sudan Journal of Medical Sciences 2009; 4 (2): 147-152 (30 ref.)

**Keywords:** Child; Retrospective Studies; Intensive Care Units; Demography; Catheterization-adverse effects; Pneumothorax; Infection; Treatment Outcome

**Abstract:** To evaluate the frequent use of percutaneous central venous catheters [CVCs] in pediatric age group. Retrospectively we reviewed the records of all children that had percutaneous CVCs in the pediatric surgical ward and pediatric intensive care unit at King Hussein Medical Center between January 2007 and December 2007 [one year]. Patients were evaluated with respect to their age, gender, catheter type, indication for CVC insertion, site of CVC insertion. The duration of catheter use and eventual complications were also taken into consideration. A total of 120 percutaneous CVCs were inserted in 104 children. Patient age ranged from one day to 14 years. The average catheter insertion time was 12.5 days. We noted 66 [18.8%] CVC- related complications. Complications related to percutaneous CVCs insertion were malposition of catheter [5.4%] and pneumothorax [0.9%]. Occlusion of CVCs [4.3%], catheter related bloodstream infections [CRBI] [4.0%], dislodgment [3.7%] and catheter damage [0.6%] were complications associated with length of CVCs use. We conclude that percutaneous central venous catheterization is a safe and efficient procedure that can be done at bedside with minimal complications in pediatric age group.

# **Cell Physiological Phenomena**

Secret of healthy living in a hostile world.

Hegde, Belle M. <u>E-mail:hegdebm@gmail.com</u> Manipal University **KMJ - Kuwait Medical Journal** 2009; 41 (2): 91-92 (8 ref.) **Keywords:** Medical Errors; Evidence-Based Medicine: HSP70 Heat-Shock Protiens

# **Cerebellar Diseases**

### diagnosis

#### The patterns of clinical presentations of cerebellar syndromes among adult Sudanese patients.

Hussein, Abbashar; Mohamed, Adam; Younis, Ali; Eltoum, H.A.; Sidig, A.; Khalfalla, K.; Al adil, O.; Hammad, A.; Malk, M.; El Tahir, Ammar; Gadour, M.O.H.

E-mail:abbashar99@yahoo.com

University of Khartoum - Faculty of Medicine - Department of Medicine

Sudan Journal of Medical Sciences 2009; 4 (2): 117-121 (35 ref.)

**Keywords:** Nervous System Diseases; Cerebellar Diseases-etiology; Prospective Studies; Cross-Sectional Studies; Signs and Symptoms; Adult; Gait Disorders, Neurologic; Ataxia; Cerebellar Ataxia; Dysarthria; Nystagmus, Pathologic **Abstract:** Cerebellar syndromes are one of the commonest neurological diseases. To study the patterns of clinical presentations of cerebellar syndromes and to identify the possible causes. This is a prospective hospital based, cross-sectional study. One hundred adult Sudanese patients with cerebellar syndromes were included in the study during the period from January 2006 -January 2007. The most common age group affected was 18-25 years. Male to female ratio was 1.5: 1; unsteadiness on walking was the most common a genoup affected was the most common sign [83%]. Cerebrovascular disease was the most common a etiology [25%]. Cerebellar syndromes are not rare in Sudan. However, they were diagnosed more commonly at the central regions of the country probably because of more awareness of patients and better facilities for diagnosis. The age of onset, the male predominance, the presentation and clinical findings were not different from reported literature. This also goes for the common causes apart from alcohol which is a strikingly rare as a cause in this study and could be accounted for the implementation of Elshariya [Islamic laws] Laws in Sudan.

# **Cerebral Hemorrhage**

### epidemiology

#### Intracerebral hemorrhage.

Bahou, Yacoub G. <u>E-mail:jacobbahou419@hotmail.com</u> Jordan University Hospital - Neurology Section **Neurosciences** 2009; 14 (2): 152-157 (51 ref.)

**Keywords:** Cerebral Hemorrhage-diagnosis; Cerebral Hemorrhage-therapy; Cerebral Hemorrhage-mortality; Hypertension; Aspirin-adverse effects; Warfarin-adverse effects; Hemiplegia; Headache; Vomiting; Basal Granglia; Prevalence; Tomography, X-Ray Computed; Treatment Outcome; Stroke; Retrospective Studies

Abstract: To study intracerebral hemorrhage [ICH] at Jordan University Hospital [JUH] with the aim of assessing prevalence, age/gender distribution, causes, clinical manifestations, and location of ICH on CT brain, treatment modalities and outcome, and to compare these findings with those from Middle Eastern and Western literature. Among 1498 patients with stroke seen over a 6-year-period, from January 2002 to December 2007 at JUH, Amman, Jordan, 100 patients with spontaneous ICH were studied retrospectively. The prevalence of ICH was 6.7%. The mean age was 61 years, with 71 males, and 29 females. The most common cause was hypertension, alone or combined with the use of aspirin and/or warfarin. The most common clinical manifestations were hemiparesis/plegia, impaired level of consciousness [mean Glasgow coma scale [GCS] score = 7.3] and headache/vomiting. The most common location on CT brain was in the basal ganglia [61 patients]. Seventy-nine patients received medical treatment and 21 had surgery. Forty-two patients died after a mean of 7 days [ranging from one day to 6 weeks]. The factors related to mortality were old age >68 years, GCS < 8, intraventricular extension of ICH on CT brain and the presence of other co-morbidities. Among 58 survivors, 50 were left with neurological deficit, predominantly hemiparesis/plegia in 46 patients. Twelve patients were left with chronic epilepsy. This study shows a lower prevalence of ICH compared to developed countries, a similar age and gender distribution, and hypertension as the major risk factor, which should be the focus of public health in Jordan and the Arab World.

# **Cerebral Palsy**

### therapy

Effect of sensory integration therapy on gross motor function in children with cerebral palsy. Shamsoddini, A.R.; Hollisaz, M.T.

E-mail:alirezaot@yahoo.com

Baqiyatallah university of Medical Sciences - Medical Faculty - Occupational Therapy Department

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 43-48 (26 ref.)

Keywords: Cerebral Palsy-epidemiology; Motor Skills; Physical Therapy Modalities; Child

**Abstract:** The primary problem in children with cerebral palsy [CP], frequently referred for occupational therapy, is gross motor dysfunction. The current study was designed to investigate the effects of sensory integration therapy [SIT] on gross motor skills in CP patients. Twenty-four children with diplegic spastic CP were randomly divided into two groups: First group [n=14,6 girls, 8 boys], age range 2 to 6 years, mean age 3.4 years. SIT training was given to the first group and only the home program was given for the second group. All children were evaluated with gross motor function measurement [GMFM 88] for rolling, sitting, crawling, standing and walking position before and after intervention. Treatment duration for both groups was 1 hour, 5 days per week for a period of 12 weeks. Gross motor function in children of the case group improved significantly better that in the control group, after intervention in sitting [P=0.02], crawling [P=0.001] and standing [P=0.03] positions; however no significant difference was seen in rolling [P=0.65] and walking [P=0.69] ability assessment. This study showed the beneficial effects of the SIT training program for children with CP; the SIT intervention had a significantly positive effect on gross motor function in the children with diplegic spastic CP. Moreover the results of the present study showed that sensory integration and vestibular stimulation were effective in children with cerebral palsy.

# **Cerebrospinal Fluid Shunts**

### adverse effects

#### Ventriculo-sagittal sinus shunt malfunction. Causes of failure, avoidance, and alternatives. Elwatidy, Sherif M.

E-mail:smfwat@yahoo.com

King Saud University - College of Medicine - Division of Neurosurgery

Neurosciences 2009; 14 (2): 172-174 (8 ref.)

**Keywords:** Cerebral Ventricles; Superior Sagittal Sinus; Hydrocephalus; Brain Stem Infarctions; Ventricul operitoneal Shunt; Catheters, Indwelling; Magnetic Resonance Angiography; Heart atria; Thoracoscopes

Abstract: This case report highlights causes of failure of the ventriculo-sagittal sinus [V-S] shunt and precautions to avoid them. We present, a 14-year-old girl, a case of post-hemorrhagic hydrocephalus with multiple revisions of ventriculo-peritoneal [V-P] and ventriculo-atrial [V-A] shunts. She developed malfunctioned V-S shunt, and ventriculitis that was complicated with massive cerebellar and brain stem infarction and the patient died. To avoid malfunction, a

cardiac catheter with side slits should be used, magnetic resonance angiography is recommended before shunt placement to check the patency of the sinus, and the pressure in the superior sagittal sinus should be measured at the time of surgery. In patients with problematic distal catheters, direct placement of the catheter into the right atrium using Thoracoscopy could be an alternative to gall bladder or ureter shunts.

# **Cesarean Section**

# Caesarean section in the Islamic Republic of Iran: prevalence and some sociodemographic correlates.

Ahmad Nia, S.; Delavar, B.; Eini Zinab, H.; Kazemipour, S.; Mehryar, A.H.; Naghavi, M.

College of Social Sciences, Allameh Tabatabaee

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1389-1398 (20 ref.)

Keywords: Prevalence; Socioeconomic Factors; Age Factors; Educational Status; Parity

**Abstract:** The aim of this study was to investigate the prevalence of caesarean section in the Islamic Republic of Iran in different provinces and to compare the sociodemographic characteristics of married women with and without caesarean section. Data were analysed from the Iranian Demographic and Health Survey of a representative sample of married women [n = 17 991] who delivered a baby between September 1998 and October 2000. Overall, 35.0% of deliveries were by caesarean section. Women having a caesarean section were older, better educated, married at a later age and with lower parity than those who delivered normally. Provincial variations in rates were significantly correlated with indices of socioeconomic development.

# Chickens

#### genetics

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

El Gendy, Essam A.

Cairo University - Faculty of Agriculture - Department of Animal Production

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

Keywords: Genome; Genotype; Genetic Screening; Polymerase Chain Reaction; Polymorphism, Genetic; Alleles

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

# Child Abuse

### Child abuse and neglect services in the occupied Palestinian territory.

Halileh, S.; Abdullah, A.

E-mail:samia@birzit.edu

Birzeit University - Institute of Community and Public Health

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1504-1512 (9 ref.)

Keywords: Questionnaires; Child Abuse, Sexual; United Nations; Family; Socioeconomic Factors; Child Welfare; Child Health Services

Abstract: This study in 2005 aimed to investigate the services available for abused and neglected children in the occupied Palestinian territory. Telephone interviews were conducted with 62 institutions from the government, non-profit and private sectors that dealt with child abuse and neglect, of which 58 provided services. Services offered were mainly in psychosocial health. Usually abused children were brought to service providers by family members and teachers. Common types of abuse seen at these institutions were physical, psychological and sexual abuse. Interviewees reported most cases of abuse occurred in the home and at school. Challenges were related mainly to sociocultural issues, training, funding and the military occupation.

# Chlamydia trachomatis

### immunology

# Chlamydia trachomatis and rubella antibodies in women with full-term deliveries and women with abortion in Baghdad.

Abdul Karim, E.T.; Abdul Muhymen, N.; Al Saadie, M.

E-mail:enas yhy@yahoo.com

Al-Nahrain University - Medical College - Department of Community Medicine

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1407-1411 (13 ref.)

Keywords: Rubella-immunology; Antibodies-blood; Immunoglobulin G-blood; Abortion, Spontaneous-microbiology; Term Birth; Seroepidemiologic Studies; Cross-Sectional Studies

**Abstract:** The seroprevalence of Chlamydia trachomatis and rubella IgG antibodies were measured in women with full-term deliveries [n = 198] and with abortion [n = 79] in a hospital in Baghdad city, Iraq. Positive rubella antibody titers were found in 42.9% of mothers with full-term deliveries and 34.2% with abortion. C. trachomatis infection was found in 13.6% of mothers with full-term deliveries and 6.4% with abortion, with a significant difference in mean antibody levels between the 2 groups. Routine screening for C. trachomatis and rubella is needed for pregnant women in Iraq.

# Chromium Compounds

### adverse effects

Effect of chromium- picolinat on biochemical and histopathological altrations in rats.

Mahmoud, Amany Abdel Ghaffar; Ghanem, Hala M.; Darwish, Nevine S.

E-mail:amany300@hotmail.com

Ain Shams University - Faculty of science - Biochemistry Department Research Institute of Ophthalmology

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 163-176 (33 ref.)

Keywords: Liver-pathology; Histology; Oxidative Stress; Glutathione Peroxidase-blood; Malondialdehyde-blood; Protective Agents; Ascorbic Acid; Picolines-blood; Treatment Outcome; Rats

**Abstract:** Chromium III tris [picolinate] [Cr[pie][3]ps a popular nutritional supplement; however its safety has been questioned, especially with regard to its ability to act as a clastogen. The aim of the preset work was to evaluate the biochemical and moiph01gicd changes in the liver following oral administration of Cr-picolinate and the possible protective effect of ascorbic acid [vitamin C] in rats. Fifty male Sprague Dawly rats were divided into five groups included the control group, the rest four groups treated orally with picolinte [0.8 and 1.5 mg 7100 g b. w] alone or in combination with Vitamin C [0.5 mg 7100 g b. w] for 8 weeks. The results indicated that animals treated with Cr-picolinate alone at the high dose level [1.5 mg/100 g b.w] showed a significant decrease in reduced glutathione [GSH] level and activity of glutathione peroxidase [GPx] in liver homogenate or blood accompanied with a significant increase degenerative changes in the form of swollen cells and degenerating nuclei, yet some cells showed regeneration by division of their nuclei The methyl green pyronin [MGP] stain showed less level of DNA in the nuclei, the cells appeared swollen and fused in some areas. It could be concluded that consumption of Cr-picolinate for a long time is contributing to health hazards and induced several hazards to liver. Supplementation with extra amounts of vitamin C may be useful to restrain the chromium-induced biochemical and morphological changes to the liver. It is believed that

# **Circumcision**, Female

#### Medicalization of female genital cutting in Egypt.

Refaat, A.

E-mail:amany.refaat@iwaldenu.edu

Suez Canal University - Department of Community Medicine

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1379-1388 (29 ref.)

Keywords: Cross-Sectional Studies; Questionnaires; Physicians; Knowledge

**Abstract:** The medicalization of female genital cutting [FGC] has been increasing. This cross-sectional study estimated the determinants of the practice of FGC among Egyptian physicians. Responses from 193 physicians showed that while 88% of them knew at least one adverse physical or sexual consequence, 18% approved of it, mostly as a religious observation [82%]. Almost one-fifth [19%] of physicians practised FGC, mostly due to conviction [51%] or for-profit [30%]. A negative correlation was found between knowledge of the adverse consequences of FGC and both approval and practice. Cultural influences were the highest determinant [81%] followed by lack of knowledge [35%].

# Clarithromycin

### blood

# A sensitive liquid chromatographic method for the analysis of clarithromycin with pre-column derivatization: application to a bioequivalencestudy.

Farshchi, Amir; Ghiasi, Golbarg; Bahratni, Gholamreza

Kermanshah University of Medical Sciences - School of Pharmacy

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 25-32 (15 ref.)

Keywords: Chromatography, High Pressure Liquid; Therapeutic Equivalency; Sensitivity and Specificity

**Abstract:** A sensitive liquid chromatographic method for the analysis of clarithromycin- a macrolide antibiotic- in human serum, using pre-column derivatization with 9-fluorenylmethyl chloroform ate [FMOC-CI] is described. The method involved liquid - liquid extraction of the drug and an internal standard [amantadine] followed by pre-column derivatization of the analytic of 0.05 M phosphate buffer containing triethylamine [2 ml/l; pH 3.8] and methanol [17:83, v/] was used as mobile phase and chromatographic separation was achieved on a Shim pack CLC-ODS column. The eluate was monitored by a fluorescence detector with respective excitation and emission wavelengths of 265 and 315 nm. The analytical method was linear over the concentration range of 0.025-10 mg/ml of clarithromycin in human serum with a limit of quantification of 0.025 mg/ml. The assay is sensitive enough to measure drug levels obtained in human single dose studies. In the present method, sensitivity and the running time of analysis have been improved and successfully applied in a bioequivalence study of three different clarithromycin preparations in 12 healthy volunteers.

# Clotrimazole

### pharmacology

# In vitro study of the effect of clotrimazole incorporation into silicone soft liner on fungal colonization.

Vojdani, M.; Zibaei, M.; Khaledi, A.A.R.; Zomorodian, K.; Ranjbar, M.A.; Boshehri, S.

E-mail:vojdanim@sums.ac.ir

Shiraz University of Medical Sciences - School of Dentistry - Department of Prosthodontic

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 19-23 (23 ref.)

Keywords: Denture Liners; Silicones; Candida albicans-drug effects; Fungi-drug effects; Stomatitis, Denture-therapy; Agar

Abstract: Candidal colonization on soft liners is important in the development of pathogenesis, such as denture stomatitis. It has heen reported that combining anti-fungal agents into soft liners might be used in treatment and prevention of denture stomatitis. The aim of this in-vitro study was to determine whether incorporating Clotrimazole [C] into the silicone soft liner [S], would inhibit the growth of C. albicans when the specimens are stored in distilled water and washed daily with wet cotton. Experimental specimen disks incorporated with Clotrimazole [Sc[1], Sc[30], Sc[60] and without Clotrimazole [S[1], S[30], S[60]] into the soft liner [no = 8] were fabricated aseptically against the polyester film to produce a smooth surface. The treated and control disks were stored in distilled water for 1, 30 and 60 days and washed daily with wet cotton. For fungal growth assessment, they were inoculated with C. albicans suspension. The disks were rinsed and sonicated in sterile water to remove surface organisms. The attached yeast was measured by inoculation of the yeast suspension on Sabouraud's agar. The data were compared using two-way ANOVA. The mean colony forming units [CPU] per mm[2] for the specimens without Clotrimazole after water storage and washing with wet cotton for 1, 30 and 60 days was 6.5X10[6], 5.8X10[6] and 6.1X10[6], respectively. CPU for specimens with Clotrimazole decreased significantly to 2.6X10[6] and 3.9X10[6] and 4.6X10[6] after 1, 30, and 60 days, respectively. In comparison to those of the control disks, Clotrimazole in treated disks was effective in inhibiting C albicans growth significantly following storage in water for 2 months [P < 0.05]. The addition of Clotrimazole significantly reduced C.albicans growth to the surface of the silicone soft liner. The samples continued to inhibit the fungal growth when they were washed daily with wet cotton for 2 months.

# **Composite Resins**

# Effect of composite elasticity and filler concentration on shear bond strength of composite to dentin.

Heshmat, H.; Alavi, G.; Niknam, M.; Alavi, A.A.

Azad University - School of Dentistry - Department of Restorative Dentistry

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 6-12 (17 ref.)

Keywords: Elasticity; Shear Strength; Dental Bonding; Dentin; Cattle; Incisor; Elastic Modulus

Abstract: Resin composites are one of the most popular tooth colored restorative materials. Their enamel and dentin bonding ability are based on many factors, including elasticity and filler concentration. This study was undertaken to evaluate the effect of volumetric filler percentage and modulus of elasticity of six composites by measuring shear bond strength to dentin of the bovine teeth as experimental bonding substrate. Eighty bovine incisors were prepared and divided into eight groups. Tetric Ceram, Tetric Flow, Compo glass F, Helimolar RO, Definite, and Degufill Mineral were applied respectively. A fifth generation of dentin bonding system [Single Bond [3M, USA]] was used for all the groups. The volumetric filler percentage of each composite was obtained from their specification data. The modulus of elasticity

was determined, using the formula presented by Bream et al [1986]. Then, in last two groups Heliomolar RO and Definite were bonded using their own bonding systems, Syntac Multi-component, and Definite Multibond. The shear bond strength was measured according to the ISO/TR 11405. Pearson's correlation test was used to compare the result with groups 4 and 5. The results indicated that the relationship between both the filler percentage and the modulus of elasticity with the shear strength was 16% [P < 0.005]. There was a significant difference between groups 4 and 7, but no significant difference was observed between groups 5 and 8. Using composites with a higher filler content and modulus of elasticity resulted in higher shear bond strength in dentin bonding system. Our results showed that the corresponding dentin bonding system of composites had better results.

# **Coronary Disease**

# Association of breast artery calcification with coronary artery disease and carotid intima-media thickness in premenopausal women.

Sarrafzadegann, N.; Ashrafi, F.; Noorbakhsh, M.; Haghighi, M.; Sadeghi, M.; Mazaheri, F.; Asgari, S.; Akhavan, A. Isfahan University of Medical Sciences - Isfahan Cardiovascular Research Centre

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1474-1482 (31 ref.)

Keywords: Carotid Arteries-pathology; Calcinosis; Risk Factors; Premenopause; Coronary Angiography; Body Mass Index; Mammography; Breast-pathology; Questionnaires

Abstract: This study investigated whether breast arterial calcification [BAC] has an association with coronary artery diseases [CAD] in young premenopausal women and evaluated the association of BAC with carotid intima-media thickness and standard CAD risk factors. Among 84 premenopausal women aged < 55 years who were referred for coronary angiography, 34 [40.5%] had abnormal angiographic findings and 6 [7.1%] showed BAC in their mammograms. The body mass index of patients with BAC was significantly higher than those without BAC. BAC had no significant association with angiography-confirmed CAD.

# Corynebacterium

### genetics

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

Abed, Kawther; Hassan, Hussam Z.

Riyadh University of Girls - Faculty of Education - Botany Department

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

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

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

# Cucumovirus

### Genetics

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

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

Cairo University - Faculty of Agriculture - Department of Vegetables

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

Keywords: Seeds; Genotype; Polymorphism, Genetic; Polymerase Chain Reaction; Breeding; Cucumissativusvirology; Chimera; Enzyme-Linked Immunosorbent Assay

Abstract: The major objective of our cucumber breeding program involves breeding for CMV disease resistance to reduce losses in quality and yield. Seven half diallel cross hybrids resistant to CMV were developed at the Vegetables Breeding Dept., Hort. Res. Inst., Egypt during March, 2006. Sixteen genetically different pure inbred lines of Cucumis sativus were used to develop the hybrids obtained from different sources and selected for their CMV disease-resistance trait. The inbred lines and one commercial [Beit alpha] cultivar as a susceptible control were examined to

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

# Cyclooxygenase Inhibitors

### pharmacology

#### Effect of celecoxib on the peripheral NO production.

Hassanzadeh, Parichehr

E-mail:Pari\_has@yahoo.com

AJA University of Medical Sciences - Faculty of Medicine - Department of Pharmacology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 43-50 (32 ref.)

Keywords: Cyclooxygenase Inhibitors-therapeutic use; Nitric Oxide-physiology; Spectrophotometry; Nitrites; Formaldehyde; Rats, Wistar

**Abstract:** Celecoxib acts through both COX-2-dependent and -independent pathways. According to the paradoxical effect of NO on the inflammatory and nociceptive signal processing, the present study designed to evaluate the probable contribution of NO in the analgesic and anti-inflammatory properties of celecoxib. Different intensities of inflammatory pain were induced by acute and chronic sc administration of 1%, 2.5%, or 5% formalin and spectrophotometrical analysis of the serum nitrite was performed. Then, in the pretreatment process, the effect of celecoxib [10, 20, or 40 mg/kg/ip] was evaluated on the inflammatory pain induced-nitrite. Also, the effect of celecoxib alone [under non-inflammatory condition] was evaluated on the peripheral NO production and the results compared with that of the vehicle. Formalin-induced inflammatory pain led to an enhancement of the serum nitrite in intensity- and time-dependent manners. Celecoxib [40 mg/kg/ip], except its ineffectiveness on the nitrite level, induced 1.5 hr after 5% formalin, reduced production of celecoxib [40 mg/kg/ip], a considerable elevation of nitrite was observed. Celecoxib 10 or 20 mg/kg/ip did not show a significant effect on either inhibition or stimulation of the peripheral NO. NO is involved both in the inflammatory and non-inflammatory conditions. It seems that celecoxib exerts a dual effect on the peripheral NO synthesis at the early stage of its action.

# **Dairy Products**

### microbiology

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

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

Omar El Mokhtar University - Faculty of Veterinary Medicine

Arab Journal of Biotechnology 2009; 12 (1): 49-56 (27 ref.)

Keywords: Fungi; Incidence; Aspergillus; Mycotoxins; Aflatoxin M1

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

# **Dental Implantation**

### methods

#### Immediate smile procedure a clinical case report.

Tardieu, Philippe

E-mail:pt@frenchdentistdubai.com Smile Dental Journal 2009; 4 (1): 26-32 (14 ref.)

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

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

# Dental Implants

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

Ihde, Stefan

E-mail:dr.ihde@implant.com

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

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

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

# **Dental Veneers**

# Shear bond strength of a veneering resin to a Ni-Cr alloy using two different surface treatment methods.

Nikzad, S.; Azari, A.; Khodamoradi, N.

Tehran University of Medical Science - School of Dentistry - Department of Fix Prosthodontics

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 35-40 (21 ref.)

Keywords: Shear Strength; Dental Bonding; Chromium Alloys; Composite Resins; Methacrylates; Dental Porcelain; Nickel

**Abstract:** A strong and stable bond between veneering materials and metal framework considerably promotes the aesthetic appearance and clinical longevity of a resin type restoration. Various adhesive metal primers have also been studied to enhance the bond strength of the composite resins to different metal surfaces. The purpose of the present study was to evaluate the shear bond strength of one laboratory composite resin bonded to a Ni-Cr alloy by means of two different methods. In this study, 24 wax disks were cast and divided into two equal groups. In the first group, a metal primer was applied to the casting surface, while an opaque porcelain material was used for the second group. After application of the veneering composite resin to the treated surfaces, the specimens were stored in a 37°C water bath for 15 days. At the end of this period, all the specimens were subjected to 1200 thermal cycles [5°C and 55 °C] and then tested for shear strength in a universal testing machine at a crosshead speed of 0.5 mm/min. Fractured specimens were examined, using a scanning electron microscope. The opaque porcelain group demonstrated higher bond strength [17.55 +/- 3.33 Mpa] in comparison to the metal primed surface [15 +/- 4.25 Mpa]. However, no statistically significant difference was found between the specimens treated with metal primer and those treated with opaque porcelain. The two alloy surface treatments exhibited mixed failures, however. While the nature of failure for opaque porcelain was predominately cohesive, the failure for the metal primed group was adhesive. It can be concluded that both techniques have potential to significantly improve resin-alloy shear bond strength.

### epidemiology

#### Post stroke depression among Iranian patients.

Iranmanesh, Farhad; Vakilian, Alireza E-mail:swt\_f@yahoo.com

Rafsanjan University of Medical Sciences - Department of Neurology Neurosciences 2009; 14 (2): 148-151 (26 ref.) Keywords: Stroke; Incidence; Hypertension; Diabetes Mellitus; Smoking; Hyperlipidemias; Prospective Studies;

Questionnaires; Risk Factors **Abstract:** To assess the incidence of depression and its contributing factors after an episode of stroke. This prospective study was performed on 200 consecutive patients with acute ischemic stroke admitted to Aliebne-Abitaleb Hospital in Rafsanjani, Iran, from September 2006 to September 2007. The diagnosis of acute ischemic stroke was made by a neurologist and confirmed by MRI. Frequency of depression, according to DSM-IV criteria, as well as demographic data and some contributing factors were registered and analyzed by chi squared test and the logistic regression method. The mean age of patients was 61.15 +/- 8.66 years. Thirty-two percent of patients suffered depression. The frequency of depression was significantly higher in women [40.9%] than men [21.1%] [p=0.004]. There was no significant relation between depression and age, location of lesion, and risk factors for stroke. Hypertension [34%], diabetes [15%], smoking [14%], and hyperlipidemia [14%] were the most common risk factors. Generally, our results show that post stroke depression is prevalent in our society, and this is more prominent among women. Early diagnosis and treatment can help to improve quality of life of these patients.

#### Surveillance of depression in Karachi, Pakistan.

Bushra, Rabia; Ali, Huma <u>E-mail:phr173@hotmail.com</u> Ziauddin University - Ziauddin College of Pharmacy **Neurosciences** 2009; 14 (2): 193-195 (5 ref.) **Keywords:** Depression-etiology; Depressive Disorders, Major; Socioeconomic Factors; Life Style; Prevalence; Cross-Sectional Studies; World Health Organization; Depression-therapy; Electroconvulsive Therapy

# Depression, Postpartum

# epidemiology

#### Frequency and associated factors for postnatal depression.

Muneer, Ather; Minhas, Fareed Aslam; Nizami, Asad Tamiz ud Din; Mujeeb, Faiza; Usmani, Asma Tanvir E-mail:athermuneer@hotmail.com

Rawalpindi General Hospital - Department of Psychiatry/Obstetrics and Gynaecology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 236-239 (25 ref.)

Keywords: Depression, Postpartum-diagnosis; Risk Factors; Social Class; Depressive Disorder, Major; Cross-Sectional Studies

Abstract: To determine the frequency and associated sociodemographic, obstetric and medical factors for postnatal depression in an outpatient sample. A descriptive, cross-sectional study. Department of Obstetrics and Gynaecology, Benazir Bhutto Hospital [formerly Rawalpindi General Hospita]], Rawalpindi, between June 2006 and February 2007. The sample consisted of women who were in the puerperal period [6 weeks postpartum]. They were screened with the help of Edinburgh Postnatal Depression Scale [Urdu version] and the severity of depression was rated with the Hamilton Rating Scale for Depression. A total of 51 participants, or 33.1% of a sample of 154 women suffered from postnatal depression, the majority of whom were either moderately or severely depressed. The demographic profile of depressed patients showed that they were young [mean age around 25 years], had a low level of education [below the matriculate level] and came from the lower socioeconomic class. They had small families comprising of fewer than 3 children, were married for less than 5 years and the majority were from extended families [living with in-laws]. Postnatal depression was found in almost 1/3rd of the study participants and the pre-ponderance of them suffered from moderate or severe depression. They were young and came from a background of socio-economic adversity. Since postnatal depression had adverse consequences for the mother and her newborn baby, there was an urgent need to direct more attention to this problem, in particular towards its early detection, so that morbidity could be reduced in this group of women.

# Depth Perception

# physiology

### A brain electrophysiological correlate of depth perception.

Akay, Ahmet; Celebi, Gurbuz <u>E-mail:ahmet.akay@ege.edu.tr</u> Ege University - Medical School - Department of Biophysics **Neurosciences** 2009; 14 (2): 139-142 (11 ref.)

#### Keywords: Electrophysiological Phenomena; Brain; Evoked Potentials, Visual

**Abstract:** To investigate brain electrical activity accompanying depth perception using random-dot stereograms. Additional experiments were conducted to ascertain the specificity of this potential to depth perception. In the present study, we performed 3 different and independent experiments on 34 subjects to establish the relationship between depth perception and its cortical electrophysiological correlate. Visual evoked potentials in response to visual stimulation by random-dot stereograms were recorded. To achieve this goal, a data acquisition and analysis system, different from common visual evoked potential recording systems, consisting of 2 personal computers, was used. One of the computers was used to generate the visual stimulus patterns and the other to record and digitally average the potentials evoked by the stimuli. This study was carried out at the Department of Biophysics of Ege University Medical School, Izmir, Turkey, from April to December, 2006. A negative potential component, which is thought to arise in association with depth perception, was recorded from the occipital region from 30 of the 34 subjects. Typically, it had a mean latency of 211.46 ms and 6.40 micro V amplitude. The negative potential is related to depth perception, as this component is present in the responses to stimulus, which carries disparity information but is absent when the stimulus is switched to no disparity information. Additional experiments also showed that the specificity of this component to depth perception becomes evident beyond doubt.

# Dermatitis, Atopic

#### Serum OX40 ligand: a potential marker of atopic dermatitis disease severity in children.

Ezzat, Mohamed H.; Sallam, Mohamed A.; Shaheen, Kareem Y.; Abo El Haythim, Rafik E. E-mail:ezzatmhm@hotmail.com

Ain Shams University - Faculty of Medicine - Departments of Pediatrics, Dermatology

Egyptian Journal of Pediatric Allergy and Immunology [The] 2009; 7 (1): 15-22 (19 ref.)

Keywords: Biological Markers; Severity of Illness Index; Tumor Necrosis Factors-blood; Disease Progression; Follow-Up Studies; Questionnaires; Child; Immunoglobulin E; Immunoenzyme Techniques; Antibodies, Monoclonal

Abstract: OX40 ligand [OX40L] and OX40 are members of the tumor necrosis factor [TNF] and TNF receptor [TNFR] super families respectively. Recent studies have indicated the critical involvement of OX40/OX40L interaction in the pathogenesis of atopic dermatitis. To our knowledge, no data could be cited in literature concerning OX40L levels in serum or in other biological fluids of atopic dermatitis children. This study was done to explore the expression of OX40L in the serum of atopic dermatitis children with respect to disease activity and severity. This follow-up, casecontrol longitudinal study was conducted on 64 children as a stratified non-random sample; 34 with atopic dermatitis and 30 healthy children. Serum concentrations of OX40L were measured by and wich enzyme immunoassay. The severity of atopic dermatitis was assessed according to the Leicester Sign Score [LSS], Simple Scoring System [SSS], Scoring Atopic Dermatitis [SCORAD] index, and Objective SCORAD. Serum OX40L levels [pg/ml] in atopic dermatitis patients were significantly elevated as compared to controls [176.6 +/- 45.9] whether during flare [1007 +/- 241.5] or quiescence [699 +/- 198.5]. There were significant positive correlations between serum OX40L levels and each of the LSS, SSS and SCORAD indices of atopic dermatitis disease severity, while it was insignificant regarding the objective SCORAD. However, when atopic dermatitis children were classified according to the objective SCORAD index of severity into mild, moderate and severe, it was found that the mean serum level in the severe group was significantly higher than the corresponding values of the mild or the moderate group. OX40L levels did not correlate with serum total IgE or absolute eosinophils count. Serum total LDH levels correlated positively with each of the serum OX40L levels and the LSS and SCORAD indices of severity. Serum OX40L level is an objective reliable marker of atopic dermatitis severity in children. It may be useful for follow up and may help to improve research and management of this disease. Blockade of interactions between OX40 on Th2 cells and OX40L on activated dendritic cells using an OX40Lspecific monoclonal antibody could represent a novel strategy for the treatment of atopic dermatitis.

## Dexmedetomidine

## pharmacology

#### Effect of dexmedetomidine added to spinal bupivacaine for urological procedures.

Al Mustafa, Mahmoud M.; Abu Halaweh, Sami A.; Aloweidi, Abdel Karim S.; Murshidi, Mujalli M.; Ammari, Bassam A.; Awwad, Ziad M.; Al Edwan, Ghazi M.; Ramsay, Micheal A.

E-mail:mahmoud\_juh@hotmail.com

Jordan University Hospital - Department of Anesthesia and Intensive Care

Saudi Medical Journal 2009; 30 (3): 365-370 (27 ref.)

Keywords: Dexmedetomidine-adminstration and dosage; Bupivacaine-therapeutic use; Nerve Block; Urologic Surgical Procedures

**Abstract:** To determine the effect of adding dexmedetomidine to bupivacaine for neuraxial anesthesia. Sixty-six patients were studied between April and May 2008 in the University of Jordan, Amman Jordan. They were randomly assigned into 3 groups, each receiving spinal bupivacaine 12.5mg combined with normal saline [group N] Dexmedetomidine 5ug [group D5], or Dexmedetomidine 10ug [group D10]. The onset times to reach T10 sensory and Bromage 3 motor block, and the regression times to reach S1 sensory level and Bromage 0 motor scale, were recorded. The mean time of sensory block to reach the T10 dermatome was 4.7 +/- 2.0 minutes in D10 group, 6.3 +/- 2.7 minutes in D5, and 9.5 +/- 3.0 minutes in group N. The mean time to reach S1 minutes in group D10, 13.0 +/- 3.4 minutes in D5, and 18.0 +/- 3.3 minutes in group N. The regression time to reach S1 dermatome was 338.9 +/- 44.8 minutes in group D10, 277.1 +/- 23.2 minutes in D5, and 165.5 +/- 32.9 minutes in group D10, 277.1 +/- 23.2 minutes in D5, and 165.5 +/- 32.9 minutes in group D10, 277.1 +/- 23.2 minutes in D5, and 165.5 +/- 32.9 minutes in group D10, 277.1 +/- 23.2 minutes in D5, and 165.5 +/- 32.9 minutes in group D10, 277.1 +/- 23.2 minutes in D5, and 165.5 +/- 32.9 minutes in D5, and 165.

group N. The regression to Bromage 0 was 302.9 +/- 36.7 minutes in D10, 246.4 +/- 25.7 minutes in D5, and 140.1 +/- 32.3 minutes in group N. Onset and regression of sensory and motor block were highly significant [N vesus D5, N versus D10, and D5 versus D10, p < 0.001]. Dexmedetomidine has a dose dependant effect on the onset and regression of sensory and motor block when used as an adjuvant to bupivacaine in spinal anesthesia.

# **Diabetes Mellitus**

## complications

#### Follow up of diabetic complications.

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

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

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

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

# Diabetes Mellitus, Type 1

## complications

# Levels of serum intercellular and vascular adhesion molecules in insulin dependent diabetic nephropathy patients.

Ali, Fahmy T.; Seoudi, Dina M.; Al Raway, Ahmed M.; Mahran, Nevien A.

Ain Shams University - Faculty of Science - Biochemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 1-16 (27 ref.)

Keywords: Diabetic Nephropathies; Intercellular Adhesion Molecule-1; Vascular Cell Adhesion Molecule-1; E-Selectin; Interleukin-1; C-Reactive Protein

Abstract: The study evaluated the possible significant role of soluble intercellular and vascular adhesion molecule-1 [sICAM-1 and sVCAM-1], sE-selectin and interluekin-l beta in development nephropathy in patients with insulin dependent diabetes mellitus [IDDM]. This study included 60 patients with type 1 diabetes mellitus [IDDM], together with 20 healthy control subjects. Patients were divided into 3 groups according to the onset of disease. All studied groups were subjected to clinical and laboratory evaluation of serum soluble sIC AM-1, sVCAM-1, sE-selectin, IL-l beta in association with micro albumin, and CRP. A highly significant elevation of soluble adhesion molecules [sICAM-1, sVCAM -1 and sE-selectin] and micro albuminuria were observed in patients with IDDM, while there was no significance difference in ILI-beta in the same patients. Our findings may have clinical implications, since they may indicate that, these adhesion molecules are known as very strong marker for renal complications and the circulating forms of these adhesion molecules have been associated with clinical vascular events and all-cause mortality in the renal population.

## diet therapy

#### Clinical hypoglycemic effects of Allium cepa [red onion] in type 1 diabetic patients.

Taj Eldin, Imad M.; Ahmed, Elhadi M.; Abd Elwahab, H.M.

University of Gezira - Faculty of Pharmacy - Department of Pharmacology

Sudan Journal of Medical Sciences 2009; 4 (2): 153-156 (11 ref.)

Keywords: Allium; Onions; Hypoglycemic Agents; Autoimmune Diseases; Islets of Langerhans; Insulin; Blood Glucose; Hypoglycemia

Abstract: Type 1 diabetes mellitus is an autoimmune disease caused by destruction of pancreatic islet beta cells and characterized by defect in insulin secretion. The present study was carried out to investigate the hypoglycemic effects of Allium cepa in patients with type 1 diabetic patients. In the assessment of the hypoglycaemic activity of Allium cepa in type 1 diabetic patients [n=21], crude Allium cepa [100 g] caused a considerably lowered value in the fasting blood glucose levels by about 89 mg/dl in relation to insulin [145 mg/dl] after 4 hours. Also the ingestion of crude Allium cepa by type 1 diabetic patients produced a significant reduction in the induced hyperglycemia [GTT] by about 120 mg/dl in relation to water [77 mg/dl] and the standard drug insulin [153 mg/dl]. Crude Allium cepa produced hypoglycemic effects, thus it could be used as a dietary supplement in management of diabetes.

# Diabetes Mellitus, Type 2

### diagnosis

#### The effect of glycemic control on serum lipids and calcium - phosphate profiles in patients with type 2 diabetes mellitus.

Abdel Gayoum, Abdel Gayoum A.; Musa, Abdalla S.

E-mail:abelgayoum@hotmail.com

University of Hail - Faculty of Health Sciences - Department of Medical Laboratories

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 79-92 (32 ref.)

Keywords: Hemoglobin A, Glycosylated-blood; Body Mass Index; Hyperlipidemia-blood; Cholesterol-blood; Triglycerides-blood; Potassium-blood; Magnesium-blood; Calcium Phosphates-metabolism

Abstract: The present study was carried out to investigate the effect of glycemic control levels in type 2 diabetic patients on the serum lipids and lipoprotein profiles and the serum levels of calcium, phosphate and some other electrolytes. The study was conducted on 81 patients with type 2 diabetes mellitus, who were attending the Outpatient Diabetic and Endocrine Clinic in King Khaled Hospital, Hail, Kingdom of Saudi Arabia. The patients were classified into two groups depending on their glycosylated hemoglobin [HbAi]; First: those with good glycemic control [GGC] who had their HbAic </= 7.5% [n = 38] and those with poor glycemic control [PGC] who had their HbAic > 7.5% [n = 43]. The control group comprised of 52 healthy subjects. All anthropometric and biochemical measurements were carried out using the standard methods. Both control and diabetic groups showed high prevalence of obesity with BMI values > 30 [32.2% of C, 34.2% of GGC and 39.5% of the PGC]. The fasting serum glucose levels in GGC and PGC groups were significantly higher than control by 77.3% and 1.1-fold, respectively. The serum total cholesterol ITcl in the PGC group showed a significant increase [P < 0.01] by 14.4%, whereas, the GGC was not significantly different from control. Tc showed a significant positive correlation with Hb Ale [r = 0.91, P = 0.00007]. On the other hand, the serum triglyceride was significantly higher [P < 0.01] in both GGC and PGC groups. The VLDL was elevated in the GGC by 96.5% and in the PGC by 100% compared to control, whereas, the LDLc fractions in the GGC and PGC were increased by 9.1% and 16.7%, respectively, but HDL-c was not-altered. The-Serum magnesium and sodium levels were not altered in any of the diabetic groups. However, calcium was significantly raised [P0.05] in the PGC compared to control, but not significantly different in GGC. Serum phosphate in the GGC and PGC exhibited significant increases [P = 0.001] and [P = 0.01], respectively. Similarly, the potassium levels were significantly higher in both groups compared to control. The type 2 diabetic patients who had better glycemic control showed favorable lipid and lipoprotein profiles with lower risk factors for atherosclerosis and had moderate calcium and phosphate levels compared to their poorly controlled counterparts.

# Diabetic Foot

## therapy

#### Diabetic septic foot in Omdurman Teaching Hospital.

Adam, Mohammed Alnour; Hamza, Aamir Abdullahi; İbrahim, Alguili Elsheikh

E-mail:dr\_mohdalnour@yahoo.com

Juba University - College of Medicine - Department of Surgery

Sudan Journal of Medical Sciences 2009; 4 (2): 129-132 (22 ref.)

Keywords: Diabetic Foot-classification; Diabetes Mellitus; Retrospective Studies; Amputation; Mortality; Risk Factors; Ulcer; Hospitals, Teaching

Abstract: To audit the management of diabetic septic foot [DSF] lesions in Omdurman Teaching Hospital, using Wagner classification. This is a retrospective study on 208 patients with DSF admitted to Omdurman Teaching Hospital, Sudan between June 2006 and May 2007. Data were analyzed manually. The male to female ratio was 2:1. The mean age +/- SD was 56 +/- 12.35 year. 16.8% patients were grade 1.33 [15.9%] patients were grade 2. grades 3, 4, 5 patients were 66 [37 %], 38 [18.3%] and 36 [17.3%] respectively. Major lower limb amputation and mortality were 19.2%, and 6.7% respectively. Preventive measures for patients at risk are highly needed, and early presentation is encouraged when ulcer develops in diabetic foot to avoid subsequent complications.

# **Diabetic Neuropathies**

## epidemiology

Cardiac autonomic neuropathy [CAN] in type-1 diabetes, mellitus patients and its association with the duration of disease and Glycemic control.

Khoharo, Haji Khan; Ansari, Shuaib; Shaikh, Imran Ali; Qureshi, Fatima E-mail:drhaajikhan786@yahoo.com

Muhammad Medical College - Department of Medicine

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 232-235 (21 ref.)

Keywords: Diabetic Neuropathies-diagnosis; Diabetes Mellitus, Type 1-epidemiology; Diabetes Mellitus, Type 1complications; Valsalva Maneuver; Heart Rate; Arrhythmias, Cardiac; Electrocardiography; Hemoglobin A, Glycosylated; Arrhythmia, Sinus

Abstract: To determine the frequency of Cardiac Autonomic Neuropathy [CAN] in type-1 Diabetes mellitus patients and its association with the duration of disease and glycemic control. Descriptive study. Department of Medicine, Liaquat University Hospital, Hyderabad/Jamshoro, from December, 2004 to April, 2005. Fifty patients of type-1 Diabetes Mellitus [DM] of >/= 10 years duration were selected. CAN was evaluated in terms of presence of resting tachycardia, loss of sinus arrhythmia and heart rate response to Valsalva maneuver by electrocardiogram [ECG]. An R-R variation with respiration of >15 beats per minute was taken normal, while 10-15 beats and <10 beats per minute were taken as borderline and definitive CAN respectively. QTc intervals were measured. Patients with HbA1c levels < 7% were considered as well-controlled. The associations between CAN, the duration of diabetes and the diabetic control were determined. The mean age was 35.16 +/- 10.58 years with 32 males and 18 females. The mean values for the known duration of diabetes and HbA1c were 13 +/- 7.3 years and 9.36 +/- 2.5 mg/dl respectively. Definitive and borderline CAN were noted in 20% and 24% respectively. Variability of heart rate with respiration was significantly related to the duration but not to the control of the diabetes [p < 0.05]. QTc showed a significant correlation with the known duration of diabetes and heart rate variability with respiration [p < 0.05]. Most of the patients had uncontrolled glycemic status. Cardiac autonomic neuropathy is common in long standing type-1 diabetics. CAN resulted in prolonged QTc interval that may result in cardiac arrhythmias and even death. Intensive glycemic control improves the cardiac autonomic nerve functions.

#### Prevalence of neuropathy in the diabetic foot.

Elrefai, Jamil M.

E-mail:jamref2000@yahoo.com

Princess Haya Hospital - Hyperbaric Oxygen Department

Neurosciences 2009; 14 (2): 163-166 (28 ref.)

Keywords: Diabetic Neuropathies-diagnosis; Diabetic Foot; Reflex, Abnormal; Peripheral Nervous System Diseases; Prevalence; Retrospective Studies; Diabetes Mellitus-complications

**Abstract:** To illustrate the prevalence of different types of neuropathy in diabetic patients with diabetic foot. This is a retrospective study of 229 diabetic foot patients treated at Princess Haya Hospital Hyperbaric Department, Aqaba, Jordan from January 1997 to January 2008, who were found to have different types of neuropathy. Neuropathy diagnosis was reached through investigating the patient's history by presence of pain, and clinical neurological examination, absence of ankle reflexes, and abnormal quantitative sensory testing. We found that 203 out of 229 [89%] patients had at least one type of neuropathy. One hundred and seventy-one out of 203 [84.2%] patients had symptoms of peripheral neuropathy, 11.8% of patients showed symptoms of different autonomic neuropathy, 2.5% of patients had been diagnosed with proximal neuropathy, and 1.5% had focal neuropathy. The mean age of diabetes in complicated neuropathy was 14.32 +/- 7.17 years. A stocking sensory loss was the leading symptom of peripheral neuropathy [77%] followed by symptoms of tingling, burning, or prickling sensations in 70% of patients. Symptoms and signs of peripheral neuropathy are considered the most important factors when counseling the diabetic patient, who should be thoroughly informed on the importance of applying ample care to the feet. The physician should consider the patient's age and chronicity of diabetes, and as they increase, it becomes imperatively important to conduct clinical examinations for early diagnosis of neuropathy.

# **Diabetic Retinopathy**

## diagnosis

## Diabetic retinopathy screening using digital retinal camera: experience in Bahrain, 2007.

Al Kabaisi, Noora Department of Ophthalmology

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 197-200 (5 ref.)

Keywords: Mass Screening; Macular Degeneration; Retina; Prevalence; Diabetes Complications

Abstract: To report the results of Bahrain diabetic retinopathy photo screening program during 2007. We audited the results of diabetic retinopathy photo screening program using digital retinal camera in Bahrain from the period January 2007 till December 2007. A total of 3265 patients were screened by digital retinal camera 2359 patients [72%] showed no diabetic retinal changes. Mild no proliferative changes were noticed in 711 patients [22%]. Moderate no proliferative changes were noticed in 83 patients [3%]. Severe no proliferative changes were noticed in 11 patients [0.3%].Proliferative retinopathy changes were noticed in 44 patients [1 %]. Maculopathy was found in 123 patients [4%]. Digital retinal photo screening is practical in Health Centers and it can detect the normal retina from the retinopathy changes in diabetic patients accurately. Its implementation has been associated with a reduction in presentations with vision-threatening retinopathy within the total community. The normal eyes on initial photo screening yearly repeat photo screening screening screened with a reduction in presentations with vision-threatening retinopathy within the total community. The normal eyes on initial photo screening yearly repeat photo screening schedule for this group.

## Diarrhea, Infantile

#### therapy

Acute diarrhea in children treated by lactobacillus acidophilus.

Hassoon, Abbas Fadhel; Mehdi, Sabih Salih

Babylon Medical College

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

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

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

## **Disabled Persons**

#### House-to-house survey of disabilities in rural communities in the north of the West Bank.

Hamdan, M.; Al Akhras, N.

E-mail:mhamdan@med.alquds

Al-Quds University - School of Public Health

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1496-1503 (18 ref.)

**Keywords:** Disability Evaluation; Rural Population; Prevalence; Health Surveys; Cross-Sectional Studies; Questionnaires; Family

**Abstract:** To identify the prevalence of disability and characteristics, conditions and needs of those with disabilities in rural communities in the north of the West Bank, 10 147 families were screened in a cross-sectional survey. Prevalence was 1.7% [806 persons with disabilities]. Physical [34.0%], mental [15.9%] and speech [11.4%] disabilities were the commonest. The major cause as perceived by the families was heredity [30.5%]: parental consanguinity was 50.8%. Economic conditions were the major problem for 41.1%, and the main barrier to receiving care: only 49.3% were receiving some kind of care. Integration in educational, work and social activities was low. Pressing needs included medical care, support equipment, and educational, physiotherapy and rehabilitation services.

## Disinfection

## methods

# Comparative efficacy of two methods of skin preparation of the perineal and genital skin of male urological patients.

Kehinde, Elijah O.; Jamal, Wafaa; Ali, Yousif; Khodakhast, Fathima; Sahsah, Mohammed; Rotimi, Vincent O. E-mail:ekehinde@hsc.edu.ku

Kuwait University - Faculty of Medicine - Department of Surgery

KMJ - Kuwait Medical Journal 2009; 41 (2): 103-107 (19 ref.)

**Keywords:** Skin-microbiology; Perineum; Genitalia, Male; Urologic Surgical Procedures; Anti-Infective Agents, Local; Chlorhexidine; Povidone-Iodine; Prospective Studies; Cystoscopy

Abstract: To compare the efficacy of two methods of skin antiseptic preparations of the genitalia and perineum in male urological patients. Prospective study. Mubarak Hospital, Kuwait. Adult male patients of two study groups numbering 114 [group-1] and 117 [group-2] admitted for cystoscopic procedures. The perineum and genitalia of patients in both groups were prepared by applying chlorhexidine-cetrimide mixture [CCM] and CCM plus povidone-iodine solution respectively. Swab specimens were obtained from the perineum and genitalia, before cleaning and disinfection [specimen A], after disinfection and draping [specimen B] and after the completion of the operative procedure [specimen C]. Specimens were cultured on appropriate media and representative colonies identified by standard methods. In groups 1 and 2, the A specimen yielded bacterial growth in 35.1 and 63% of patients, respectively. The commonest isolates in both groups were Gram-positive bacteria [89.2%] while Gram-negative bacteria accounted for only 10.8%. The B and C specimens B and C yielded bacterial growth in 5.1 and 2.6% patients respectively. In both groups, there was a significant reduction of patients with culture-positive bacterias after skin disinfection [p < 0.001]. The isolation rate of bacteria in specimen C group-2 was significantly lower than group-1 patients [p < 0.001]. The addition of povidone-iodine to the CCM based regimen of perineal skin antiseptic preparation is associated with longer and more effective skin disinfection in male urological patients.

## DNA

## isolation and purification

#### Heat treatment of bacteria: a simple method of DNA extraction for molecular techniques.

Dashti, Ali A.; Jadaon, Mehrez M.; Abdulsamad, Abdulsamad M.; Dashti, Hussein M.

E-mail:aad@hsc.edu.ku

Kuwait University - Faculty of Allied Health Sciences - Department of Medical Laboratory Sciences

KMJ - Kuwait Medical Journal 2009; 41 (2): 117-122 (27 ref.)

Keywords: Hot Temperature; Base Sequence; DNA, Bacterial; Polymorphism, Restriction Fragment Length; Klebsiella pneumoniae; Polymerase Chain Reaction; Microwaves

Abstract: To evaluate the efficacy of two simple methods involving use of heat for extraction of bacterial deoxyribonucleic acid [DNA] be used in molecular techniques like polymerase chain reaction [PCR], restriction fragments length polymorphism [RFLP] and DNA sequencing and compare them with DNA extraction using commercial kits. DNA extraction by improved alternative methods and commercial kit. Microbiology Research Laboratory, Faculty of Allied Health Sciences, Kuwait University, Kuwait. Forty isolates of Klebsiella pneumoniae. DNA was extracted from isolates by either boiling for 10 minutes or microwave irradiation for 10 seconds. For comparison, DNA was also extracted using a commercial kit. All extracted DNA samples were analyzed by PCR, RFLP and / or DNA sequencing of TEM and SHV genes of the bacteria. Successful extraction of DNA. PCR, RFLP and DNA sequencing gave the expected results in all the DNA samples extracted by all the three methods [boiling, microwave irradiation and the commercial kit]. The results were qualitatively equivalent in all methods. Heat may be used to extract DNA from K, pneumoniae which can be utilized successfully in performing PCR, RFL and DNA sequencing.

# **Drug Toxicity**

Adverse drug reactions in an Iranian department of adult infectious diseases.

Kourorian, Z.; Fattahi, F.; Pourpak, Z.; Rasoolinejad, M.; Gholami, K.

Tehran University of Medical Sciences - Immunology, Asthma and Allergy Research Institute

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1351-1357 (24 ref.)

Keywords: Cross-Sectional Studies; Communicable Diseases; Risk Factors; Hospitalization; Awareness

**Abstract:** This study aimed to assess the frequency and severity of adverse drug reactions [ADRs] [WHO definition] in hospitalized adult patients in an infectious diseases referral ward in Tehran. Of 281 patients evaluated over 6 months, a total of 170 suspected ADRs were reported among 101 patients [35.9%]. The most commonly affected organ system was gastrointestinal [47.5%], and the most common class of drugs responsible was anti-infective [93.1%]. ADRs were high among HIV-positive patients [82.9%], mainly due to anti-tuberculosis drugs. Attention to appropriate prescription of drugs is required with more careful clinical and laboratory monitoring of patients.

# Duodenum

## injuries

# Penetrating traumatic injuries of the duodenum; experiences form Al-Yarmouk teaching hospital, Baghdad.

Rajab, Khalid Kareem

Al Yarmouk Teaching Hospital - Department of Surgery

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 193-196 (9 ref.)

Keywords: Wounds and Injuries; Mortality; Postoperative Complications; Duodenum-surgery; Abdominal Injuries; Wounds Penetrating

Abstract: Duodenal injury following penetrating trauma remains one of the most challenging problems confronting trauma surgeons. Experience in trauma specially for penetrating injuries has increased in the few years with accompanying increase in mortality. Twenty seven patients with penetrating duodenum trauma, collecting from September 2005 November 2007, evaluated according to the age, gender, types of injury, trauma location, severity of duodenal injury, associated injury, interval between trauma and definitive operation, hemodynamic status, surgical procedure postoperative complication and mortality. Injuries according to Trauma and injury severity score [TRISS] and penetrating trauma abdominal index [PATI] were evaluated. Bullets injury were 23[85.2%] patients and blast injury [shell] 4[148%] patients. The mean PATI score was 30.2 [15-9]; low score 44.4%, intermediate score 37% and high score 11.55[1.5-90]. Primary repair with pyloric exclusion [with or without bypass surgery] or other type of surgery were performed. Male to female incidence was 4:1 and mean age 27.6 year [9-60 yr.]. Complications were evaluated and the mortality were 11[40.7%] with low score of PATI 2[16.6%], intermediate score is 4[40%] and high scores [100%]. Experience suggests that duodenum injury still causing high morbidity and mortality in trauma. The predictive value of the PATI suggests that it should be included along with other injury severity indices in trauma. The predictive value of the PATI suggests that it operation to perform duodenum repair according to the type and site of injury.

# Dyslipidemias

## diagnosis

Levels of inflammatory markers and their correlation with dyslipidemia in diabetics.

Waheed, Palvasha; Naveed, Abdul Khaliq; Farooq, Fareeha

Army Medical College - Department of Biochemistry and Molecular Biology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 207-210 (28 ref.)

Keywords: Diabetes Mellitus, Type 2; Ferritins-blood; C-Reactive Protein; Hemoglobin A, Glycosylated; Cholesterol, LDL-blood; Cholesterol, HDL-blood

Abstract: To measure the levels of inflammatory markers [serum ferritin and high sensitivity C-reactive protein] and dyslipidemia in diabetics and to find a correlation between these inflammatory markers and dyslipidemia. Comparative study. Department of Biochemistry and Molecular Biology, Army Medical College, Rawalpindi, from March 2007 to February 2008. The study included 30 known type-2 diabetic patients randomly inducted from diabetic clinics of Rawalpindi. Healthy volunteers [n = 30] having blood glucose less than 6 mmol/L were inducted as the comparison

group. Fasting blood samples of diabetics and controls were analyzed for glucose, glycated hemoglobin [HbA1c], lipid profile, high sensitivity C-reactive protein [hs-CRP] and serum ferritin. The diabetic subjects had significantly higher levels of glucose, HbA1c, total cholesterol, LDL cholesterol, triglycerides, hs-CRP and ferritin as compared to normal subjects [p < 0.001], while the level of HDL cholesterol was significantly lower in diabetics [p < 0.001]. Furthermore, a significant positive correlation was found between the inflammatory markers, hs-CRP and ferritin, and the parameters of dyslipidemia i.e. total cholesterol, LDL cholesterol and triglycerides [p < 0.001 r = 0.72] except for HDL cholesterol, which had an insignificant negative correlation with the inflammatory markers [p > 0.05 r = -0.10]. Low-grade inflammation exists in Diabetes mellitus and it is positively related with dyslipidaemia [except for HDL cholesterol] in diabetics.

# Dyspepsia

## epidemiology

#### Uninvestigated dyspepsia and its related factors in an Iranian community.

Barzkar, Mosayeb, Pourhoseingholi, Mohamad A.; Habibi, M.; Moghimi Dehkordi, Bijan; Safaee, Azaaeh; Pourhoseingholi, Asma; Khalafii, Abdolrasool; Zali, Mohammad R.

Shahid Beheshti University - The Research Center for Gastroenterology and Liver Diseases

Saudi Medical Journal 2009; 30 (3): 397-402 (38 ref.)

Keywords: Dyspepsia-diagnosis; Gastroesophageal Reflux; Educational Status; Body Mass Index; Widowhood; Risk Factors; Questionnaires; Cross-Sectional Studies; Prevalence

**Abstract:** To determine the prevalence and determinants of uninvestigated dyspepsia in the Iranian population. A cross-sectional study conducted in Tehran province from May 2006 to December 2007, included 18,180 adult persons selected randomly. The study took place at Shahid Beheshti University, MC, Tehran, Iran. A questionnaire was completed in 2 steps. In the first part, personal characteristics and 11 gastrointestinal symptoms were inserted. Those who reported at least one of these 11 symptoms were referred for the second interview, which consisted of questions on different gastrointestinal disorders based on Rome III criteria, including uninvestigated dyspepsia. The prevalence rate of uninvestigated dyspepsia was 8.5% [10.9% in women and 6.4% in men]. Among the subjects diagnosed with dyspepsia, bothersome postprandial fullness was the most common symptom [41.5%]. Uninvestigated dyspepsia was more common in low educated and widowed participants. Approximately 41.4% of patients had a history of depression, and 66.1% had self-report of stress. The prevalence of functional irritable bowel syndrome in patients with uninvestigated dyspepsia was 8.3% and Gastroesophageal reflux disease was 64.9%. Uninvestigated dyspepsia has a less common prevalence in the general Iranian population than developed countries. Women, older, obese, widowed, and low education subjects are more likely to suffer from dyspepsia.

## Echinacea

# A comparison study of the effects of Echinacea purpurea ethanolic extract and Mesna on cyclophosphamide indueed macroscopic fetaldefects in rats.

Varzi, Hossein Najafzadeh; Mahabadi, Mahmood Khaksari

E-mail:najafzadeh@scu.ac.ir

Shahid Chamran University - Faculty of Veterinary Medicine - Department of Pharmacology and Toxicology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 61-66 (29 ref.)

**Keywords:** Mesna-therapeutic use; Antioxidants; Immunologic Factors; Cyclophosphamide-adverse effects; Congenital, Hereditary, and Neonatal Diseases and Abnormalities; Cystitis-etiology; Cleft Palate-epidemiology; Rats, Wistar

Abstract: There are some reports that the teratogenic effects of cyclophosphamide [CPA] can be prevented by application of antioxidant drugs and stimulation of the maternal immune system. Echinacea purpurea extract is antioxidative and immunomodulator drug. Mesna [Sodium 2-mercaptoethane sulfonate] is used for decreasing side effects of CPA, especially hemorrhagic cystitis. In this study, we compared the prophylactic effects of mesna and Echinacea extract on teratogenic effects of CPA. This study was performed on 32 pregnant rats that were divided into 4 groups. The first group [control group] received normal saline and the other groups received CPA [15 mg/kg intraperitonealy] on 13th day of gestation. Mesna and E. purpurea extracts were administrated at doses of 100 and 400 mg/kg by IP injection, respectively, along with it and 12 hr later, after CPA injection. Rats were dissected on day 20 of gestation, embryos harvested and after determination of gross malformations they were stained by Alizarin red-Alcian blue method. Cleft palate incidence was 38.46, 30.77 and 14.28% in fetuses of rats that received only CPA, CPA with mesna and CPA with Echinacea extract, respectively. In addition, skeletal anomalies incidence including limbs, vertebra, sternum, and scapula defects were decreased by Echinacea extract. E. purpurea has significant effect on preventing CPA-induced malformations and better prophylactic effect than mesna on cases like CPA-induced cleft palate.

## Education, Medical

# Physical environment status of educational clinics in Isfahan University of Medical Sciences: an inseparable part of teaching- learning process in clinic.

Haghani, F.; Molabashi, R.; Jamshidian, S.; Memarzadeh, M.

E-mail:haghani@edc.mui.ac.ir

Isfahan University of Medical Sciences - Medical Education Research Center - Department of Medical Education

IJME - Iranian Journal of Medical Education 2009; 8 (2): 239-245 (17 ref.)

Keywords: Ambulatory Care Facilities; Environment; Teaching

Abstract: The trend of medical education is going toward ambulatory medicine and clinics and the effect of physical environment on teaching-learning process is undeniable. This study was performed to determine the frequency distribution of physical environment indices in educational clinics of hospitals affiliated to Isfahan University of Medical Sciences [33 clinics] were investigated through census sampling method. The data gathering tool was a researcher-made checklist including features of a clinic and its qualitative and quantitative characteristics. Clinics were directly observed by the researcher. The data was analyzed by SPSS software and reported through descriptive indices. The highest frequencies in the clinics under investigation belonged to the domains of light [100%], facilities [78.8%], and arrangement of seats [84.8%]. The lowest frequency percentages belonged to the existence of anti-acoustic walls [0%], access to educational resources such as internet and computers [3%], and access to reference books [6.1%]. The bysical environment of the investigated clinics was evaluated as weak regarding access to educational resources, as average regarding the existence of internal room, conditioning and access to facilities, and as very good in regard to the amount of light. Due to the lack of study in the field of physical environment, especially in clinical education, it is recommended to conduct further studies.

## Education, Medical, Continuing

# Determining the topics and content of CME programs in five selected subjects: comparing the view points of experts and target group; Tehran University of Medical Sciences experience.

Zeyinlou, A.; Shirazi, M.; Alaedini, F.; Tofighi, H.; Pajoumand, A.; Seyrafi, H.; Akhoundzadeh, S.; Talebian, M.; Taghadosinejad, F.; Ahmadi, A.; Khanjani, H.

E-mail:zeinaloo@tums.ac.ir

Tehran University of Medical Sciences [TUMS] - Medical Education Development Center - Department of Medical Education

IJME - Iranian Journal of Medical Education 2009; 8 (2): 255-262 (12 ref.)

Keywords: Needs Assessment; Physicians, Family; Education, Medical; Cross-Sectional Studies; Questionnaires

Abstract: One of the most appropriate methods for needs assessment is to assess learners' needs and arrange the educational programs based on their viewpoints. The aim of this study was to determine the topics and content of Continuing Medical Education [CME] programs in five selected subjects by medical education experts and target group, based on the real needs of General Practitioners [GPs] in order to revise CME national programs. In this crosssectional applied study. 700 GPs covered by Medical Sciences Universities in Tehran province were studied. A questionnaire consisting of two parts of demographic features and 80 scientific questions regarding their knowledge in five domains of clinical pharmacology, skin diseases, toxicology, emergencies, and forensic medicine was used. The questionnaires were delivered to physicians' offices by trained personnel using a list or by direct referral to offices and then gathered. Three topics in each subject and 15 standard educational contents in total were developed for the target group. There was almost a complete relationship between the opinion of experts and target group in forensic medicine. Some of the first five priorities of the two groups overlapped in skin diseases, forensic medicine, and emergencies. No common viewpoints were observed between experts and target group in pharmacology. In toxicology, there was no common viewpoint in the first three selections of the two groups. Real educational needs of GPs in receiving new information in order to promote their competencies and knowledge were different from those considered by experts. It is recommended to design the educational content for the target groups in the health care field based on their real deficiencies in knowledge and practice and by assessing their views and knowledge.

## Education, Medical, Undergraduate

[The stressing factors in clinical education: the viewpoints of students]

Fard, M. Yazdankha; Pouladi, S.; Kamali, F.; Zahmatkeshan, N.; Mirzaei, K.; Akaberian, S.; Yazdanpanah, S.; Jamand, T.; Gharibi, T.; Khoramroudi, R.; Hajinezhad, F.

E-mail:yazdan494@yahoo.com

Boushehr University of Medical Sciences - School of Nursing and Midwifery - Department of Medical Surgical

IJME - Iranian Journal of Medical Education 2009; 8 (2): 341-350 (24 ref.)

Keywords: Students, Medical; Cross-Sectional Studies; Questionnaires; Stress, Psychological

Abstract: Clinical education is a complicated process which is affected by several factors and variables. Thus the aim of this study was to determine the stressing factors in clinical education from the viewpoints of students of Boushehr University of Medical Sciences. In this descriptive cross-sectional study, 334 students of Boushehr University of Medical Sciences were selected thorough census. The data gathering tool was a researcher-made questionnaire. This question-naire consisted of two parts of demographic data and 60 questions about stressing factors in clinical education in five areas. Data was analyzed by SPSS software using frequency distribution, mean, standard deviation, and Chi[2], variance analysis test. The humiliating experiences, educational environment, clinical experiences, unpleasant emotions, and interpersonal relationships areas were high stressing factors respectively. The most stressing factors were as teachers' notification in front of personnel and physicians, lack of facilities in ward, watching patients suffering from pain, solicitude about contagious disease transmission, and lack of teacher support respectively. Medical students are exposed to a variety of stressor factors. Thus establishing a supportive system during the first academic year and improving it throughout clinical education is necessary to equip medical students with effective coping skills.

# **Education**, Nursing

# Nursing students' and instructors' experience about nursing fundamental course: a qualitative study.

Mahmoudirad, G.; Alhani, F.; Anousheh, M.

E-mail:mahmoudirad@gmail.com

Tarbiat Modares University - Department of Nursing

IJME - Iranian Journal of Medical Education 2009; 8 (2): 293-303 (29 ref.)

**Keywords:** Students, Nursing; Curriculum; Education; Qualitative Research; Clinical Competence **Abstract:** The situations affecting teaching and learning nursing fundamental course may influence acquiring competencies in primary clinical skills. Several reasons have been mentioned for this problem. The aim of this study was to describe the experiences and viewpoints of nursing students and instructors on nursing fundamental course. This was a qualitative study using thematic analysis method. Fifteen nursing students, 4 nursing instructors, the head nurse of operating ward, and two nurses graduated from the university in which the study was performed, were selected through purposive sampling and interviewed. All interviews were transcribed, analyzed. Using thematic analysis, a significant number of preliminary themes and 7 main themes each having few other sub-themes, were extracted. The main themes included educational factors, not respecting the standards in performing the techniques, the gap between theory and practice, motivation, human resources, communications, management staff, equipments, and physical environment. These main themes and other sub themes have been explained in the main article using direct statements of study samples. The results of this study revealed problems in communication in educational

environment and interaction between instructor and students as well as lack of motivation among nursing instructors and students. These are the main principles of the appropriate teaching and learning. It is recommended that nursing education administrators pay more attention to these aspects of educational process and remove the causing factors.

# The viewpoints of nurses towards applicability of nursing curriculum in hospitals affiliated to Hamedan University of Medical Sciences.

Borzu, R.; Safari M.; Khodavisi, M.; Torkaman, B.

E-mail:edu@yahoo.com

Hamedan University of Medical Sciences - School of Nursing and Midwifery - Department of Medical-Surgical

IJME - Iranian Journal of Medical Education 2009; 8 (2): 205-211 (30 ref.)

Keywords: Students, Nursing; Curriculum; Education; Hospitals, University; Cross-Sectional Studies; Questionnaires; Nurses

Abstract: The appropriateness of nurses' educational program to their tasks in clinical practice is an inevitable fact. This study was performed to investigate the viewpoints of nurses employed in hospitals affiliated to Hamedan University of Medical Sciences towards the applicability of nursing curriculum presented during Bachelor of Nursing course. Methods: In this descriptive cross-sectional study, 172 graduated nurses who were employed in hospitals affiliated to Hamedan University of Medical Sciences and met the inclusion criteria, were selected. A questionnaire containing demographic data and nursing educational programs was used for data gathering. This information included basic, main, specialized, and training courses as well as field training in nursing curriculum. After completing the questionnaires by nursing personnel, the data was analyzed by SPSS software. The highest and the lowest mean scores belonged to physiology [2.97], and vital statistics and research methods [1.62] in basic courses; pharmacology [3.45], and principles of epidemiology [2.58], in main courses; medical surgical diseases nursing 1 and 3 [3.46], and community health nursing 1 [2.34] in specialized courses, respectively. The highest and lowest mean scores in training courses belonged to medical surgical diseases 1 [3.38] and community health nursing [2.33], respectively. Regarding the field training course, the highest and the lowest mean scores belonged to medical surgical diseases 3 and 4 [3.38], and community health nursing [2.35], respectively. Based on the results of this study and considering the fact that most graduated nurses would be employed in medical surgical and critical wards at the beginning of their jobs in hospitals, it is recommended to pay more attention to medical surgical and critical courses in future curriculum planning in addition to conducting more studies in this field.

# [The effect of guided reciprocal peer questioning [GRPQ] on nursing students' critical thinking and metacognition skills].

Seyedin, A. Vaghar; Vanaki, Z.; Taghi, S.; Molazem, Z.

E-mail:waghars@yahoo.com

Tarbiat Modares University - Department of Nursing

IJME - Iranian Journal of Medical Education 2009; 8 (2): 333-340 (24 ref.)

Keywords: Thinking; Cognition; Questionnaires; Students, Nursing

Abstract: Fostering critical thinking and Metacognition is one of the most important objectives in nursing education. This study was designed to investigate the effect of guided reciprocal peer questioning on nursing students' critical thinking and Metacognition skills. In this quasi experimental study, the experiment group included 30 nursing students in their 6th semester in Birjand Islamic Azad University. Two credit courses were presented in this group using guided reciprocal peer questioning. In the control group which included 28 nursing students, those two credit courses were presented using the routine lecture method. California Critical Thinking Skills Test [CCTST] [form B] was used for evaluating critical thinking skills, and metacognition was evaluated before and after intervention by met cognitive awareness questionnaire. The statistical analysis was done by SPSS software. Descriptive statistics, t-independent test, paired t-test; Chi-square, Mann Whitney, and Kappa were used in this study. Performing guided reciprocal peer questioning led to a significant increase in critical thinking skills scores in the experiment group compared to the control group. In spite of the increase in the mean score of met cognitive awareness of the experiment group, comparing the

mean difference of pre and post tests in the two groups showed no significant difference. Using guided reciprocal peer questioning in the education of nursing students may lead to developing critical thinking skills as one of the important missions of higher education.

# Eggs

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

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

Omar El Mokhtar University - Faculty of Veterinary Medicine

Arab Journal of Biotechnology 2009; 12 (1): 65-71 (29 ref.)

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

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

## Electroencephalography

EEG as an easy diagnostic tool in differentiation of Alzheimer and non-Alzheimer dementia.

Gokce, Fatih M.; Kececi, Hulusi; Demir, Serif; Ankarali, Seyit; Ankarali, Handan C. Duzce University - Medical School - Departments of Physiology

Neurosciences 2009; 14 (2): 188-190 (5 ref.)

Keywords: Alzheimer Disease-diagnosis; Dementia-diagnosis; Dementia-etiology; Dementia-classification

# Electrolytes

## blood

#### Plasma electrolytes in healthy individuals and elective surgical patients in Khartoum.

Abdalla, Ahmad Abdalazim; Abdalla, Elmuataz Elmansi

University of Khartoum - Faculty of Medicine - Department of Physiology

Sudan Journal of Medical Sciences 2009; 4 (2): 141-145 (9 ref.)

Keywords: Sodium; Potassium; Calcium; Random Allocation; Spectrophotometry; Students, Medical; Surgical Procedure, Elective

Abstract: This study aimed to investigate if the frequently observed low preoperative values of the plasma electrolytes Na[+], K[+], and Ca[+2] in our surgical patients, in Khartoum, is a reflection of their levels in the population at large or it is a genuine finding in patients. 90 male and female subjects were included in this study. 60 healthy, young and elderly individuals were selected randomly from amongst medical students and employees of the University of Khartoum. 30 elective orthopedic and general surgical patients were randomly selected from Khartoum teaching hospital. Plasma Na[+] and K[+] were measured using a digital flammometer, and plasma Ca[+2] was measured using a spectrophotometer. Results were compared to international data using the Z test. Comparison between the groups in the study was done using the student t-test. Plasma Na[+], K[+], and Ca[+2] of the healthy subjects and the surgical patients were found to be low compared to the international reference values. Plasma K[+] is higher and Ca[+2] is lower in the older subjects when compared to young ones. A larger study is needed to set the normal values for plasma electrolytes in Sudan. The high environmental temperature and nature of our diets could be the reason for the observed differences between our subjects and international reference values.

## Endometriosis

## genetics

# Polymorphic [CAG]n repeats in the androgen' receptor gene: a risk marker for endometriosis and uterine leiomyomas.

Shaik, Noor Ahmad; Govindan, Sujatha; Kodati, Vijaylakshmi; Rao, Kaipa Prabhakar; Hasan, Qurratulain <u>E-mail:qhasan2000@yahoo.com</u>

Vasavi Medical and Research Centre - Department of Genetics and Molecular Medicine

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 289-293 (43 ref.)

**Keywords:** Endometriosis-epidemiology; Leiomyoma-genetics; Leiomyoma-epidemiology; Biological Markers; Polymerase Chain Reaction; Uterus-anatomy and histology; Androgens-physiology; Receptors, Androgen; Uterine Neoplasms; Polymorphism, Genetic; DNA

**Abstract:** Endometriosis and uterine leiomyomas are leading hormone responsive, benign uterine disorders responsible for high morbidity in women of reproductive age group. A polymorphic [CAG] repeat length located in exon 1 of the androgen receptor [AR] gene has been proposed as a risk marker for both endometriosis and leiomyomas in

some ethnic groups. The present study was carried out to assess the frequency of AR [CAG]n repeat polymorphism as a risk marker for endometriosis and uterine leiomyomas in Asian Indian women. DNA was isolated from peripheral blood samples of 331 subjects, which include 90 endometriosis cases, 140 cases of leiomyomas and 101 healthy ageand sex-matched controls. PCR was carried out to amplify exon 1 of the AR gene. All the PCR amplicons were analysed initially on 2% agarose gel electrophoresis, followed by bidirectional sequencing to calculate the number CAG repeats in individuals. The CAG repeat ranges detected in endometriosis cases were 4.33 [Mode-19] and in leiomyomas cases 5-34 [Mode-20], whereas in controls it was 5-34 [Mode-22]. A distinct variation was observed in the three groups at 14, 18, 19, 20 and 22 [CAG]n repeats, which were statistically analyzed using chi-square and odds ratio tests. 19 CAG repeats were found to be higher in endometriosis cases [19.09%] when compared with conttrols [9.04%], while 20 CAG repeats were higher in leiomyomas cases [14.02%] compared to controls [6.14%]. A statistically significant [P < 0.05] association was observed in 19 and 20 CAG repeats in endometriosis and leiomyomas, respectively. This is the first report from an Asian Indian population proposing that 19 and 20 CAG repeats of the AR gene are associated with endometriosis and leiomyoma and can be regarded as high-risk markers.

## Endosonography

#### Indications for endoscopic ultrasound and diagnosis on fine needle aspiration and cytology.

Hussain, Tassawar; Salamat, Amjad; Farooq, Muhammad Asif; Hassan, Fayyaz; Hafeez, Muhammad Military Hospital - Department of Gastroenterology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 223-227 (25 ref.)

Keywords: Biopsy, Fine-Needle-statistics and numerical data; Lymphatic Diseases-diagnosis; Pancreatic Neoplasmsdiagnosis; Neoplasm Staging; Cross-Sectional Studies; Cytology

Abstract: To determine common indications for requesting Endoscopic Ultrasound [EUS] and to describe the diagnosis made after endoscopic ultrasound/Fine-Needle Aspiration and Cytology [FNAC] during two years at a tertiary gastrointestinal unit. Cross-sectional descriptive study. The study was carried out in Gastrointestinal Department of Military Hospital, Rawalpindi, from March 2006 to February 2008. One hundred and eighty nine patients who underwent EUS during study period at Military Hospital were included in the study. Patients too ill [hypoxemic/hypotensive] to undergo procedure safely and those with complete esophageal blockage at upper end by tumour not allowing scope/EUS probe to advance beyond were excluded. EUS was done with Olympus Exera EUS 160, linear or radial scope, as required. EUS findings were recorded against indications as enlarged lymph nodes, tumour, staging, normal or incomplete. Fine-Needle Aspiration [FNA] was done as per findings on EUS using 21-22 G needle. An on-site cytopathologist made the provisional cytopathological diagnosis. Final cytology/histopathology report was given after review of slides by consultant histopathologists at Armed Forces Institute of Pathology [AFIP], Rawalpindi, and were documented as tuberculosis, malignancy, chronic pancreatitis or reactive hyperplasia. Data was analyzed for documentation of patients' age, gender, common indications, findings on EUS/FNAC, using SPSS version 10. Percentages and frequencies were calculated for the presence of these above-mentioned variables. Of the 189 patients, 145 [77%] were male and 44 [23%] female. Age was 18-80 years [mean 49 years]. Major indications for referral were lymphadenopathy in 92 [49%], suspected growth pancreas in 57 [28%], growth of stomach in 20 [11%] and a heterogeneous group included esophageal, liver, retroperitoneal masses, rectal and other pathologies. Findings on EUS included lymphadenopathy in 76, mostly in sub-carina and AP window. Mass in pancreas was seen in 36, followed by stomach tumour in 17 and esophagus in 9. FNAC was done in 142 out of 189 patients. Final diagnosis out of 67 FNAC/histopathology of lymph nodes were tuberculosis in 26 and malignant lesions in 23. These included metastatic Adenocarcinoma in 8, Lymphoproliferative disorder in 7, metastatic squamous cell carcinoma in 5. small cell carcinoma in 2 and anaplastic in 1. Pancreatic tumours were Adenocarcinoma in 16, poorly differentiated in 3 and neuroendocrine in 2. Stomach tumours were found in 11, and included lymphomas 5, GIST 3, carcinoids 2, metastatic choriocarcinoma 1 and Adenocarcinoma in 1. Therapeutically, 3 celiac blocks and one pancreatic pseudo cyst drainage was done. The main indication of EUS and pathology of mediastinal and celiac nodes were metastatic malignancy and tuberculosis. Pancreatic Adenocarcinoma was another common cause for asking EUS.

# Epilepsy

## chemically induced

Experimental epileptic discharge can be transmitted between 2 brains in rats.

Abuhamed, Mutasem M.; Bo, Xiao; Zhi, Song

Central South University - Affiliated Xiangya Hospital - Department of Neurology

Neurosciences 2009; 14 (2): 128-130 (19 ref.)

**Keywords:** Rats, Sprague-Dawley; Brain; Kindling, Neurologic; Penicillins; Hippocampus; Frontal Lobe; Electrodes; Electroencephalography; Seizures

Abstract: To identify whether epileptic discharges can be conducted out of the brain according to the principle of a lightning rod. This experimental study was conducted at Central South University, Xiangya Hospital, Hunan, China between 2005 and 2008. Eighty Sprague-Dawley rats were implanted with intra hippocampus and intra frontal lobe electrodes, and randomized to 3 groups: [A] a group that was kindled via stimulation of intra-hippocampus injection of penicillin, [B] a group that was stimulated via a copper wire connected to the intra-hippocampus electrodes of group A, [C] a group composed of non-stimulated, control rats. The behavioral changes and epileptic form activity were assessed by both Racine Grade and electrocardiogram [ECoG]. The intrahippocampal ECoG recordings were coincident with clinical seizures, electrographic seizures occurred not only in the injected hippocampus group A rats, but also in the connected group B rats. However, there were no visible seizures or ECoG burst at any time in group C rats. Epileptic discharge can be conducted out of the brain, which may open new therapeutic approaches for epilepsy.

# Factor V

### genetics

#### Prevalence of factor V Leiden mutation in patients with thrombosis in Tunisia.

Ajem, A.; Slama, A.; Slama, F.B.H.; Mehjoub, T.

Faculty of Medicine of Sousse - Immunogenetic Unit

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1483-1488 (24 ref.)

Keywords: Mutation-genetics; Thrombosis-genetics; Prevalence; Polymerase Chain Reaction

**Abstract:** This study determined the prevalence of inherited factor V Leiden mutation in a group of 128 thrombosis patients [102 with venous thrombosis and 26 with arterial thrombosis] attending a hospital in Sousse, Tunisia, and a control group of 100 with no history of thrombosis. Using an allele-specific PCR amplification technique, factor V Leiden was found in significantly more patients [20.3%] than controls [6.0%]. The higher prevalence was significant in the subgroup of venous thrombosis patients but not in arterial thrombosis patients. The allele frequency was 3.5% in the normal Tunisian population. Screening Tunisian patients with venous thrombosis and their relatives for factor V Leiden may be justified.

# **Family Practice**

#### Family medicine in the Arab World: is it a Luxury?

Alnasir, Faisal Abdul Latif

Department of Family Medicina JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 191-192 (8 ref.) Keywords: Arab World; Delivery of Health Care; Education; Physicians, Family; History of Medicine

# Fasciitis, Necrotizing

## therapy

#### Management dilemma of cervicofacial necrotizing fasciitis.

Dhaif, Ghassan; Al Saati, Ameen; Cabs, Bassim M. Ashoor

Oral and Maxillofacial Surgeon

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 223-227 (20 ref.)

**Keywords:** Fasciitis, Necrotizing-complications; Infection; Mortality; Necrosis; Risk Factors; Hyperbaric Oxygenation; Neck; Fasciitis, Necrotizing-mortality

Abstract: Cervicofacial necrotizing fasciitis is a rare polymicroibial infection, which carries high morbidity as well as mortality rate. It is usually the result of rapid spread of infection along the fascial planes, causing necrosis of the fascia and overlying skin, which eventually involve the blood vessels and muscles. Early diagnosis is crucial in limiting the fatal consequences of the disease process and the establishment of the appropriate line of management. We discuss the management dilemma in selected cases treated at the Department of Oral and Maxillofacial Surgery, Salmaniya Medical Complex, Bahrain during the period 1 999-2006 and outline briefly the medical as well as the surgical management.

# Fasting

#### Effects of Ramadan fasting on time perception task.

Khazaie, Habibolah; Tahmasian, Masoud; Ekhtiari, Hamed; Safaei, Homan; Ganjgahi, Habib; Ghadami, Mohammad R. <u>E-mail:ha\_khazaie@yahoo.com</u>

Kermanshah University of Medical Sciences - Sleep Research Center - Department of Psychiatry Neurosciences 2009; 14 (2): 196-197 (5 ref.)

Keywords: Islam; Cognition; Sleep; Social Behavior; Time Perception

## Feces

## microbiology

#### Faecal carriage of extended-spectrum beta-lactamase-producing bacteria in the community.

Kader, A.A.; Kamath, K.A.

E-mail:aakader@doctor.com

Almana General Hospital - Department of Clinical Microbiology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1365-1370 (25 ref.)

Keywords: beta-Lactamases; Microbial Sensitivity Tests; Fluoroquinolones-adverse effects; Risk Factors

Abstract: We determined the faecal carriage of extended-spectrum beta-lactamase-[ESBL]-producing bacteria in the community in Saudi Arabia. A total of 716 faecal specimens [from 505 healthy individuals and 211 community outpatients] were screened for ESBL using the double-disk synergy test and confirmed by the Clinical Laboratory Standards Institute combined disk method. We found 91 [12.7%] isolates were ESBL-producers. Of these, 87 [95.6%] were Escherichia coli and 4 [4.4%] Klebsiella pneumoniae. A similar rate of faecal carriage of ESBL-producers was

demonstrated in community outpatients and healthy individuals: 62 [12.3%] healthy persons and 29 [13.7%] outpatients. We conclude that the community could be a reservoir of these ESBL-producing bacteria and enzymes.

# Fingersucking

## adverse effects

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

Alkattan, Hisham Abd Alkarem

E-mail:hishamalkattan@yahoo.com

Mousl University - Mousl Medical College - Department of surgery

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

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

# **Foreign Bodies**

## diagnosis

#### Embedded esophageal foreign body. A diagnostic challenge.

Bhat, Venkatraman S.; Al Saadi, Khalid A.; Bessiouni, Ibrahim E.; Tuffaha, Amjad S.

E-mail:bvenkatraman@gmail.com

Hamad Medical Corporation - Department of Radiology

Saudi Medical Journal 2009; 30 (3): 433-435 (6 ref.)

**Keywords:** Foreign Bodies-radiography; Esophageal Diseases-diagnosis; Tomography, X-Ray Computed; Endoscopy, Digestive System; Child; Esophagus

Abstract: Esophageal foreign body [EFB] ingestion is of ubiquitous occurrence in pediatric population. Diagnosis and precise localization of non-radio opaque FB poses considerable challenge. Delayed presentation, poor history, and inconclusive esophagoscopic findings often lead to diagnostic delay. Multidetector computed tomography [MDCT] could be a great option in these situations. We present a case of EFB in a child who presented with failure to thrive, had negative fibreoptic endoscopy, ultimately diagnosed conclusively on MDCT examination.

## **Forensic Dentistry**

#### Forensic odontology.

Al Amad, Suhail Hani

E-mail:suhail\_amad@hotmail.com University of Sharjah - College of Dentistry

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

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

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

# Gastric Antral Vascular Ectasia

## therapy

Efficacy of argon plasma coagulation in gastric vascular ectasia in patients with liver cirrhosis.

Bhatti, Muhammad Afzal; Khan, Anwaar A.; Alam, Altaf; Butt, Arshad K.; Shafqat, Farzana; Malik, Kashif; Amin, Joher; Shah, Waqar

E-mail:afzalbhatti@hotmail.com

Shaikh Zayed Hospital - Department of Gastroenterology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 219-222 (21 ref.)

**Keywords:** Gastric Antral Vascular Ectasia-diagnosis; Argon-therapeutic use; Liver Cirrhosis-complications; Hemoglobins; Telangiectasis; Endoscopy, Digestive System; Treatment Outcome; Blood Coagulation

Abstract: To determine the efficacy of Argon Plasma Coagulation [APC] in terms of improvement in hemoglobin level and disappearance of telangiectasia as endoscopic treatment for Gastric Antral Vascular Ectasia [GAVE] and Diffuse Antral Vascular Ectasia [DAVE] syndrome in liver cirrhosis. Quasi-experimental study. Department of Gastroenterology and Hepatology of Shaikh Zayed Hospital/ Federal Postgraduate Medical Institute, Lahore, from January, 2006 to July, 2007. Cirrhotic patient with gastric vascular ectasia were enrolled and followed-up for 18 months with repeated sessions of APC. Efficacy of APC was evaluated on the basis of patient's symptoms, transfusion requirements and hemoglobin levels. APC was performed by using ERBE generator set at 60 W and flow rate 2.0 L/min using primarily endfiring probes. Fifty patients were enrolled in the study. Mean age was 55.78 +/- 1.24 years with 32 males and 18 females giving a male to female ratio 1.7:1. Forty-two patients were in Child's Class C and 8 in Child's Class B. Presenting complaints were malena and anemia. Two hundred and fifty three APC sessions were carried out; mean 5.06 + 1.5 sessions per patient. Mean follow-up period after the last session was 8.5 + 3.7 months. Mean increase in the hemoglobin level was 1.35 + 0.24 g/dl. There was no death of any patient during the study period. Treatment with APC is an effective and safe method to decrease blood loss in patients with GAVE and DAVE.

# Geniculate Bodies

## anatomy and histology

# Gradual increase in neuronal density of rats' lateral geniculate nucleus from anterior to posterior.

Abdolrahmani, Mohammad; Jameie, Seyed B.

E-mail:m.abdolrahmani@gmail.com

Hormozgan University of Medical Sciences - Department of Anatomy

Neurosciences 2009; 14 (2): 124-127 (24 ref.)

Keywords: Neurosis; Rats, Sprague-Dawley; Brain; Microscopy, Polarization

**Abstract:** To clarify the organization of the rat lateral geniculate nucleus [LGN]. A total of 50 male Sprague-Dawley albino rats of 2 months of age were used in this study carried out in the Iran University of Medical Sciences, Tehran, Iran in Spring-Fall 2007. The rats were cardially perfused under deep ether anesthesia, first with a small amount of saline then with a fixative solution containing 4% par formaldehyde and 0.2% glutaraldehyde in 0.1 M phosphate buffer pH 7.2. The brains were removed, processed, and then 50 micro m coronal sections of the LGN were cut and divided into 3 groups: anterior, middle, and posterior third. Cresyl violet stained sections were studied by light microscopy and counts of neurons were carried out with Olysiabio report software of Olympus Microscope in every other section. We observed that the neuronal density in the anterior, middle, and posterior thirds were statistically different. The concentration of neuronal terminals and neuronal connections causes changes in neuronal density.

# **Genital Diseases, Female**

## epidemiology

#### National study of reproductive tract infections among high risk groups of Lahore and Karachi.

Rehan, N.; Bokhari, Asma; Nizamani, Naseer M.; Jackson, Denis; Naqvi, Hassan Raza; Qayyum, Kanwal; Mansoor, Samina; Muzaffar, Rana

E-mail:nrehan@yahoo.com

The Research Associates

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 228-231 (14 ref.)

**Keywords:** Genital Diseases, Male-epidemiology; Drug Users; Prevalence; Polymerase Chain Reaction; Enzyme-Linked Immunosorbent Assay; HIV; Syphilis; Gonorrhea; Chlamydia Infections; Vaginosis, Bacterial; Hepatitis C; Cross-Sectional Studies; Questionnaires

**Abstract:** To estimate the prevalence of reproductive tract infections [RTIs] among the Female Sex Workers [FSWs], Male Sex Workers [MSWs], Injecting Drug Users [IDUs] and truck drivers. Cross-sectional. Lahore and Karachi, from March to August, 2004. Four hundred FSWs, 400 MSWs, 200 eunuchs, 400 IDUs and 400 truck drivers were interviewed and examined. Biological testing included PCR and ELISA. The mean prevalence of syphilis was 17.7% [95% CI:15.1-20.3%]. Genital gonorrhoea was found among 0.8-12.3% of subjects with mean of 4.5% [95% CI: 0.8-5.2%]. Genital chlamydia was seen in 0.2-11% individuals with mean of 2.6% [95% CI: 21-3.1%]. Trichomonas was present in 19.3% FSWs of Lahore and 5.52% FSWs of Karachi. Only 0.8% truckers in Lahore had trichomonas. In Lahore, 47.6% FSWs and in Karachi, 27.4% FSWs were positive for bacterial vaginosis. A vast majority of IDUs, 91.8% in Lahore and 87% in Karachi were hepatitis C positive. The prevalence of syphilis is very high among all high-risk groups; particularly so among eunuchs [60.2% in Karachi and 32.3% in Lahore]. Such a high levels of RTIs indicate a serious threat for HIV epidemic because of socially transmitted infection.

# Gitelman Syndrome

## diagnosis

#### A rare case of Gitelman's syndrome with hypophosphatemia.

Akhtar, Naureen; Hafeez, Farkhanda

E-mail:naureenakhtar@hotmail.com

The Children's Hospital and Institute of Child Health - Department of Nephrology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 257-259 (11 ref.)

Keywords: Hypophosphatemia; Gitelman Syndrome-genetics; Hypokalemia; Alkalosis; Magnesium-blood; Calcium-Urine; Gitelman Syndrome-therapy

Abstract: Gitelman's syndrome is a hereditary disorder occurring due to loss of functional mutations of the gene encoding the distal convoluted tubule sodium chloride cotransporter [NCCT] and is characterized by Hypokalemic metabolic alkalosis, hypomagnesaemia and hypocalciuria. This case reports an adolescent girl presenting with episodes of carpopedal spasms and difficulty in walking with laboratory tests suggestive of Gitelman's syndrome along with hypophosphatemia.

## Guillain-Barre Syndrome

### diagnosis

#### Childhood Guillain Barre syndrome.

Barzegar, H.

E-mail:mm barzegar@yahoo.com

Tabriz University of Medical Sciences - Tabriz Children Hospital - Department of Pediatric Neurology

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 7-14 (31 ref.)

**Keywords:** Guillain-Barre Syndrome-epidemiology; Guillain-Barre Syndrome-therapy; Cerebrospinal Fluid-chemistry; Myelitis, Transverse; Myasthenia Gravis; Tick Paralysis; Botulism; Child

**Abstract:** The Guillan-Barre syndrome [GBS] is characterized by the acute onset of rapidly progressive, symmetric muscle weakness with absent or decreased deep tendon reflexes. GBS is the most common cause of acute flaccid paralysis in childhood, with an incidence of 0.6-4 per 100000 Population per year. The clinical features are district and obtaining patient's history and conducting and examination generally lead to the diagnosis that can be confirmed by supportive laboratory tests and electrodiagnostic studies. The major considerations in differential diagnosis include transverse myelities, toxic neuropathy, tick paralysis, infantile butolism and myasthenia gravis. Although most, children with GBS have a relatively care monitoring. Immunomodulating treatment should be used for any child who loses the ability to walk.

## Habits

#### Health habits and behaviour of adolescent schoolchildren, Taif, Saudi Arabia.

Abou Zeid, A.H.; Hifnawy, T.M.; Abdel Fattah, M.

E-mail:alaabouzeid@yahoo.com

Cairo University - Faculty of Medicine - Department of Public Health

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1525-1534 (27 ref.)

Keywords: Behavior; Students; Schools; Cross-Sectional Studies; Smoking; Prevalence; Overweight; Body Mass Index; Health

Abstract: The aim of this study was to provide data regarding habits, behavior, problems and needs regarding health in adolescent children from a military community at Al Hada and Taif, Saudi Arabia which could guide school health programmes. We carried out a cross-sectional study on 284 preparatory and secondary school students. Prevalence of smoking was 21.3% among males and 4.9% among females. The rate of overweight was 20.8%. Driving without a license was reported by 68.8% of students and 82.3% said they didn't fasten seat belts. However, we recorded a high rate of physical activity, 75.0% overall.

## Hand Injuries

## diagnosis

#### Scaphoid fracture with ipsilateral fracture dislocation of the metacarpals: a rare fracture pattern. Syed, Shakir; Shah, Mian Munawar

E-mail:shakirsyed@doctors.org.uk

The University Hospital Birmingham NHS Trust - Selly Oak Hospital - Department of Trauma

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 260-261 (10 ref.)

Keywords: Hand Injuries-therapy; Metatarpal Bones-injuries; Scaphoid Bone-injuries; Fractures, Bone-radiography; Casts, Surgical; Dislocations

Abstract: Scaphoid fracture with ipsilateral metacarpal fracture dislocation is very rare. A unique case of this injury is reported. It is important to be aware of this fracture pattern so that appropriate evaluation and treatment can be instituted. Thorough clinical and radiographic examination at the initial presentation of the patient is the key to identify uncommon combination of injuries.

## Health Knowledge, Attitudes, Practice

### Knowledge, attitude and practices regarding leprosy among general practitioners at Hyderabad.

Bajaj, Doulat Rai; Matlani, Bhajan Lal; Soomro, Farooque Rehman; Iqbal, Muhammad Pervaiz E-mail:doulat01@yahoo.com

Liaguat University of Medical and Health Sciences - Department of Dermatology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 215-218 (19 ref.)

Keywords: Attitude of Health Personnel; Physicians, Family; Leprosy-microbiology; Leprosy-epidemiology; Cross-Sectional Studies; Questionnaires **Abstract:** To assess the level of knowledge, social attitude towards patients, and diagnostic and management capabilities of general practitioners [KAP] regarding leprosy, practicing at Hyderabad, Pakistan. Cross-sectional study. Hyderabad, Sindh, Pakistan, during October to December 2007. A pre-tested and well-structured questional study. Hyderabad, Sindh, Pakistan, during October to general practitioners working at various areas in Hyderabad. The questions were grouped under different headings and covered clinical features, common and uncommon presentations, complications, referral practices and stigma. The sum of correct answers marked by doctors was taken to classify the respondents. The doctors who responded correctly for up to 10 questions were assigned level 1 [poor], from 11 to 25: level 2 [average], from 26 to 40: level 3 [good], while those who marked correct answers for more than 40 questions were assigned level 4 [excellent]. Chi-square test was used to determine significance at p < 0.05. A total of 200 doctors were surveyed. Fourteen doctors [7%] had poor knowledge of disease [number of correct answers less than 10], 32 [16%] had average [number of correct answers between 11 and 25], 140 [70%] doctors good [number of correct answers between 26 and 40] while 14 [7%] had excellent [number of correct answers more than 40] knowledge of the disease. There is inconsistency and deficiencies in the knowledge, referral pattern and treatment of leprosy among general practitioners, which needs to be improved by conducting awareness activities.

# Health Promotion

# Female youth health promotion model in primary health care: a community-based study in rural Upper Eqypt.

El Nouman, A; El Derwi, D.; Abdel Hai, R.; Abou Zeina, H.

University of Cairo - Faculty of Medicine - Department of Public Health and Community Medicine

EMHJ - Éastern Mediterranean Health Journal 2009; 15 (6): 1513-1524 (24 ref.)

Keywords: Primary Health Care; Health Surveys; Rural Population; Health Education; Knowledge; Perception

**Abstract:** The health status of underprivileged young females is a global concern. This intervention study in rural Upper Egypt used an integrated approach to develop a model for primary care health promotion services to female adolescents. An initial household survey and focus group discussions identified the health problems of a sample of 671 adolescent women aged 12-20 years recruited from one village. Interventions included training courses for health care providers on relevant health topics and on client-provider interaction skills; community and local authority mobilization; and health education sessions and a special record system for the women. An increase was seen in the utilization of primary care services.

# Heart Defects, Congenital

## complications

#### Total anomalous pulmonary veins connection: the perioperative risk factors.

Diab, Yousef

E-mail:ducvsc@mail.sy

Damascus University - Faculty of Medicine - Department of Cardiac Surgery

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

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

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

## **Heart Diseases**

## diagnosis

#### [Hanging by a thread] left ventricular thrombus in an asymptomatic soldier.

Chamsi Pasha, Mohammed A.; Anwar, Ashraf M.; Nosir, Youssef F.; Chamsi Pasha, Hassan

King Abdul Aziz University - Department of Cardiology

Saudi Medical Journal 2009; 30 (3): 436-438 (9 ref.)

Keywords: Heart Diseases-etiology; Heart Diseases-therapy; Thrombosis; Anticoagulants-therapeutic use; Echocardiography; Embolism; Military Personnel

Abstract: A mobile and pedunculated left ventricular mass was incidentally detected on transthoracic echocardiography in a 32-year old asymptomatic soldier. Because of the mobility of the mass and the uncertainty of its nature, the risk of embolization was considered to be high, and hence surgical removal was recommended but the patient opted for anticoagulation therapy. The mass resolved within 6 weeks without any embolic or bleeding complications. No recurrence of the thrombus was observed during a 12-month follow up period.

# Heart Neoplasms

## diagnosis

Cutaneous pigmentation and palpitations: a sign of familial atrial myxoma?

Taghipour, Hamid Reza; Dadjou, Yahya; Motamedi Mohammad Hasan Kalantar; Motamedi, Mohammad Hosein Kalantar; Moharramzad Yashar

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 266 (5 ref.)

Keywords: Heart Neoplasms-epidemiology; Heart Neoplasms-genetics; Myxoma-diagnosis; Skin Pigmentation; Echocardiography; Cardiac Surgical Procedures

# **Helicobacter Infections**

Salivary anti-Helicobacter pylori positivity among endoscopy patients with chronic liver disease. Feteih, R.; Abdel Salam, M.; Jamjoom, H.; Akbar, H.

King Abdulaziz University - Faculty of Dentistry

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1371-1378 (28 ref.)

Keywords: Helicobacter pylori; Saliva-microbiology; Endoscopy; Liver Diseases; Chronic Disease; Sensitivity and Specificity; Case-Control Studies; Enzyme-Linked Immunosorbent Assay

Abstract: In this study, endoscopy patients with and without chronic liver disease [CLD] were examined and tested for Helicobacter pylori infection by detecting the presence of serum and salivary anti-H. pylori antibody. The validity of these measures was compared with Campylobacter-like organism analysis [gold standard] performed on patients requiring gastric biopsy. Among 114 patients with CLD and 50 without, the commonest endoscopy diagnosis was gastritis [27.2%]. Salivary H. pylori positivity was significantly associated with older age. Salivary anti-H. pylori antibody positivity showed low sensitivity [36.6%] and high specificity [75.8%] in CLD patients.

# Hematoma, Epidural, Cranial

### surgery

#### Management and outcome of posterior fossa extradural hematoma and management outcome.

Lehri, Shabir Ahmed; Agha, Syed Farid-ud-din; Tareen, Muhamad Saleh; Lehri, Iqbal Ahmed; Goraya, Azimullah Asif Jah

E-mail:shabirlehri@hotmail.com

BMC Complex Hospital - Department Bolan Medical College

Medical Forum Monthly 2009; 20 (1): 25-27 (15 ref.)

**Keywords:** Hematoma, Epidural, Cranial-diagnosis; Hematoma, Epidural, Cranial-mortality; Cranial Fossa, Anterior; Treatment Outcome; Tomography, X-Ray Computed; Disease Management

Abstract: Presentation of patients with CT proven extradural hematoma their management and outcome. 12 patients of posterior fossa extradural hematoma were included in the study. Excellent recovery was found in 50% good in 25% and poor in 16.6% and 8.33% was died.

## Hemosiderosis

## diagnosis

#### Idiopathic pulmonary hemosiderosis.

Almutairi, Abdullah; Behbehani, Nasser; Mohammed, Tareq M.M.A.

E-mail:doctorq8@gmail.com

Mubarak Alkabeer Hospital - Department of Medicine

KMJ - Kuwait Medical Journal 2009; 41 (2): 146-148 (13 ref.)

**Keywords:** Hemosiderosis-pathology; Lung Diseases; Anemia, Iron-Deficiency; Hemoptysis; Respiratory Insufficiency; Steroids-therapeutic use; Age Factors; Immunosuppressive Agents

Abstract: Idiopathic pulmonary hemosiderosis [IPH] is a rare disorder that is usually characterized by the triad of bilateral pulmonary infiltrates; hemoptysis and iron deficiency anemia. The disease is well known to affect the pediatric age group with conflicting treatment trials. We report a case of a 19 year- old girl with IPH and respiratory failure who had excellent initial response to systemic steroids. To the best of our knowledge, this is the first reported case in this age group in the region.

# Hepatitis B

## epidemiology

#### Prevalence of hepatitis B surface antigen in a Saudi hospital population.

Al Wayli, Hessa M. <u>E-mail:lizql26@yahoo.com</u> Ministry of Health - Al Yamamah Hospital **Saudi Medical Journal** 2009; 30 (3): 448-449 (5 ref.) **Keywords:** Hepatitis B Surface Antigens-diagnostic use; Hepatitis B Vaccines; Prevalence; Retrospective Studies

# Hepatitis B Vaccines

## immunology

# Evaluation of the immune response to Hepatitis B vaccine in different age groups of the population of Sana'a - Yemen.

Al Shamahy, Hassan A.; Al Moyed, Tageia Abdul Karim; Al Medhagi, Anwar G. Ministry of Health - Central Health Laboratory

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 201-206 (31 ref.)

Keywords: Immune System; Immunization; Age Factors; Sex Factors; Enzyme-Linked Immunosorbent Assay; Hepatitis B Antibodies; Hepatitis B Surface Antigens; Voccination

Abstract: The study was made to evaluate the immune response to HBV among individuals with different ages and sexes by measuring the level of circulating anti-HBs antibodies over an interval of 1 to 5 years after immunization with the three doses of hepatitis B vaccine. A total of 300 individuals vaccinated against HBV prior to the study were included, of whom males represent 47.7% and females 52.3% with a mean age of 26.67 years. Sera were tested for HBsAg and anti-HBc by gualitative ELISA and anti-HBs by ELISA guantitative technique. The individual's data were collected in a pie-designed questionnaire including: vaccination date, number of doses of vaccine, sex, occupation and age at the time of the present study. Two hundred and sixteen [81.2%] of 266 individuals [lacking both HBsAg and anti-HBc] responded to the vaccine with anti-HBs antibody level >/= mlu/ml. Thirty-four [11.3] of 300 individuals were reactive to anti-HBc, indicating an immune response due to previous infection rather than vaccination. Seven [2.3%] of all vaccinated individuals were reactive to HBsAg, indicating infection, Individuals having ages < 15 years had the highest immune response [89.8%] with antibody level >/= 10 mlu/ml. There was no difference in response at ages from 16-35 [82.8%], while the lowest response was obtained at ages > 36 years [66.7%]. The present study included two vaccination schedules, the first one at 0,1,2 months, showing an immune response of 62.2%, while the second schedule at 0.1.6 months showed a greater immune response of 83.1%. Individuals immunized with a veast-derived vaccine had higher anti-HB5 levels [81.9%], than those immunized with a plasma-derived vaccine [79.8%]. The year intervals [1-5 years] after primary immunization showed no difference in the immune response. This study revealed a high response rate to the vaccine. However, a considerable proportion of vaccinated individuals remain to be reconsidered for either revaccination or booster doses due to nonexistent, inadequate, or low response. The schedule of 0, 1, and 6 months was more efficient in inducing antibodies towards the vaccine than the 0, 1, 2 months schedule.

## Hepatitis, Autoimmune

## diagnosis

#### Autoimmune hepatitis and hepatitis C infection: diagnostic dilemma.

Al Hashash, Wafaa Ahmed

Al Sabah Hospital - Internal Medicine - Gastroenterology, Hepatology and Liver Transplant

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

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

Abstract: The evidence for an association between autoimmune forms of chronic hepatitis and hepatitis C virus [HCV] infection is controversial. Although anti-liver kidney microsomal antibody-positive autoimmune chronic hepatitis appears to be associated with HCV infection, evidence of such an association is less convincing with other subtypes of autoimmune chronic hepatitis. Autoantibodies are frequently found in patients with chronic hepatitis C, although usually in low titers which suggests that HCV elicits an immune response in the host. In a small subset of patient with chronic hepatitis C, autoantibodies are seen in high titers along with hyper gamma globulinemia, which further clouds the distinction between autoimmune chronic hepatitis and chronic hepatitis C. This has important therapeutic implications because inappropriate treatment of autoimmune chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Few data are available to show how patients with features of both autoimmune hepatitis and chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Conversely, controsteroid therapy for chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Conversely, controsteroid theraption chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Conversely, controsteroid therapties to show how patients with features of both autoimmune hepatitis and chronic hepatitis C may enhance HCV replication, which could worsen underlying liver disease. Few data are available to show how patients with features of both autoimmune hepatitis and chronic hepatitis c may enhance HCV replication, which could worsen underlying liver disease.

# Hepatolenticular Degeneration

## diagnosis

#### Neurological and other manifestations of Wilson disease; 1998-2005.

Fallah, A.

E-mail:azarfalah@yahoo.com Shahid Beheshti Medical University - Loghman Hospital

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 35-41 (21 ref.)

Keywords: Hepatolenticular Degeneration-complications; Hepatolenticular Degeneration-drug therapy; Copper-blood; Copper-urine; Ceruloplasmin; Ascites; Anemia, Hemolytic; Jaundice; Penicillamine-therapeutic use

Abstract: Wilson disease [WD] is an inherited copper metabolism dysfunction disease characterized by cirrhosis and CNS findings. Wilson disease is important because it is fatal not recognized and treated. Our Goa of study is to investigate the clinical signs and symptoms, lab results and other relevant matters in our patients in order to obtain a better understanding of this potentially lethal disease in our country. We have evaluated 21 cases of children with Wilson disease who were referred to Loghman and Imam Hussein Hospital between years 1998-2005. The mean age of our patients was 9 years. The presenting symptom was ascites and extremity edema in 6[28.5%] patients, behavioral changes or neurological signs in 5[24%] simultaneous Ascites and icter in 9[43%] patients and in one patient the presenting manifestation was hemolytic anemia [4.8%]. One of our patients died because of fulminant hepatitis in the course of admission [4.8%]. We showed in this study that Wilson disease can be presented by a manifold symptom in children and adolescence. Having a good concept of these symptoms in high clinical suspicious are required to diagnose this potentially lethal disease at the proper time in order to decrease the potential adverse effects of the disease especially the neuropsychiatric damages significantly.

# Hernia, Diaphragmatic

## diagnosis

Obstructed Bochdaleck diaphragmatic hernia in a child girl.

Kella, Nandlal; Rathi, Prem Kumar; Qureshi, Mohammad Ali

E-mail:nckella@yahoo.com

Liaquat University of Medical and Health Sciences - General Surgery - Department of Paediatric Surgery

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 252-253 (8 ref.)

**Keywords:** Hernia, Diaphragmatic-complications; Hernia, Diaphragmatic-surgery; Intestinal Obstruction-Radiography; Intestinal Obstruction-diagnosis; Child; Laparotomy; Radiography, Abdominal

Abstract: A five-year-old female child presented with intestinal obstruction. X-ray abdomen and chest showed multiple air-fluid levels in abdomen and a single gas shadow with air-fluid level in left hemithorax. Ultrasound confirmed the presence of gut loop in left side of chest. Laparotomy was carried out with repositioning of intestinal loops in abdominal cavity and closure of posterolateral diaphragmatic defect with non-absorbable suture. Patient recovery was uneventful. As soon as diagnosis of diaphragmatic hernia is made, surgical intervention should be made to prevent fatal complications.

# **History of Medicine**

Anatomy of the eye from the view of Ibn Al Haitham [965-1039]. The founder of modern optics. Unal, Nedim; Elcioglu, Omur

E-mail:nunal@oqu.edu.tr

Eskisehir Osmangazi University - Faculty of Medicine - Department of Anatomy

Saudi Medical Journal 2009; 30 (3): 323-328 (16 ref.)

Keywords: History, Medieval; Islam-histroy; Eye-anatomy and histology; Lens, Crystalline; Optic Nerve; Cornea; Retina; Iris

Abstract: Ibn Al-Haitham [known as Alhazen in Latin [965 Basra, Iraq-1039, Cairo, Egypt]] was a scientist who played an important role in the middle age Islam world. He wrote many books and novels, but only 90 of them are known. His main book Kitab al-Manazir was translated into Western languages in the late twelfth century, and in the early thirteenth century. In this book, he formulated many hypotheses on optical science. The book, which is also known as Optic treasure [opticae thesaurus], affected many famous Western scientists. He became an authority until the seventeenth century in the Eastern and Western countries. Roger Bacon [1212-1294], who made radical changes in the Western optical traditions, reconfirmed Ibn Al-Haitham's findings. Ibn al-Haitham began his book Kitab al-Manazir with the anatomy and physiology of the eye. He specifically described cornea, humor aqueous, lens, and corpus vitreum. He examined the effect of light on seeing. He caused changes in the prevailing ideas of his age, and suggested that light came from objects, not from the eye. He provided information regarding the optic nerve, retina, iris, and conjunctiva. He showed the system of the eye as a dioptric, and the relations between the parts of the eye. It is understood that he mastered all knowledge on the structure of the eye in his century. The best proof of this is the eye picture that he drew.

# **HIV Infections**

## epidemiology

# Health point prevalence of human immunodeficiency virus and pulmonary tuberculosis among patients in various parts of Delta State, Nigeria.

Jemikalajah, Johnson D.; Okogun, Godwin Ray A.

Central Hospital - The Medical Laboratory Department

Saudi Medical Journal 2009; 30 (3): 387-391 (19 ref.)

Keywords: Tuberculosis, Pulmonary-epidemiology; Prevalence; World Health Organization; Staining and Labeling; Prospective Studies; HIV

Abstract: To assess the prevalence of human immunodeficiency virus [HIV] and pulmonary tuberculosis [PTB] in the study population in Delta State of Nigeria. Two hundred and five patients suspected of HIV and TB were prospectively studied in Kwale, Agbor and Eku in Delta State of Nigeria from February 2006 to February 2008. Human immunodeficiency virus status was determined using World Health Organization systems II, and Zeihl Nelson staining technique was used for TB screening. A health point prevalence rate of 53.2% was obtained for HIV, 49.3% for TB, and 16.6% for HIV/TB. The population of HIV positive [p=0.890, p=0.011, p=0.006] and TB positive [p=0.135, p=0.0003, p=0.0001] subjects were statistically significant among the suspected subjects while the HIV/TB positive cases were not statistically significant [p=0.987, p=0.685, p=0.731]. Our study showed that HIV and PTB infections remains high in parts of Delta State in Nigeria.

## Hodgkin Disease

### Clinical characteristics and outcome of pediatric patients with stage IV Hodgkin lymphoma.

Belgaumi, Asim; Al Kofide, Amani A.; Khafaga, Yasser; Joseph, Nicey; Jamil Malik, Rubina; Siddiqui, Khawar S.; Sabbah, Rajeh, S.

E-mail:belgaumi@kfshrc.edu.sa

King Faisal Specialist Hospital and Research Centre - Department Pediatric Hematology/Oncology, MBC53

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 278-284 (27 ref.)

Keywords: Treatment Outcome; Antineoplastic Combined Chemotherapy Protocols; Neoplasm Staging; Remission Induction; Survival Rate; Retrospective Studies; Bone Marrow Examination; Tomography, X-Ray Computed; Child

Abstract: While treatment outcomes for patients with Hodgkin lymphoma [HL] have improved remarkably, patients with disseminated disease still have a poorer outcome. Stage IV HL is often reported with other "advanced stage" categories, confusing the specific contribution of disease dissemination to the outcome. This single-institution report looks at characteristics and outcomes of this specific category. The medical records of pediatric HL patients [<14 years] from 1975 through 2003 were retrospectively reviewed and the data analyzed. Stage IV patients [n=67] had more poor -risk characteristics than patients in stages I-III [n=300] [B symptoms 86.6% vs. 19.3%, bulky disease 57.6% vs. 45.5% and mediastinal mass 77.6% vs. 29.7%; P < .001 for all characteristics]. The liver was the most common extra lymphatic site [in 51.5% of patients with stage IV disease. Stage IV patients received chemotherapy [CT] alone [n=55] or combined modality therapy [CMT] [n=12]. Fifty-four patients [80.6%] achieved complete remission, 2 [3%] partial remission, 10 [14.9%] had progressive disease and 1 was lost to follow up. Overall survival was 79.4% and event-free survival [EFS] was 63.9% at 5 years. There was a non-significant benefit for CMT [OS=91.7% v. 77.1%, P=.3: EFS=70.7% v. 62.7%, P=.3]. Ten of 12 relapsed and only 1 of 10 progressive disease patients were salvaged. On multivariate analysis, failure to achieve complete remission with CT was associated with a poorer outcome. Stage IV disease is associated with poor risk features and confers a worse outcome than stage I-III disease. Achievement of complete remission with CT is an important prognostic feature. Slow responders may require novel and/or aggressive therapy to achieve complete remission.

## Homocysteine

#### blood

# Plasma homocysteine levels in cardiovascular disease, malaria and protein-energy malnutrition in Sudan.

Abdel Gader, A.G.M.; Abdullah, S.H.; Kordofani, A.Y.

E-mail:amagader@hotmail.com

King Saud University - College of Medicine - Coagulation Laboratory, Department of Physiology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1432-1439 (24 ref.)

Keywords: Cardiovascular Diseases-blood; Malaria-blood; Protein-Energy Malnutrition-blood; Risk Factors; Enzyme-Linked Immunosorbent Assay

Abstract: This study investigated the role of hyperhomocysteinaemia as a risk factor in Sudanese adults suffering from cardiovascular disease or malaria and children with protein-energy malnutrition. Mean total plasma homocysteine levels [micro mol/L] were significantly higher in patients with coronary heart disease [17.64; SD 11.68] recurrent venous thrombosis [5.06; SD 10.55] and recurrent malaria [13.61; SD 4.82] than in healthy adult controls [7.85; SD 3.39]. The mean homocysteine level was also significantly higher in children with protein-energy malnutrition [8.41; SD 1.61] than in healthy control children [5.72; SD 1.99].

# Hypertension

## drug therapy

#### Control of emergence hypertension after craniotomy for brain tumor surgery.

Goma, Hala M.; Ali, Mostafa Z.

E-mail:ahmeda1995@yahoo.com Cairo University - Faculty of Medicine - Department of Anesthesia

Neurosciences 2009; 14 (2): 167-171 (14 ref.)

**Keywords:** Piperidines-therapeutic use; Piperidines-administration and dosage; Propanolamines-therapeutic use; Propanolamines-administration and dosage; Systolic Pressure; Antihypertensive Agents; Propanolamines-contraindications; Craniotomy-adverse effects; Brain Neoplasms-surgery; Prospective Studies

**Abstract:** To compare the anti-hypertensive effects of both remifentanil and esmolol infusion. This prospective comparative study was conducted on 20 patients [10 patients in each group], in the Neurosurgical Theater of Kasr Elaini Hospital, Cairo, Egypt from 2006 to 2008. The patients were divided into 2 equal groups. In group one, remifentanil was used as a bolus of one ug/kg intravenous [iv] in 30-60 seconds, followed by infusion at a rate of 0.25-0.5 ug/kg/min until the systolic blood pressure was < 140 mm Hg. In group 2, esmolol was given as a 500 ug/kg iv bolus in 30 seconds followed by continued infusion of 100-300 ug/kg/min until systolic blood pressure was < 140 mm Hg. Infusion was continued until the patients left the post anesthesia care unit [PACU]. The onset time of decreasing blood pressure was shorter in group 2 [40 +/- 0.01 seconds] than group one [52.5 +/- 4.47 seconds]. The PACU and hospital stay were comparable between both groups. Remifentanil can be used to control blood pressure during emergence of anesthesia after craniotomy for brain tumors. It has higher rapid recovery score than esmolol and other narcotics. In addition, it can be used when esmolol is contraindicated such as in cardiac patients, asthmatics, chronic obstructive pulmonary disease, or during pregnancy. Also, it decreases the need for postoperative analgesia and allows sedation if the infusion is continued as surgical patients are admitted to the ICU.

#### genetics

#### The lipoprotein lipase hind III polymorphism and the susceptibility to hypertension.

Hemimi, Neveen Salah Eldin; Abdel Salam, Mona Mohamed; Abdel Wahab, Mahmoud A.

E-mail:neveen59@yahoo.com

Ain Shams University - Faculty of Medicine - Biochemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 129-144 (50 ref.)

Keywords: Lipoprotein Lipase; Polymorphism; Triglycerides-blood; Lipoproteins, HDL Cholesterol-blood; Genotype; Anthropometry; Body Mass Index; Polymerase Chain Reaction; Lipid Metabolism; Risk Factors

**Abstract:** Lipoprotein lipase [LPL] enzyme plays a central role in lipid metabolism. The primary function of LPL enzyme is the hydrolysis of the core triglycerides of circulating chylomicron and very low density lipoprotein [VLDL]. It releases monoglycerides and free fatty acids, which are taken up by skeletal muscle or adipose tissue. The present work aimed to study the association of the common variant of LPL Hind III [H+] and hypertension. Hind III [+] variant allele of LPL were determined by polymerase chain reaction restriction fragment length polymorphism [PCR-RFLP] assay in 150 hypertensive patients and 150 normotensive as a control group. Serum lipoproteins were also observed in both groups. Allele frequencies were H+ = 0.733 and H- = 0.267 for LPL Hind III in the hypertension group compared to H+ = 0.683 and H- = 0.317 in the control group. Individuals with homozygous [H+/+] genotype were at higher risk of developing hypertension compared to the [H-/-] genotype [Odds Ratio OR = 2.13, 95% Confidence Interval CI = 0.937-4.8]. Serum TG level were also higher in the individuals with [H+/+] genotype compared to the [H-/-] genotype, while HDL showed negative correlation with the presence of [H+/+] genotype. It can be concluded that the LPL Hind III [H] wariant of LPL may influence the blood lipid metabolism and increase risk for hypertension.

## prevention and control

# Awareness, treatment and control of hypertension, dyslipidaemia and diabetes mellitus in an Iranian population: the IHHP study.

Shirani, S.; Kelishadi, R.; Sarrafzadegan, N.; Khosravi, A.; Sadri, Gh.; Amani, A.; Heidari, S.; Ramezani, M.A. Isfahan University of Medical Sciences

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1455-1463 (37 ref.)

Keywords: Dyslipidemias-prevention and control; Diabetes Mellitus-prevention and control; Awareness; Prevalence; Risk Factors; Lipids-blood

**Abstract:** We used data from the baseline survey from the Isfahan Healthy Heart Programme to determine the prevalence of hypertension, dyslipidaemia and diabetes among a representative samples of 12 514 adults living in 3 cities in the Islamic Republic of Iran. The prevalence of hypertension, dyslipidaemia and diabetes was 17.3%, 66.3% and 5.6% respectively. Awareness, treatment and control of hypertension were 40.3%, 35.3%, and 9.1% respectively. The rates for dyslipidaemia were 14.4%, 7.1% and 6.5% respectively, and 54.6% of diabetics were aware of their disease and 46.2% were under treatment.

# Hyperthyroidism

### diagnosis

# A case of severe primary hyperthyroidism, secondary hyperparathyroidism, adrenal insufficiency and osteoporosis with multiple fractures.

Basak, Ramen C.; Chatterjee, Manas; Rassem, Mahmoud W.

E-mail:basakrc@yahoo.com

King Khaled General Hospital - Department of Endocrinology

KMJ - Kuwait Medical Journal 2009; 41 (2): 152-155 (23 ref.)

**Keywords:** Hyperparathyroidism, Secondary-diagnosis; Adrenal Insufficiency-diagnosis; Osteoporosis-diagnosis; Asthma; Steroids-adverse effects; Parathyroid Hormone; Absorptiometry, Photon; Fractures, Bone

Abstract: Osteoporosis is generally known to be one of the most serious adverse effects of long-term corticosteroid administration. Recently it was discovered that corticosteroid-induced osteoporosis occurs not only in trabecular bone but also in cortical bone, leading to the reduction in the strength of bones and subsequent fracture. We report a case of severe hyperthyroidism, secondary hyperparathyroidism, adrenal insufficiency and osteoporosis with multiple fractures [mostlikely collectively due to chronic steroid intake because of steroid dependant bronchial asthma, hyperparathyroidism and hyperthyroidism] which was treated appropriately and made an uneventful recovery.

# Hypoplastic Left Heart Syndrome

### surgery

Outcome of Norwood and Damus-Kaye-Stansel procedures for univentricular congenital heart anomalies.

Al Akhfash, Ali A.; Kabbani, Mohamed S.; Abu Sulaiman, Riyadh M.; Tamimi, Omar R.; Elbarbary, Mahmoud A.; Najm, Hani K.

E-mail:akhfasha2@ngha.med.sa

King Abdulaziz Cardiac Center - National Guard Health Affairs - Cardiac Sciences Department, MC 1413

Saudi Medical Journal 2009; 30 (3): 340-345 (16 ref.)

**Keywords:** Ventricular Outflow Obstruction; Heart Defects, Congenital; Surgical Procedures, Operative; Echocardiography; Survival Rate; Treatment Outcome; Retrospective Studies

Abstract: To review the experience with Norwood and Damus-Kave-Stansel [DKS] staged repair in the management of hypoplastic left heart syndrome [HLHS], or functional single ventricle [FSV] with systemic outflow tract obstruction [SOTO]. A retrospective study was conducted from a single center from January 2001 to September 2007 at the Cardiac Sciences Department, King Abdulaziz Cardiac Center, National Guard Health Affairs, Riyadh, Kingdom of Saudi Arabia. The cardiac departmental database was reviewed, together with the echocardiographic findings. Demographic data representing age and weight at operation, gender, cardiac anatomy, non-cardiac abnormalities, and operative details were collected. Twenty-eight patients with a diagnosis of HLHS were included in the study. The mean +/- SD for weight was 3.4 +/- 0.85 kg and 32 +/- 37 days for age. All infants at our institution who underwent a Norwood or DKS surgery for HLHS, or other forms of FSV with SOTO were included. All included patients underwent first stage palliation consisting of either a classical Norwood procedure in 6/23 [21%] patients, or a modified Norwood with right ventricle to pulmonary artery [RV-PA] conduit in 22/28 [79%] patients. After first stage palliation, 23 patients [82%] survived, and all but one underwent second stage palliation with bidirectional cavopulmonary anastomosis [BCPA]. The survival rate after second stage repair was 91%. Subsequently, 4 patients completed a third stage Fontan with 100% survival. All deceased patients had HLHS. The Norwood procedure is applied to a heterogeneous group of patients with variable outcomes in certain subgroups. Patients with HLHS palliated with the Norwood procedure are at a greater risk for morbidity and mortality compared to those with other forms of FSV with SOTO.

# Indomethacin

## therapeutic use

# Potential utility of indomethacin in enhancing the leishmanicidal activity of glucantime.

Namazi, M.R.

Shiraz University of Medical Sciences - Department of Dermatology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1624-1625 (7 ref.)

Keywords: Organometallic Compounds; Leishmaniasis-drug therapy; Glutathione-analogs and derivatives; Trypanosoma

# Infertility, Male

## diagnosis

#### Male factor infertility, basics revisited.

Alam, Nadeem

E-mail:drdanishhaseen@hotmail.com

Dow University of Health Sciences - Civil Hospital - Department of Biochemistry

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 205-206 (8 ref.)

Keywords: Infertility, Male-etiology; Infertility, Male-therapy; Semen Analysis; Oligospermia; Azoospermia; Spermatogenesis-genetics; Fertilization; Tocopherols-therapeutic use; Clomiphene-therapeutic use; Seminal Vesicles-physiology; Chromosomes, Human

## Injections

#### Injection prescribing patterns in public health care facilities in Egypt.

Bodenschatz, C.; Talaat, M.; Kandeel, A.; Lohiniva, A.L.; Radwan, E.; Mahoney, F. <u>E-mail:haeschatz@datacomm.ch</u>

US Naval Medical Research Unit No. 3 - Infection Control Unit

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1440-1448 (24 ref.)

Keywords: Drug Administration Routes; Physician's Practice Patterns; Hepatitis C-epidemiology; Hepatitis C; Drug Prescriptions

**Abstract:** This study assessed the frequency of and rationale for use of injections at health care facilities in Egypt based on WHO core drug use indicators. We reviewed 1406 prescriptions in 43 randomly selected hospitals and primary health care clinics in 2 governorates in Upper and Lower Egypt in 2001. Patients received an injection at 18.1% of encounters. The most frequently prescribed parenteral drugs were anti-infectives [56.9% of injections] and analgesics [13.7%]. Injections were more often prescribed in hospitals than in primary health care clinics and in rural than in urban settings. Most injections [94.7%] could have been replaced by a suitable oral preparation. Further efforts are needed to enforce the essential medicines programme in Egypt to improve rational drug prescribing.

# **Intercellular Signaling Peptides and Proteins**

## therapeutic use

#### The anti-inflammatory properties of interleukin 18 binding protein in rheumatoid arthritis.

Khalid, Khalid Eltahir; Gue, T.B.; Sun, W.; Nie, H.; Liu, A.; El Imam, Mohamed; Yosif, Nasrden; Miskeen, Elhadi; Saeed, Osman K.; Zhang, J.Z.

Chinese Academy of Sciences - Shanghai JiaoTong University School of Medicine - Department of Biochemistry and Nutrition

Sudan Journal of Medical Sciences 2009; 4 (2): 109-116 (18 ref.)

**Keywords:** Interleukin-18; Carrier Proteins; Arthritis, Rheumatoid-immunology; Anti-Inflammatory Agents; Immunosuppressive Agents; Arthroscopy; Synovial Membrane; Osteoarthritis; Polymerase Chain Reaction; Enzyme-Linked Immunosorbent Assay

**Abstract:** Interleukin-18 binding protein [IL-18BP] is functioning as a natural anti-inflammatory and immunosuppressive molecule by neutralizing the effects of IL-18 during inflammation. This study aimed to identify the role of IL-18BPa in the regulation of immune responses associated with the pathogenesis of RA. 65 RA patients, 22 OA patients, and 40 sex and age matched healthy donors were enrolled in this study. Synovial specimens were obtained through synovectomy or arthroscopic procedures. SFMC and PBMC were prepared by using FicoII-Hypaque separation procedure. Super array analysis was used to measure the expression profile of immune-related genes in normal PBMC treated with recombinant human IL-18BPa. The mRNA levels of Th1 and Th2 cytokines were measured by Real-time PCR, and the protein levels of IFN-gamma, IL-4 were detected by ELISA. SuperArray analysis of immune related gene expression profile in normal PBMC treated with IL-18BPa indicated decreases in the gene expression of IFN- gamma and its regulatory molecules STAT-1 and STAT-2. This study pointed out that IL-18BPa has additional anti-inflammatory property through down regulating the expression of IFN- gamma and IL-12, at the same time, up regulating the expression of IL-4 and IL-10. Both IFN- gamma and IL-12 could up regulate the mRNA and protein levels of IL-18BPa in both the normal and RA subjects. Our results demonstrated the importance of IL-18 BPa as an immune regulatory molecule and as a promising therapy for treating RA.

# **Intestinal Volvulus**

## diagnosis

### Compound volvulus in pregnancy.

Sharif, Karam Kamal Y. <u>E-mail:karam\_kamal66@yahoo.com</u> Uuniversity of Mosul - College of Medicine - Department of Surgery Journal of the Arab Board of Medical Specializations 2009; 10 (1): 66-68 (14 ref.) Keywords: Intestinal Volvulus-surgery; Risk Factors; Pregnancy; Treatment Outcome

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

## Intracranial Aneurysm

#### surgery

# Clipping versus coiling for ruptured intracranial aneurysms after the international subarachnoid aneurysm trial. United Kingdom experience.

Taha, Mahmoud S.; Patel, Umang J.

E-mail:mtaha66@hotmail.com

King Fahad Specialist Hospital - Department of Neurosurgery

Neurosciences 2009; 14 (2): 118-123 (39 ref.)

Keywords: Aneurysm, Ruptured-surgery; Subarachnoid Hemorrhage; Prospective Studies; Multicenter Studies as Topic; Treatment Outcome; Cost-Benefit Analysis

Abstract: The International Subarachnoid Aneurysm Trial [ISAT] was designed as the first multi-central international prospective randomized trial aiming to compare the safety and efficacy of the 2 available treatments for ruptured intracranial aneurysms; endovascular coiling and surgical clipping. The initial results were published in the Lancet [2002], and it showed clearly a superiority of coiling over clipping in the treatment of ruptured intracranial aneurysms; of coiled patients were dependent or dead compared with 30.6% in the surgical group with absolute risk reduction of 6.9%. The results of the ISAT drew huge attention from both scientific authorities and lay media. Despite criticisms, the study has made a significant impact on the treatment of aneurysmal subarachnoid hemorrhage, especially in the United Kingdom and Europe. Since their initial results, the ISAT group has published further papers and updates covering more interesting results regarding the risks of rebleeding, repeat procedures, epilepsy, and the cost effectiveness of both treatments.

# Job Satisfaction

#### [Satisfaction of pharmacists in Lebanon and the prospect for clinical pharmacy]

Bou Antoun, R.; Salameh, P.

Lebanese University - Faculty of Pharmacy

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1553-1563 (12 ref.)

Keywords: Pharmacists; Questionnaires

**Abstract:** We conducted a questionnaire survey among community and pharmaceutical company pharmacists in Lebanon to evaluate their satisfaction with their professional status and their willingness to work as clinical pharmacists. The majority of community pharmacists were satisfied with their professional situation [> 50%], except for the financial aspect [40%]. For pharmaceutical company pharmacists, only 33% thought that their profession had a positive image. However, > 65% were satisfied with social and financial standing. About 25% of pharmacists in pharmaceutical companies were ready to switch to clinical pharmacy with less income. Over 75% of the community pharmacists were prepared to apply clinical pharmacy in their practice and would be ready to attend courses for this purpose.

## **Ketogenic Diet**

Intractable seizure disorders: efficacy of the classic ketogenic diet.

Karimzadeh, P.; Tabarestani, S.; Mahvelati, F.; Tonekaboni, S.H.; Ghofrani, M.

E-mail:Pkarimzadeh@sbmu.ac.ir

Shahid Beheshti Medical University [SBMU] - Pediatric Neurology Research Center - Pediatric Neurology Department IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 15-20 (21 ref.)

Keywords: Seizures-epidemiology; Seizures-diet therapy; Child; Treatment Outcome; Epilepsy; Anticonvulsants

Abstract: The ketogenic diet is a high-fat, low carbohydrate, adequate protein diet, developed in the 1920s for the management of intractable seizure disorders in children. To evaluate efficacy and tolerability of the classic ketogenic diet, we analyzed records of the children started on the diet from 1999 to 2006 at the Mofid children's hospital. The subjects were 87 children, mean age 55 months. Before initiation of the diet, 55% of the patients had seizures, at least 1-4 times per day, 36%-5 or more per day and 9%-2 to 4 times per week. Mean number of Anti Epileptic Drugs [AEDs] tried for them was 8 and 67% were receiving three or more drugs. The ketogenic diet showed drastic improvement, with at least 50% reduction in seizure frequency in 87% of our patients, 39% of whom showed complete seizure control in the third month. After one year, in 80% of the patients who returned, improvement continued, with 26% of them being seizure free; besides, 23% had one AED decreased, 36% had two or three AEDs decreased, and 25% [one child] had all AEDs discontinued. Of the 30 improved cases, 20%, at the end of the first year, had improved behavior as well, and 23% of them had become more alert. The medium diet duration of the improved group was 15 months. The improvement in our patients, low side effects, and the duration of diet by families reveal that the ketognic diet can still be a very useful alternative therapy in certain epileptic children.

# Klebsiella Infections

## epidemiology

#### Prevalence, antibiotic susceptibility pattern and production of extended-spectrum betalactamases amongst clinical isolates of Klebsiellapneumoniae at armed forces hospital in Saudi Arabia.

Ahmad, Shamweel; Al Juaid, Nami Fawazan; Alenzi, Paris Q.; Mattar, Essam H.; Bakheet, Osama El Sayed E-mail:drshamweel@hotmail.com

King Saud University - College of Medical Sciences - Department of Clinical Microbiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 264-265 (6 ref.)

Keywords: Klebsiella Infections-microbiology; Klebsiella pneumoniae; beta-Lactamases-biosynthesis; Anti-Bacterial Agents; Prevalence; Drug Resistance, Multiple; Cross Infection-etiology

Abstract: The aim of this descriptive study was to determine the prevalence of Klebsiella pneumoniae from different clinical specimens, their antibiotic susceptibility pattern and the extended-spectrum b-lactamase [ESBL] production among such isolates at Armed Forces Hospital, Al-Kharaj, Saudi Arabia, from November, 2004 to October, 2007. A total of 328 isolates of K. pneumoniae recovered from 8152 different specimens were studied for ESBL production and antimicrobial susceptibility. The prevalence of K. pneumoniae was 4% [328/8152]. We observed a high percentage of K. pneumoniae resistant to ampicillin [100%] and tetracycline [92%]. The prevalence of ESBL-producing K. pneumoniae was found to be 10.4% [34/328]. The ESBL-producing strains were mostly from aspirates [25%] followed by sputum [20%] and blood [18.2%]. These ESBL producing isolates were highly resistant to gentamicin and ciprofloxacin. Allisolates were susceptible to imipenem. Our findings demonstrate a high percentage of ESBL-producers among clinical isolates of K. pneumoniae and a high rate of multidrug resistance. Continued infection control measures and prudent use of antimicrobial agents are essential in reducing the spread of multi-resistant ESBL-producing K. pneumoniae.

## Labor, Induced

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

Ahmed, Taha Umbeli; Hummieda, Sami

E-mail:Umbellil@hotmil.com

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

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

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

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

# Lasers, Solid-State

Transluminal Nd: YAG laser embolysis in a case of hemiretinal arterial occlusion. Shalchi, M.H.A.; Daneshvar, R. Mashhad University of Medical Sciences - Khatam Al-Anbia Eye Hospital EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1613-1616 (8 ref.) Keywords: Retinal Artery Occlusion-therapy; Treatment Outcome

## Learning

e-Learning: the next big thing in medical education.

Hussain, Amro A.

E-mail:amr\_sudan@hotmail.com

Omdurman Islamic University - Faculty of Medicine and Health Sciences

Sudan Journal of Medical Sciences 2009; 4 (2): 101-107 (19 ref.)

Keywords: Education, Distance; Education, Medical-methods; Information Science; Internet; Problem-Based Learning; Students, Medical; Knowledge; Education, Medical, Undergraduate

Abstract: The rapid advances in Information and Communication Technology [ICT] and the wide use of the World Wide Web has important implications for education. This continuous advancement in technology [e.g. Broadband internet connections, Ubiquitous Computing, Open Source Softwares] in conjunction with the recent recommendations in medical education suggesting a move toward problem-based learning [PBL] and use of information and communication technologies. All these factors led to the evolution of the e-learning environment in medical education. An initiative is underway in Faculty of Medicine and Health Sciences [FMHS], Omdurman Islamic University [OIU], Sudan which aims to introduce a modern web-based learning environment that serves undergraduate medical students, supports the newly adopted philosophy of Problem-based Learning, and provides these new generations of doctors [Net generations] with the knowledge and skills they need to be successful practitioners. This digest endeavors to give a bird's-eye view of e-learning, its benefits and limitations and explores, with examples, some of the current uses of e-learning technologies in the education of medical students.

## Leishmaniasis, Cutaneous

## diagnosis

Serodiagnosis of cutaneous leishmaniasis in the Syrian Arab Republic.

Al Nahhas, Samar A.

E-mail:samarnahas@yahoo.com

Damascus University - Faculty of Sciences - Department of Animal Biology

Saudi Medical Journal 2009; 30 (3): 382-386 (29 ref.)

Keywords: Leishmaniasis, Cutaneous-epidemiology; Blotting, Western; Enzyme-Linked Immunosorbent Assay; Leishmania-parasitology; Antibodies; Questionnaires

Abstract: To evaluate the validity of western blot [WB] and enzyme linked Immunosorbent assay [ELISA] that use antigens from culture promastigote from Leishmania parasites, for laboratory diagnosis of cutaneous leishmaniasis in Syria. We utilized 290 serum samples from endemic areas [patients group] and other regions [control samples] in Syria during 2002-2005 and the serological testing was brought to the applied the serological tests at the Department of Animal Biology, Damascus University, Damascus, Syria. Anti-Leishmania antibody was detected in 250 [92.5%] cases using the ELISA and 254 [94%] cases using the WB. It is also noted that this response canchange according to the number of lesions. Results of this study showed that there was no significant difference between ELISA and WB, which are easy to perform. Thus, they can be used for diagnosing the cutaneous leishmaniasis in Syria.

# Leukemia, Myelogenous, Chronic, BCR-ABL Positive

## genetics

# Methylenetetrahydrofolate reductase [MTHFR] genotype association with the risk of chronic myelogenous leukemia.

Ismail, Said I.; Ababneh, Nida A.; Awidi, Abdallah

E-mail:sismail@iu.edu.jo

University of Jordan - Faculty of Medicine - Department of Biochemistry

Jordan Medical Journal 2009; 43 (1): 8-14 (27 ref.)

**Keywords:** Methylenetetrahydrofolate Reductase (NADPH2)-genetics; Folic Acid-metabolism; DNA Methylation; Reverse Transcriptase Polymerase Chain Reaction; Genotype

**Abstract:** The metabolism of folate is essential in DNA synthesis, and polymorphisms of genes involved in this metabolism have been implicated in many types of cancer. One such gene is the Methylenetetrahydrofolate Reductase [MTHFR] gene, which encodes an enzyme that converts folate to a methyl donor used for DNA methylation. In this report, we studied the association between the different genotypes of the two most common MTHFR polymorphisms, C677T and A 1298C, and the risk of Chronic Myelogenous Leukemia [CML]. For this purpose, 149 of previously diagnosed CML patients and 170 normal controls were examined using PCR followed by Restriction Fragment Length Polymorphism [RFLP]. Results showed that the frequency of the C677T TT homozygous mutant genotype in patients with CML was significantly higher compared to controls [OR - 2.84, 95% CI: 1.24-6.50, .P-value - 0.014]. No such association was shown for the heterozygous C677T CT genotype [OR = 1.52, 95% CI: 0.95-2.41, P-value - 0.046]. No such statistical significance was demonstrable for the heterozygote genotype 1298AC [OR = 1.08, 95% CI: 0.14-6.90, P-value - 0.046]. No such statistical significance was demonstrable for the heterozygote genotype 1298AC [OR = 1.80, 95% CI: 0.68-1.73, P-value = 0.743]. This is the first report to suggest that both mutated MTHFR genotypes, specifically the homozygous 677TT and 1298CC polymorphisms, can be associated with a higher risk of developing CML.

# Lipoprotein [a]

## blood

# Lipoprotein [a] is a feature of the presence, diffuseness, and severity of coronary artery disease in Saudi population.

Habib, Syed S.; Abdel Gader, Abdul Jalil M.; Kurdi, Mohammad I.; Al Aseri, Zohair; Soliman, Mona M. <u>E-mail:shahidhabib44@hotmail.com</u>

King Saud University - College of Medicine, King Khalid University Hospital - Department of Physiology Saudi Medical Journal 2009; 30 (3): 346-352 (33 ref.)

Keywords: Coronary Artery Disease-diagnosis; Coronary Angiography; Cholesterol-blood; Triglycerides-blood; Cholesterol, LDL-blood; Cholesterol, HDL-blood; Cross-Sectional Studies; Risk Factors

**Abstract:** To study lipoprotein[a] [Lp[a]] levels in Saudi patients with angiographic ally defined coronary artery disease and to see its relationship with its severity and diffuseness. This cross-sectional study was carried out at King Khalid University Hospital, Riyadh, Saudi Arabia in 2006-2007. One hundred and forty-seven individuals with coronary artery disease [CAD] and 49 healthy individuals matched for age and body mass index were studied. Among CAD patients, 133 underwent angiography. Blood samples were analyzed for total cholesterol [TC], triglycerides [TG], low density lipoprotein [LDL] and high density lipoprotein [HDL] and Lp[a]. Coronary artery disease patients had higher Lp[a] levels than controls [25.78 +/- 25.09 mg/dl versus 14.57 +/- 11.81 mg/dl, p = 0.0030]. Patients without stenosis [10.97 +/- 8.06 mg/dl] and one vessel involvement [19.67 +/- 17.33 mg/dl] had significantly lower levels of Lp[a] compared to double [31.88 +/- 32.17 mg/dl] and triple [29.70 +/- 28.12 mg/dl] vessel disease. Lipoprotein[a] levels correlated significantly with coronary vessel score [r = 0.234, p = 0.033] and Gensini score [r = 0.256, p = 0.02]. Smoking [odds ratio [OR]: 1.86; 95% confidence interval [CI]: 1.020-2.510; p = 0.04], TG levels [OR: 2.04; 95% CI: 1.251-4.932; p = 0.03] and Lp[a] levels [OR: 1.56; 95% CI: 1.033-3.687; p = 0.025] significantly predicted CAD severity. High risk levels of Lp[a] >/= 30 mg/dL were present in 66.7% of CAD patients. Lipoprotein[a] levels are significantly higher in Saudi patients with CAD compared to healthy individuals, and are associated with more severe and diffuse blockage of the coronaryvessels.

# Liver Neoplasms

## diagnosis

Primary hepatic non Hodgkin lymphoma presenting as acute hepatitis in a 2 year old male.

Al Tonbary, Youssef; Fouda, Ashraf; El Ashry, Rasha; Zalata, Khaled

E-mail:ytonbary@gmail.com

Mansoura University Children's Hospital - Hematology/Oncology/BMT Unit

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 299-301 (11 ref.)

**Keywords:** Lymphoma, Non-Hodgkin-epidemiology; Lymphoma, Non-Hodgkin-diagnosis; Lymphoma, Non-Hodgkindrug therapy; Antineoplastic Combined Chemotherapy Protocols; Ultrasonography; Tomography, X-Ray Computed; Hepatitis; Acute Disease; Infant

# Liver Transplantation

## adverse effects

# One hundred and thirty seven living donor pediatric liver transplants at Riyadh Military Hospital. Results and outlook for future.

Khan, Iftikhar A.; Al Shaqrani, Mohammad A.; Arain, Zahid B.; Al Hebbi, Homoud A.; Wall, Sami H.; Bassos, Atef F. E-mail:ikhan@rmh.med.sa

Riyadh Military Hospital - Prince Sultan Liver Transplant Unit

Saudi Medical Journal 2009; 30 (3): 403-408 (21 ref.)

**Keywords:** Liver Transplantation-mortality; Tissue Donors-statistics and numerical data; Transplantation, Homologous; Biliary Atresia; Cholestasis, Intrahepatic; Survival Rate; Graft Survival; Child; Treatment Outcome; Retrospective Studies; Hospitals, Military

**Abstract:** To review the results of 137 living donor pediatric liver transplants performed at Riyadh Military Hospital [RMH]. Retrospective analysis of the in- and out-patient case notes was carried out. Data were collected regarding age, gender, nationality, diagnosis, type of procedure, complications and survival of the grafts and the recipients. The first 137 living donor pediatric liver transplants were performed in 113 months. The age range was 4.5 months to 14 years. Eighty-four recipients [61%] were male. One hundred and twelve children were Saudi. Left lateral segment was used as allograft in 135 cases. One child each received full left lobe and full right lobe. Six auxiliary partial orthotropic liver transplants were carried out. Familial metabolic liver disorders made the largest group of children needing transplant. The most common indications were progressive familial intrahepatic cholestasis and biliary atresia [45 cases each]. The numbers of major complications are: hepatic artery thrombosis [n=8]; portal vein thrombosis [n=3]; portal vein stenosis [n=3] and biliary strictures [n=4]. Fifteen patients died. Three further allograft have been lost. Thus, the overall patient survival rate is 89% and graft survivalrate is 86.8%. Living donor liver transplantation is a viable option for children with end-stage liver disease. Metabolic liver disease is the most common indications and recipient and graft survival rates of the program at RMH are acceptable.

# Lupus Erythematosus, Systemic

## diagnosis

#### Cerebritis and neutropenia in a child with ANA negative lupus.

Akhoondian, J.; Rezaii Yazdi, Z.; Behmanesh, F.; Talebi, S.

E-mail:j-akhondian@mums.ac.ir

Mashhad University of Medical Sciences [MUMS] - Ghaem Medical Center

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 61-66 (17 ref.)

Keywords: Lupus Erythematosus, Systemic-complications; Neutropenia-etiology; Antibodies, Antinuclear; Child; Tomography, X-Ray Computed; Magnetic Resonance Imaging; Electroencephalography

Abstract: Systemic lupus erythematosus [SLE], an autoimmune systemic disease with unknown etiology, affects virtually every part of the body; involvement of the central nervous system [CNS] isone of the major causes of morbidity and mortality in systemic lupus erythematosus [SLE] patients and is the least understood aspect of the disease. Neutrogena is very uncommon in childhood lupus. True negative anti nuclear antibody [ANA] tests in patients with lupus are now very rare. The patient reported here was a 12-year-old girl with ANA negative lupus cerebritis who presented with left hemiparesis after a generalized seizure, with neutropenia observed during its course.

#### Scrub typhus associated with systemic lupus erythematosus: a case report.

Nasr, Mohsen; Mostafa, Mohamed Mostafa Abdelwahab; Surrun, Soondal Koomar

E-mail:mohsennasr@hotmail.com

Al Jahra Hospital - Department of Internal Medicine

KMJ - Kuwait Medical Journal 2009; 41 (2): 149-151 (7 ref.)

**Keywords:** Scrub Typhus-diagnosis; Lupus Erythematosus, Systemic-pathology; Steroids-therapeutic use; Tetracycline-therapeutic use; Arthralgia; Fever; Fever of Unknown Origin

Abstract: The etiology of systemic lupus erythematosus [SLE] is largely unknown and there is a probable contribution of genetic, hormonal, immunological and environmental factors for its manifestation. The widespread immunological destruction of many organs in SLE and the associated decreased immunity increase the risk of infections. Steroids and other immunosuppressant are important in the treatment of SLE, but they further increase the risk of infections, and sometimes with rare organisms. We present a case of an adolescent girl with prolonged fever, joint pains and without skin rashes. The initial diagnosis was SLE. She was treated with steroids with improvement in her general condition and relief of joint pains. However the fever persisted and subsequent investigations revealed an associated scrub typhus. The fever subsided after treatment with oral tetracycline. There were no complications of scrub typhus. Since scrub typhus infection is not common in the Arabian Peninsula the disease was not initially thought of. In the investigation of prolonged fever in SLE, viral, bacterial, protozoal as well as rickettsial diseases should be borne in mind.

## Lycopersicon esculentum

## genetics

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

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

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

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

Keywords: Food, Genetically Modified; Fusarium; Fungi; Antifungal Agents; Chitinase; Polymerase Chain Reaction Abstract: Tomato [Lycobersicum esculentum Mill] cultivar Castle Rock was used to produce fungal resistant plants by introducing an antimicrobial chitinase gene. Hypocotyl with a part of cotyledon [hypocotyled onary] of young tomato seedlings were used as explant material. The transformation performed by delivering the vector pGL2 harbouring a class I rice chitinase gene [chi11] under the control of the CaMV 35S promoter and hygromycin resistant gene as a plant selectable marker, using biolistic bombardment mediated transformation system. Shoots were regenerated onto selective regeneration medium supplemented with 1 mg/l BAP, 1 mg/l Zeatin ripozide, 5mg/l AgNO[3] and 25mg/l hygromycin, then subjected to rooting medium for developing roots. Putative transgenic plantlets of R0 were confirmed by PCR analysis using specific primers for the transgene, and most regenerated plants showed positive results. However, PCR and dot blot analyses were conducted using R1 seedlings to confirm the stable integration of transgenes in R1 progeny. Bioassay for transgenic plants was performed on the transgenic R1 young seedlings and non-transgenic controls by challenging with a vigorous isolate of the fungal pathogen Fusarium oxysporum f. sp. Lycopersici to assay for the resistance against fusarium wilt disease among individuals. Data from transgenic plants showed lower percentages of infection ranging from 11 to 60% in lines 8 and 5 respectively compared to the control plants [80% infected]. The percentage of resistance ranged from 11 to 77.7% in lines 7 and 8, respectively compared to 10% in non-transgenic control plants. In addition, the average percent of the tolerant seedlings were 19.69% that had been infected but showed delayed symptoms and suppression in symptom extension. The obtained results indicated that expression of the chitinase protein [Chi 11] in transgenic tomato plants acquired them antifungal activity against Fusarium.

# Lymphatic Diseases

## etiology

#### Differential diagnosis of cervical malignant lymphadenopathy among Iranian patients.

Naeimi, Mohammad; Sharifi, Amin; Erfanian, Youssef; Velayati, Arash; Izadian, Shahla; Golparvar, Sadegh E-mail:dr.naeimi@gmail.com

Mashhad University of Medical Science - Ghaem Medical Center - Department of Otolaryngology Saudi Medical Journal 2009; 30 (3): 377-381 (16 ref.)

Keywords: Lymphatic Diseases-diagnosis; Lymphoma-epidemiology; Thyroid Neoplasms-epidemiology; Endoscopy; Biopsy, Fine-Needle; Cross-Sectional Studies

Abstract: To investigate the differential diagnosis in cases referred with neck lumps suspicious to malignant nodal masses and its relation to demographic variants. Individuals who entered in this cross-sectional study conducted at the Department of Otolaryngology, Ghaem Medical Center, Mashdad, Iran from May 1995 to April 2005 were re-evaluated by history taking, physical examination and imaging studies. Fine needle aspiration was applied to obtain tissue sampling. Among the patients, 232 cases had malignant disease confirmed by pathology reports. Cases with unknown primary tumor underwent investigations including pan-endoscopy, and further imaging studies were carried out to determine the primary tumor site. Demographic data as gender, age, location, size, and pathology of tumor were considered. The results of this study showed that 50% of patients which were referred with neck masses had malignant neoplasm. The most common pathology in patients younger than 40 years were lymphoma [55%] and thyroid cancer [26%], whereas, in patients older than 40 years squamous cell carcinoma [67%] was more common. The most involved lymph nodes were jugulodigastric chain. Larynx and hypopharynx are the most common sources of aero digestive tract metastatic. According to high incidence malignancy [50%] among neck lesions, an asymmetrical neck mass in adults should be considered malignant until proven otherwise. It seems that age is an important predictor of tumor pathology, and determination of further diagnostic investigations would be helpful.

# Lymphoma, Mantle-Cell

## diagnosis

Complete remission of mantle cell non Hodgkin lymphoma with a dendritic cell vaccine.

Massumoto, Celso; Sousa Canavez, Juliana M.; Moreira Leite, Katia R.; Camara Lopes, Luiz H.

E-mail:jmscanavez@genoabiotec.com.br

Zacarias Marques de Pesquisa Institate - Genoa Biotechnology

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 302-304 (19 ref.)

**Keywords:** Lymphoma, Mantle-Cell-genetics; Lymphoma, Mantle-Cell-drug therapy; Lymphoma, Non-Hodgkinepidemiology; Remission Induction-methods; Cancer Vaccines-therapeutic use; Positron-Emission Tomography; Dendritic Cells

# Lymphoma, Non-Hodgkin

## diagnosis

#### An obscure cause of leg edema, non-Hodgkin's lymphoma.

Sajid, Tanveer; Intisar ul Haq; Haq, Irum; Chaudhary, Ahmed Khan

Combined Military Hospital - Department of Surgery

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 254-256 (10 ref.)

**Keywords:** Lymphoma, Non-Hodgkin-epidemiology; Lymphoma, Non-Hodgkin-therapy; Psoas Abscess; Lymphatic Diseases; Lower Extremity; Ultrasonography; Tomography, X-Ray Computed; Antineoplastic Combined Chemotherapy Protocols-therapeutic use; Leg; Edema

Abstract: A 25-year-old female having asymptomatic edema of unilateral leg was provisionally diagnosed as a case of psoas abscess. Later, she turned out to be a case of non-Hodgkin's lymphoma. This presentation is contrary to usual age and mode of presentation of non-Hodgkin's lymphoma.

## Mammography

## utilization

The use of mammography among Jordanian women: findings from the behavioral risk factor surveillance system 2007.

Almasad, Jamal; Awidi, Abdallah; Belbeisi, Adel; Massad, Diana E-mail:jmasad@ju.edu.jo

Jordan University Hospital - Surgical Oncology

Jordan Medical Journal 2009; 43 (1): 33-43 (23 ref.)

Keywords: Breast Neoplasms; Early Detection of Cancer; Marital Status; Educational Status; Income; Insurance, Health; Health Status; Risk Factors; Behavior

Abstract: This study aims to provide a national estimate of the rate of utilization of mammography among Jordanian women aged 35 years and above and the impact of the different variables affecting this utilization. Data were derived from the Risk Factor Surveillance Survey conducted in 2007, focusing on all women aged 35 years and above with a total of 1161. Dependant variables were mammography utilization, while Predictor variables were; age, marital status, education, income, medical insurance, medical service providers, residency and health status as perceived by the respondents. Appropriate analysis was used to assess the relationships between the severable. Only 12.5% had mammography. Utilization increased with increasing age, level of education and with the higher income level. Non-insured and those who obtained medical service through the private sector had more utilization. Women in good health who are residing in the middle part of the country showed higher rates of mammography. This national study has demonstrated underutilization of mammography. It provides basic data for future studies. Initiating national program for screening helps to find out measures to facilitate utilization of mammography as easy access and reduced cost. Improvement of income, education level and insurance will positively influence mammography utilization.

## **Medication Errors**

# Refusal in reporting medication errors from the viewpoints of nursing students in Arak University of medical sciences.

Kouhestani, H.; Baghcheghi, N.

E-mail:hamidnbkb@yahoo.com

Arak University of Medical Sciences - Medical-Surgical Department

IJME - Iranian Journal of Medical Education 2009; 8 (2): 285-292 (19 ref.)

Keywords: Students, Nursing; Mandatory Reporting; Cross-Sectional Studies; Questionnaires

Abstract: Reporting medication errors leads to saving patients' wellbeing and safety and also is counted as a valuable information source for preventing further mistakes in future. The aim of this study was to determine the causes for refusing to report medication errors from the viewpoints of nursing students. All nursing students of Arak University of Medical Sciences [n=76] were selected to participate in this descriptive cross- sectional study. Using a 17 item questionnaire based on 5-point Lickert scale, nursing students' viewpoints toward refusal in reporting medication errors were investigated. This questionnaire included 3 domains of fear from reporting consequences [10 items], administrative factors [4 items], and reporting procedure [3 items]. Data was analyzed by SPSS software. Nursing students estimated that 75% of medication errors were reported by them. Among all causes under investigation, "fear from reporting consequences" had the highest score[4.13] among all. From 10 existing items in the domain of "fear from reporting consequences", "fear from evaluation score", and "academic consequences", were main causes for refusing to report medication errors. Among 4 items in the domain of "administrative factors", students had most agreement with the item of "lack of appropriate feedback following reporting medication fault". Some medication errors are not reported by the students and fear from reporting consequences and administrative factors are two main factors for refusing to report medication errors in nursing students. With regard to the fact that reporting medication errors could enhance the patients' immunity, nursing instructors should react positively towards the reports of medication errors bynursing students.

## Medroxyprogesterone 17-Acetate

## administration and dosage

# Effect of depot medroxyprogesterone [DMPA] on body weight and serum lipid profile in adult female rats.

Bakry, S.; Abdullah, A.

E-mail:Sayed bakry@yahoo.com

Al Azhar University - Faculty of Science - Zoology Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 17-30 (41 ref.)

**Keywords:** Rats; Body Weight; Cholesterol-blood; Triglycerides-blood; Lipoproteins, LDL Cholesterol-blood; Lipoproteins, HDL Cholesterol-blood; Contraceptive Agents; Medroxyprogesterone 17-Acetate-adverse effects; Weight Gain

Abstract: Depo Provera [Medroxyprogesterone Acetate, DMPA] is a long-acting, injectable progesterone derivative contraceptive that is currently used by 30 million women in 90 countries, including Egypt, United States and Canada. DMPA classified as sex hormone binding globulin [SHBG]. The objective of this study was to investigate body weight and serum lipid profile following treatment of rats with the injectable contraceptive depot medroxyprogesterone acetate, [Depo Provera; DMPA]. Adult female rats [Rattus norvigcus] were treated with a single dose of DMPA that is comparable to the weight-corrected dose in humans [2.7 mg/rat or 5.4 mg/rat] and sacrificed on day ten or fifteen post treatment. Body weights were recorded and sera from both treated and control groups studied for lipid profile using a colorometric method. Treating animals with 2.7 mg/rat or 5.4 mg/rat of DMPA for 10 and 15 days led to a dose-related increase in the body weights [maximum ~ 24.77%]. There was increase in total lipids [TL], triglycerides [TG], total cholesterol [TC] as well as low density-lipoprotein cholesterol [LDL-C] and very low density lipoprotein [VLDL-C]. On the other hand, a marked decrease was found in high density-lipoprotein cholesterol [HDL-C] in the DMPA-treated groups. Statistical analysis indicated that these changes were significant [p < 0.01] in all treated groups compared to control ones. We concluded that, this preliminary study indicates a long-term atherogenic role for DMPA.

# Meningitis

## epidemiology

#### Epidemiology of meningitis in Oman, 2000-2005.

Dash, N.; Al Khusaiby, S.; Behlim, T.; Mohammadi, A.; Mohammadi, E.; Al Awaidy, S. <u>E-mail:ndash@sharjah.ac.ae</u>

Oman Medical College - College of Medicine - Department of Microbiology and Immunology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1358-1364 (21 ref.)

Keywords: Meningitis-microbiology; Age Distribution; Meningitis-diagnosis; Meningitis-cerebrospinal fluid; Incidence; Meningitis, Haemophilus

Abstract: We reviewed the epidemiologic features and trends for 771 cases of meningitis in Oman from January 2000 to December 2005. We found 69% were bacterial in origin and 13% were viral. Leading bacterial pathogens included Haemophilus influenzae [15%], Streptococcus pneumoniae [14%] and Nesseria meningitidis [12%]. For 56% of patients with suspected pyogenic meningitis, no specific bacterial pathogen could be identified. Peak occurrence was in children under 2 years old. The incidence of H. influenza type b decreased by almost 100% after implementation of the national immunization programme in 2001, while the incidence of cases caused by S. pneumoniae and N. meningitidis remained steady.

# Meningococcal Infections

## complications

Immune associated complication in meningococcal disease; a report of two cases.

Al Qattan, Hanan Y.; El Hashash, Osama AEF.; Abul, Nabila A.

E-mail:alkatan\_07@hotmail.com

Farwaniya Hospital - Department of Pediatrics

KMJ - Kuwait Medical Journal 2009; 41 (2): 140-142 (8 ref.)

Keywords: Meningococcal Infections-diagnosis; Meningococcal Infections-immunology; Arthritis; Vasculitis; Pericarditis; Nephritis; Scleritis

Abstract: Meningococcal disease is one of the most feared infections in children. In recent years, little attention has been focused on the complications of meningococcal disease in the sub-acute phase, the so-called immune associated complications. Its main features are arthritis, vasculitis, episcleritis, pericarditis and very rarely nephritis. We report two siblings with meningococcal disease. The first developed arthritis and vasculitis while the younger sister developed only arthritis of the right ankle. To the best of our knowledge, this is the first case report to be published in Kuwait.

## Menopause

# Association of menopause with osteopenia and osteoporosis: results from population based study done in Karachi.

Baig, Lubna; Mansuri, Farah Asad; Karim, Saadiya A.

Karachi Medical and dental College - Department of Community Medicine

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 240-244 (29 ref.)

Keywords: Osteoporosis, Postmenopausal-diagnosis; Osteoporosis, Postmenopausal-epidemiology; Bone Diseases, Metabolic-diagnosis; Bone Diseases, Metabolic-epidemiology; Bone Density; Patient Acceptance of Health Care; Ultrasonography

Abstract: To assess the association of osteopenia and osteoporosis with menopause and compare the health seeking behaviour of women related to menopause in different strata of society. A cross-sectional study. Three different socioeconomic strata of Karachi from May till August 2004. A sample of 925 women, over 35 years of age, was selected from 16 clusters of 250 households [50 houses in each cluster]. All apparently healthy women having age between 35 and 50 years were selected in the cluster houses. Those who were not willing to be the part of the study or giving history of taking treatment for any disease for more than 4 weeks were excluded. In-depth interviews were conducted at their houses by the fourth year medical students trained and supervised by the senior faculty of the Medical College. T-scores were calculated to get BMD [Bone Mineral Density] for all the subjects through heel ultrasound. A total of 287 women were found to be experiencing menopause. The mean age of menopause was 47.8 + 4.7 years. Out of those 287 women, 135 [47%] wanted their menses to continue and 235 [82%] had consulted a physician after menopause. There was a significantly lower score of BMD of postmenopausal women [mean = -1.833 + 0.65] compared to pre-menopausal women [mean = -1.597 + 0.60, p=0.016]. Out of the 925 women interviewed, 53% had consulted a physician for various symptoms related to menopause. The symptoms experienced by premenopausal women included lack of sleep [25%], fear of becoming sterile [13%] and urinary incontinence [18%]. The average age of menopause was found to be similar to other studies of the country. Lower bone mineral density was found in greater proportion among older females. Majority needed intervention inclusive of awareness through health education and medication.

# Mental Health Services

#### Mental health care in Lebanon: policy, plans and programmes.

Chahine, L.M.; Chemali, Z.

American University of Beirut - Medical Centre

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1596-1612 (49 ref.)

Keywords: Primary Health Care; World Health Organization; Mental Disorders-prevention and control; Community Mental Health Services; Awareness; Health Promotion

Abstract: Lebanon is a developing country marred by several years of civil war and continuing political, social and economic instability. It has no mental health policy or plan. Through literature reviews, surveillance of current mental health services and interviews with primary care physicians and officials at the Ministry of Public Health and World Health Organization, we identified several barriers to the optimal delivery of mental health services in Lebanon. These include government-, physician-, and patient-related factors. New initiatives are necessary at several levels, particularly in the primary care setting. These are outlined in light of the 2001 WHO recommendations on mental health services.

# Metabolic Syndrome X

## etiology

MetS and cardiovascular risk factors among Palestinians of East Jerusalem.

Abu Sham'a, R.A.H.; Darwazah, A.K.; Kufri, F.H.; Yassin, I.H.; Torok, N.I.

E-mail:dr rshama@yahoo.com

Makassed Hospital - Department of Cardiology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1464-1473 (36 ref.)

**Keywords:** Cardiovascular Diseases-etiology; Risk Factors; Cross-Sectional Studies; Prevalence; Anthropometry; Blood Pressure; Obesity-epidemiology; Diabetes Mellitus-epidemiology; Lipids-blood; Sex Distribution

**Abstract:** In a cross-sectional survey conducted in 2005, we determined the prevalence metabolic syndrome [MetS] and other atherosclerotic cardiovascular disease risk factors among a sample of 342 Palestinians >/= 20 years in East Jerusalem. Participants were inter viewed and anthropometric measurements and blood testing were done. MetS was found in 115 [33.6%] participants, with no significant difference between the sexes. The prevalence of obesity, diabetes and other cardiovascular risk factors was also high, with central obesity and obesity [BMI >/= 30kg/m[2]] being significantly higher in women [P < 0.01]. With the exception of low-density lipoprotein cholesterol and haemoglobin, there was a significantly higher prevalence of atherosclerotic markers among the MetS group.

## Metformin

## therapeutic use

The role of metformin therapy in women with polycystic ovarian syndrome.

Siddique, Shazia; Rao, Shahid Irshad; Ata Ullah, Nabila

Nishtar Medical College Hospital - Department of Obstetrics and Gynaecology

Medical Forum Monthly 2009; 20 (1): 14-18 (21 ref.)

**Keywords:** Metformin-administration and dosage; Polycystic Ovary Syndrome-drug therapy; Polycystic Ovary Syndrome-diagnosis; Ovulation Induction; Infertility, Female-drug therapy; Ultrasonography; Pregnancy

**Abstract:** To determine the efficacy of metformin therapy in women with PCOS in terms of ovulation induction and pregnancy. The study was carried out in Outpatient department Gynaecology Unit-1, Nishtar Hospital, Multan from January 2007 to March 2008. A total of 285 patients fulfilling the inclusion criteria [oligo/hypomenohorea, infertility, weight gain, hyperandrogenism] were enrolled. Ultrasound pelvis was obtained in all women. Presence of eightor more multiple follicles in one or both ovaries was the cut off number for positive ultrasound. Patients with other causes of infertility were excluded from the study. Metformin was adjusted to 500 mg thrice daily. Six months later patients were evaluated for response to metformin therapy. At the start of the study, 78% women had menstrual irregularity, 54% had primary and 46% had secondary, ultrasound features were found in 94% patients, hirstism in 70% and weight gain was found in 64% of patients. After six months of metformin therapy, ovulation was observed in 66% of women while 52% of patients conceived on metformin, therapy alone. Metformin alone was an effective treatment for PCOS in terms of ovulation induction and pregnancy.

## Methicillin-Resistant Staphylocaccus aureus

## drug effects

Prevalence and pattern of antimicrobial susceptibility of methicillin-resistant and methicillinsensitive staphylococcus aureus in north Jordan.

El Nasser, Ziad; Awad, Faisal

E-mail:znasscr@just.cdu.jo Jordan University of Science and Technology [JUST] - Faculty of Medicine - Department of Microbiology and Immunology

Jordan Medical Journal 2009; 43 (1): 15-20 (25 ref.)

**Keywords:** Anti-Bacterial Agents-pharmacology; Microbial Sensitivity Tests; Disk Diffusion Antimicrobial Tests; Sensitivity and Specificity; Prevalence; Cross Infection; Community-Acquired Infections; Staphylococcal Infections-epidemiology; Methicillin-Resistant Staphylococcus aureus-pathogenicity; Staphylococcal Infections-diagnosis

Abstract: The main goal of this study is to determine the prevalence and pattern of antimicrobial susceptibility of methicillin-resistant [MRSA] and methicillin sensitive Staphylococcus aureus [MSSA] in north Jordan. The study also aims to evaluate the [MRSA] latex screen test for the detection of [MRSA]. One hundred and fifty isolates of Staphylococcus aureus, that were received at the clinical microbiology laboratory of the faculty of medicine at Jordan University of Science and Technology from two major hospitals in the North part of Jordan from September of 2007 to February of 2008, were included in the study. Ninety isolates were obtained from clinical specimens and sixty isolates from carrier patients. Staphylococcus areus strains were identified morphologically and biochemically by standard laboratory tests and procedures. Antimicrobial susceptibility was performed by the disk diffusion [Kirby-Bauer], and Minimum Inhibitory Concentration [MIC] method was used to identify methicillin resistance. The pattern of resistance to seven antimicrobials [Vancomycin, Cephalothin, Clindamycin, Cortimaxizole, Erythromycin, Gentamycine, and Penicillin G] showed that none of the intrinsic-resistant isolates were resistant to vancomycin. The majority of the isolates was recovered from anterior nares [60%] and the least from peritoneal and synovial fluid [0.7% each]. The majority of isolates were recovered from surgical specimens [40%] and the minority from the ophthalmology department [1.3%]. The pattern of antimicrobial succeptability was as follows: MSSA [n=123], MRSA [n-27], Vancomycin [100%, 100%], Caphalothin [99.2%, 85.2%], Clindamycin [95.9%, 88.9%], Cotrimaxizole [98.4%, 85.2%], Erythromycin [81.3%, 40.7%], Gentamycin [95.9%, 85.2%], and penicillin G [4.9%, 0%]. The diffusion test showed a sensitivity of 100 and 88.9 and a specificity of 100 and 86.2, respectively. The pattern of antimicrobial susceptibility of S. areus differs between methicillin-sensitive and resistant isolates. Except for penicillin, most of methicillin-sensitive isolates were susceptible to nearly all antimicrobial agents used in this study.

# Methylenetetrahydrofolate Reductase NADPH2

# Methylenetetrahydrofolate reductase C677T polymorphism and relation ship with coronary artery disease.

Ibrahiem, Magdy M.; Gaber, Osama Abdel Aziz; Mohammed, Samy H.; Salem, Ehab M.

Zagazig University - Faculty of medicine - Medical Biochemistry and Internal medicine Departments

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 177-194 (43 ref.)

Keywords: Homocysteine; Folic Acid; Genotype; Polymorphism; Coronary Disease; Risk Factors

**Abstract:** Methylenetetrahydrofolate reductase [MTHFR] is involved in the reduction of 5, 10-Methylenetetrahydrofolate to 5-methyltetrahydrofolate. A 677 C/T single nucleotide polymorphism [SNP] localized in the MTHFR gene was associated with both thermo ability and reduced activity of the enzyme and is associated with increased Homocysteine levels. The aim of this study was to establish the genetic frequency of MTHFR SNP and whether this MTHFR SNP may affect a homocysteine level and if it is considered as a risk factor for Coronary artery disease [CAD]. This study included 65 subjects [40 cases and 25 controls]. For all participants in this study total lipids profile, Apo AI, homoysteine, blood glucose, folic acid and genetic polymorphism of MTHFR were done. The percentage distribution of the different genotypes in the study population [all subjects] showed that the CC genotype was the most prevalent one followed by CT and then TT [45%, 35%, 20%] respectively. There was no significant association of T Allele in CAD group when compared to control group although plasma homocysteine level was higher in the CAD compared to the control. It seemed that the high levels of homocysteine in CAD are not only dependent on MTHFR activity but also on many factors such as age, sex, and other vitamins which were not measured in this study such as B12 and B6.

## Micronutrients

# Current maternal-infant micronutrient status and the effects on birth weight in the United Arab Emirates.

Amirlak, I.; Ezimokhai, M.; Dawodu, A.; Dawson, K.P.; Kochiyil, J.; Thomas, L.; Abdulle, A.M. E-mail:iradjamirlak@gmail.com

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

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1399-1406 (26 ref.)

**Keywords:** Nutritional Status; Birth Weight; Infant; Mothers; Ferritins-blood; Ascorbic Acid-blood; 25-Hydroxyvitamin D 2-blood; Vitamin D Deficiency

**Abstract:** Micronutrient deficiencies exist among women of childbearing age in the United Arab Emirates but the effects of maternal micronutrient deficiency on fetal growth are not well documented. To investigate the association between micronutrients and birth weight, we measured maternal and cord blood micronutrients [vitamin A, C, D, and E] and ferritin in 84 term, singleton infants born to healthy Arab and South Asian women at Al-Ain hospital. Median serumascorbic acid and 25-hydroxyvitamin D [25-OHD] concentrations were low in mothers and infants. In multivariate analysis, maternal serum 25-OHD correlated positively with birth weight while serum ferritin showed a negative correlation.

## Midazolam

### pharmacology

# Midazolam efficacy and side effects in generalized and partial refractory status epilepticus in children.

Omran, M.R. Salehi; Edraki, M.R.

E-mail:salehiomran@yahoo.com Babol University of Medical Sciences

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 21-25 (22 ref.)

**Keywords:** Midazolam-adverse effects; Midazolam-administration and dosage; Status Epilepticus-drug therapy;

Hypotension; Respiratory Insufficiency; Child

**Abstract:** Midazolam is a significant and effective drug for control of a life-threatening condition, generalized and partial refractory convulsive status epilepticus. The goal of this study was evaluation of midazolam efficacy for management of this serious disease and its two side effects, hypotension and respiratory failure. Our study was done using a quasi experimental method; 22 children with generalized refractory convulsive status epilepticus were enrolled for the study. All patients received 0.2 mg/kg/dose as abolus intravenous midazolam followed by 1-6 mcg/kg/min continuous intravenous midazolam. Following this, termination of seizures as well as hypotension and respiratory failure were evaluated. midazolam ceased stop convulsions in 81.81% [18] patients with generalized seizures, and in 76.92% [10] patients with partial seizures, showing no significant difference between these two types of seizures [p=0.52]. Hypotension was induced in 18.18% [4] patients with generalized seizures and in 30.70% [4] patients with generalized seizures, again difference not significant [p=0.14]. There was respiratory failure in 21.73% [5] patients with generalized seizure and in 7.69[1] patients with partial seizure, infference on the significant [p=0.09]. There was no significant difference in efficacy and creation of hypotension and respiratory failure and respiratory failure and partial seizure and in 7.69[1] patients with partial seizure and in 7.69[1] patients with generalized seizures and in 30.70% [4] patients with generalized seizure and in 7.69[1] patients with generalized seizur

## Milk

## microbiology

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

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

Omar El Mokhtar University - Faculty of Veterinary Medicine

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

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

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

# Misoprostol

## administration and dosage

Extraamniotic versus vaginal misoprostol for ripening the unfavorable cervix.

Al Assadi, Ali F.; Al Waeely, Faiz A.; Ahmed, Hameda; Al Ali, Nihal R.

Basra Medical College

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 207-211 (14 ref.)

Keywords: Cervix Uteri; Cervical Ripening; Pregnancy; Amnion; Vagina; Administration, Intravaginal; Gravidity; Labor, Obstetric; Prospective Studies

Abstract: To compare the efficacy of two different routes of administration of misoprostol for ripening the unfavorable cervix. Labor room in Basra Maternity [teaching] Hospital with 400 bed capacity. A prospective comparative study was conducted to compare two different routes of administration of misoprostol [Cytotec] for ripening the unfavorable cervix. The cervix was ripped using a 2cc of misoprostol solution [25 micro g] installed into e upper vagina. The cervix was ripped using a Foley's catheter, which was inserted to the extraamniotic space and 2cc misoprostol solution [25 micro g] was infused through the catheter into the extraamniotic space. The clinical trial involved a total of 180 pregnant women, in method I [92], and method II [98], the success rates in achieving cervical ripening were 100% for both groups. The ripening times in group II [primigravidae [6.05 +/- 2.25], multiparae [3.97 +/- 1.1]] were significantly shorter

than those in group I [primagravidae [10.3 +/- 1.3], multiparae [9.22 +/- 1.32]. The induction delivery times were a slightly deferent in both groups in primagravidae; where as it was significantly shorter in multgravidae in group II. The vast majority of the women [100% in group I and 97% in group II] had vaginal delivery. This study confirms that vaginal and extra-amniotic misoprostol [which was evaluated for first time in this study] were effective in achieving cervical ripening but we recommend the use of vaginal misoprostol in stead of extra amniotic misoprostol because although it takes a longer priming time, it achieves a higher post ripening score, it is easily administered and do not requires special method for application as in the extra-amniotic one. We also recommend that extra amniotic misoprostol is reserved for use in patient in whom quick cervical ripening is indicated.

### therapeutic use

# To compare the efficacy and complications of misoprostal and prostaglandin F[2] alpha for second trimester pregnancy termination.

## Taj, Nergis; Fatima, Naheed; Igbal, Shafique

QAMC, Bahawalpur

Medical Forum Monthly 2009; 20 (1): 36-39 (11 ref.)

Keywords: Misoprostol-adverse effects; Dinoprost-therapeutic use; Dinoprost-adverse effects; Abortion, Therapeutic; Pregnancy Trimester, Second; Fetal Death; Abortion, Incomplete; Pelvic Infection

**Abstract:** To compare the efficacy and complications of Misoprostal and Prostaglandin F[2] alpha for Second Trimester Pregnancy termination. Sixty pregnancy women at 14-24 weeks of gestation divided into two group A and B. Group-A Misoprostal, Group-B Prostaglandin F[2] alpha. Patients needing terminations of pregnancy were 10%. The mean induction expulsion interval found in Group-A 19.13 hours and in Group-B 20.07 hours. The complication in Misoprostal group like deadfetus, pelvic infection, coagulopathy, rupture, incomplete abortion were less as compare to PGF[2] alpha group. Misoprostal is more effective then PGF[2] alpha for second trimester pregnancy terminations.

## Models, Nursing

# [The effect of a skill-training model on nursing students' skills in communicating with mental patients]

Namdar, H.; Rahmani, A.; Ebrahimi, H.

E-mail:namdar@tbzmed.ac.ir

Tabriz University of Medical Sciences - School of Nursing and Midwifery - Department of Medical-Surgical

IJME - Iranian Journal of Medical Education 2009; 8 (2): 323-332 (26 ref.)

Keywords: Communication; Psychotic Disorders; Education; Students, Nursing; Mentally III Persons

Abstract: The effects of teaching communication skills using a specific model on nursing students' skill in communicating with mental patients has less been a subject of investigation. The aim of this study was to determine the effect of a communication skills' teaching model on nursing students' communicating with mental patients. This quasi-experimental study was conducted as pretest-posttest design, on 49 senior nursing students in two groups of control [24 students] and experiment [25 students]. After performing the pretest of communication skills, both groups spent 12 days of clinical education for communication skills. The experiment group was taught using the mentioned model and the students of control group had the traditional training. After finishing the educational course, students' progress in communication skills in the two groups was compared. An integrated checklist was used for gathering data. Students' skills in interviewing mental patients were observed and the results were analyzed by SPSS software using Wilcoxon and Mann Wittney tests. Both methods of training model showed a significantly higher level of improvement in nursing students' communication skills. In spite of the significant effect of the mentioned model on improving nursing students' communication skills, due to the lack of enough evidence in this regard, conducting further studies in this area is recommended.

## Mouth Neoplasms

## Community survey of knowledge about oral cancer in Babol: effect of an education intervention.

Motallebnejad, M.M.; Khanian, M.; Alizadeh, R.; Dabbaghian, I.

E-mail:mmotallebnejad@yahoo.com

Babol University of Medical Sciences - Faculty of Dentistry - Department of Oral Medicine

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1489-1495 (26 ref.)

**Keywords:** Knowledge; Health Education; Health Surveys; Questionnaires; Risk Factors; Cross-Sectional Studies; Urban Population; Rural Population

**Abstract:** A study in Babol, Islamic Republic of Iran, used a questionnaire to gather information on knowledge about oral cancer and its risk factors and to evaluate the efficacy of an educational brochure. From a community sample of 400 people, 76.0% had no knowledge of oral cancer. Mean knowledge score before the education intervention was 1.47 [standard deviation 3.40] out of 10. Knowledge about oral cancer was not associated with age, sex or education level but urban residents had better knowledge than rural residents. Mean knowledge score improved significantly by 5.92 [SD 3.30] at 1 month after the intervention among the 226 respondents who had read the brochure.

# Moyamoya Disease

## diagnosis

#### Moyamoya induced acute paraplegia in a child with epilepsy.

Taghdiri, M.M.; Bigdeli, H.; Khorsand, M.; Jabary, M.

Hamedan University of Medical Sciences - Ekbatan hospital

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 57-60 (16 ref.)

Keywords: Moyamoya Disease-epidemiology; Moyamoya Disease-pathology; Epilepsy; Paraplegia; Cerebral Angiography; Magnetic Resonance Angiography; Child; Acute Disease

Abstract: Moyamoya disease [MMD] is a chronic, occlusive, Cerebrovascular disorder of unknown pathogenesis, characterized by progressive stenosis of the bilateral supraclinoid internal carotid arteries, with concomitant formation of tortuous arterial collateral vessels at the base of the brain, which reconstitute distal branches of the cerebral circulation. In Japanese, "Moyamoya" means "hazy puff of smoke" and refers to the angiographic appearance of the abnormal network of vessels that develop at the base of the brain and basal ganglia to supply of collateral route of blood flow. We report here the case of Moyamoya disease in a 5 year-old girl with normal mentality with a one year history of epilepsy, with Todd's paralysis. This condition is rare and most patients are diagnosed in childhood. With this report we aim to underscore the possibility that usual neurological sign could be associated with unusual neurological disorders.

# Multiple Myeloma

## complications

#### Multiple myeloma of the central nervous system: a clinicopathological review.

Al Sobhi, E.; Osoba, A.O.; Karar, A.; Zuraiki, A.M.

E-mail:ensobhi@hotmail.com

King Khalid National Guard Hospital - Department of Haematology

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1570-1579 (37 ref.)

**Keywords:** Multiple Myeloma-pathology; Multiple Myeloma-cerebrospinal fluid; Central Nervous System-pathology; Biopsy; Immunophenotyping; beta 2-Microglobulin-cerebrospinal fluid

Abstract: Multiple myeloma [MM] is a systemic malignancy of pathologic plasma cells that is treatable with chemotherapeutic agents and irradiation, but rarely curable. The spectrum of neurological complications of MM is diverse; however, involvement of MM in the cerebrospinal fluid and leptomeningeal infiltration is considered rare. There have been many reviews of central nervous system complications in MM but there are none on intracranial and leptomeningeal infiltration of MM. We review this here along with our clinic pathological experience and a summary of our present knowledge of this condition.

## Myasthenia Gravis

## diagnosis

#### Limb girdle myasthenia.

Yuksel, Gulbun; Gencer, Mehmet; Orken, Cihat; Tutkavul, Kemal; Tireli, Hulya Haydarpasa Numune Training and Research Hospital - Department of Neurology **Neurosciences** 2009; 14 (2): 184-185 (6 ref.) **Keywords:** Autoimmune Diseases; Receptors, Cholinergic; Autoantibodies; Thymectomy; Neurologic Examination; Extremities; Muscle Weakness; Edrophonium-diagnostic use

#### Myasthenia gravis and psoriasis vulgaris.

Koc, Filiz; Yerdelen, Deniz

E-mail:koc.filiz@gmail.com

Cukurova University - Faculty of Medicine - Department of Neurology

Neurosciences 2009; 14 (2): 175-177 (12 ref.)

**Keywords:** Psoriasis-diagnosis; Myasthenia Gravis-epidemiology; Autoimmune Diseases; Skin-pathology; Histocompatibility Antigens; Receptors, Cholinergic; Thymectomy; Autoantibodies

Abstract: Myasthenia gravis is a rare autoimmune disorder in which antibodies form against acetylcholine nicotinic postsynaptic receptors at the myoneural junction. Psoriasis vulgaris is achronic, recurring, and an inflammatory skin disease. Myasthenia gravis and psoriasis are both autoimmune diseases and correlated with specific human histocompatibility antigens. In this report, a 53-year-old woman who has myasthenia gravis accompanied with psoriasis vulgaris ispresented. To conclude, this association is extremely rare and the pathogenetic etiology was thought to depend on a generalized immunological disturbance.

# Myelitis, Transverse

### diagnosis

### Role of dermatomal somatosensory evoked potential in localizing the site of transverse myelitis.

Kabiraj, Mohammed; Hussain, Karamat; Al Janoubi, Nada E-mail:kabirajmmu@yahoo.com

Riyadh Military Hospital - Division of Neurology and Neurophysiology

Neurosciences 2009; 14 (2): 198-199 (6 ref.)

Keywords: Respiratory Tract Infections; Muscle Weakness; Urinary Retention; Reflex, Abnormal; Evoked Potentials, Somatosensory; Steroids-therapeutic use; Acyclovir-therapeutic use

## **Myocardial Infarction**

## mortality

# Seasonal variation in enzymatic infract size and mortality in patients with ST-segment elevation myocardial infarction.

Sohrabi, Bahram; Kazemi, Babak; Aghazadeh, Behzad

Tabriz University of Medical Sciences - The Cardiovascular Research Center

Saudi Medical Journal 2009; 30 (3): 353-357 (19 ref.)

Keywords: Myocardial Infarction-diagnosis; Mortality; Seasons; Creatine Kinase, MB Form-blood

Abstract: To investigate any seasonal variation in enzymatic size, mortality rate, and localization of ST-segment elevation myocardial infraction [STEM]. Between March 2003 and September 2006, all patients admitted to the Madani Heart Center, Tabriz, Iran with the diagnosis of acute myocardial infarction [AMI] were included in this observational prospective study. Cases were divided into 4 groups according to the season that MI occurred, and enzymatic size and location were determined for each patient. One thousand and two hundred six cases of AMI were analyzed during the study period. In our study, no seasonal difference was observed in demographic characteristics of patients. Also, no significant seasonal variation was found in enzymatic infract size, MI location, and in-hospital wortality rate. Our findings does not support the hypothesis that enzymatic size, mortality rates, and location of STEMI varies by seasons.

## Myocardial Ischemia

## diagnosis

# Impaired holter-derived variables of parasympathetic activity in diabetic patients with daily-life silent myocardial ischemia.

Al Dousary, Ahmad Ali; El Enezy, Saleh; Akbar, Mousa A.J.; Hegazy, Ali Mohamad

E-mail:aldousai@hotmail.com

Farwania Hospital - Department of Medicine

KMJ - Kuwait Medical Journal 2009; 41 (2): 128-133 (25 ref.)

**Keywords:** Electrocardiography, Ambulatory; Parasympathetic Nervous System; Activities of Daily Living; Hemoglobin A, Glycosylated; Forecasting; Cross-Sectional Studies; Sensitivity and Specificity; Myocardial Infarction

**Abstract**: To evaluate Holter-derived variables of impaired parasympathetic activity in diabetic patients with silent myocardial ischemia. Cross sectional nature cohort study. Department of Medicine, Farwania Hospital, Kuwait. One hundred and sixty patients with diabetes mellitus. 24-hour Holter electrocardiography [ECG] monitoring was used for heart rate variability and silent myocardial ischemia. Predictive indices revealed that Holter derived variables of parasympathetic activity [p-NN50, rMMD, SDANN-i] are considered as indicators for predictive of fikelihood of daily life silent myocardial ischemia in diabetic patients. Sensitivity was 86, 85, 82%, specificity=88, 89, 81%, accuracy = 87, 86, 87%, positive predictive value = 89, 90, 86% and negative predictive value = 84, 83, 81% respectively. Multivariate analysis revealed that duration of diabetes status and serum level of HbA1c, as independent variables were associated with likelihood of daily life silent myocardial ischemia [p < 0.05]. Receiver operating characteristic [ROC] curve data revealed that the best cut-off value of p-NN50 was 8% with sensitivity = 86% and false positive = 81% and false positive = 21% for prediction of likelihood of daily life silent myocardial ischemia in diabetic patients. Silent myocardial ischemia in diabetic patients with sensitivity = 86% and false positive = 81% and false positive = 21% for prediction of likelihood of daily life silent myocardial ischemia in diabetic patients. Silent myocardial ischemia in diabetic patients silent myocardial ischemia in diabetic patients. Silent myocardial ischemia in diabetic patients for myocardial ischemia in diabetic patients. Silent myocardial ischemia in diabetic patienty.

# National Health Programs

## organization and administration

#### The national oncology program: a Yemeni-Canadian partnership.

Vandenberg, Theodore; Nagi, Nadeem; Garcia, Bertha; Kirk, Catherine; Gilchrist, James; Poirier, Susan; Allen, Hugh; Driedger, Albert; Fournie, Kate; Basahi, Mohamed; Robinsong, Martin

London Health Sciences Centre - Department of Oncology

E-mail:ted.vandenberg@lhsc.on.ca

#### Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 294-298 (18 ref.)

Keywords: Neoplasms-epidemiology; Neoplasms-mortality; World Health Organization; Education, Public Health Professional; Health Promotion; Medical Oncology; Needs Assessment

Abstract: Cancer in developing countries is growing and will soon be a major problem as life expectancy increases. This article outlines the experience and future objectives of a partnership between Yemeni and Canadian oncology professionals in their attempt to develop a National Oncology Program in Yemen. We review current knowledge of the epidemiology, social, educational and economic challenges as well as suggested initial steps in developing a relevant oncology program for this society.

## Natural Cytotoxicity Triggering Receptor 2

#### Expression of NC-2 receptor on MCL cells and its natural cytotoxicity against cancer cells.

Shirzad, Hedayatollah; Zamanzad, Behnam; Shahabi, Ghorbanali

E-mail:Bzamanzad@yahoo.com

Shahrekord University of Medical Sciences - Department of Microbiology and Immunology

KMJ - Kuwait Medical Journal 2009; 41 (2): 112-116 (20 ref.)

Keywords: Cell Line; Mast Cells; Tumor Cells, Cultured; Antibodies, Monoclonal; Immunoenzyme Techniques; Flow Cytometry; Cytotoxicity, Immunologic; Interleukin-3; Killer Cells, Natural

Abstract: To identify the expression of NC-2 on an interleukin-3 dependent mast cell line [MCL] and investigate the activity of this receptor against tumor cells. Laboratory study. Cellular and Molecular Center, Shahrekord, Iran. The MCL cells were stained with D9 monoclonal antibody [anti-NC-2] and analysed by flow cytometry. This was confirmed by immunoperoxidase staining. The cytotoxicity assay was performed to show the cytotoxic activity of MCL cells against 51Cr-labelled WEHI-164 tumor cells. The expression of NC-2 on MCL cells, and the anti-tumor activity of this receptor were investigated. Flow cytometric analysis and in vitro experiments were performed for showing the activity of NC-2 against cancer. NC-2 receptor was expressed on more than 95% of MCL cells. Pretreatment with D9 monoclonal antibody resulted in about 63% reduction in natural cytotoxicity of MCL cells against WEHI-164 tumor cells. NC-2 is also one of the receptors expressed on MCL and utilized for WEHI-164 tumor cells.

## Neoplasms

#### therapy

#### Cancer management in Sudan: current status and future perspectives.

Abu Idris, Dafalla Omer; Ahmed, Anas Osman; Elmadani, Ahmed Elkhidir; Eltayeb, Elgaylani Abdalla; Elgaili, Elgaili Mohamed; Elwali, Nasreldin Abdalla; Hamed, Kamal Eldein

E-mail:abuidris@yahoo.com

University of Gezira - Institute of Nuclear Medicine, Molecular Biology and Oncology [INMO] - Department of Radiation Oncology

Sudan Journal of Medical Sciences 2009; 4 (2): 189-193 (6 ref.)

Keywords: Cancer Care Facilities; Developing Countries; Nuclear Medicine; Radiation Oncology; Molecular Biology; Medical Oncology; Disease Management; Oncology Service, Hospital

Abstract: Sudan is one of the developing countries that face a great challenge with cancer management. About 5700 cases had been seen during year 2007 in Radiation and Isotope Center- Khartoum [RICK] and Institute of Nuclear medicine, Molecular biology, and Oncology [INMO] Wadmedani which are the only cancer centers in Sudan. Aim of this work is to highlight the difficulties of cancer management in Sudan and to propose possible solutions. This paper evaluates the current situation of cancer management in Sudan through reviewing of data available in cancer centers and reports from the Sudan national bureau of statistic. Suggestions are also made for cancer control plan in Sudan having the current situation in mind and guided by the published international data on cancer control. The preliminary analysis of the available data reveals that Sudan has very limited resources available to deal with cancer and the service provided is not evenly distributed. Establishment of new centers is extremely needed with special attention to good distribution of services. To achieve such a goal training of more staff and upgrading of the existing centers is mandatory to manage all types of cancer. Cancer registry is the right way to plan for cancer control in Sudan.

## Nerve Fibers, Myelinated

#### ultrastructure

# Electron microscopic study of the myelinated nerve fibres and the perineurial cell basement membrane in the diabetic human peripheralnerves.

El Barrany, Wagih G.; Hamdy, Raid M.; Al Hayani, Abdulmonem A.; Jalalah, Sawsan M.

Alexandria University - Faculty of Medicine - Department of Anatomy

Neurosciences 2009; 14 (2): 131-138 (36 ref.)

Keywords: Diabetic Neuropathies; Sural Nerve; Basement Membrane; Microscopy, Electron; Peripheral Nerves; Diabetes Mellitus-complications

Abstract: To study the quantitative and ultrastructural changes in myelinated nerve fibers and the basement membranes of the perineurial cells in diabetic nerves. The study was performed at the Department of Anatomy, Faculty of Medicine, King Abdul-Aziz University, Jeddah, Saudi Arabia from 2003 to 2005. Human sural nerves were obtained from 15 lower limbs and 5 diabetic nerve biopsies. The total mean and density of myelinated nerve fibers per fascicle

were calculated, with density of microtubules and mitochondria in the axoplasm. The number of the perineurial cell basement membrane layers was counted, and thickness of the basement membrane was measured. Among the 15 diabetic and 5 normal human sural nerves, the average diameters, number and surface area of myelinated nerve fibers and axonal microtubules density were found to be less in diabetic nerves. Mitochondrial density was higher in diabetic axons. Thickness of the perineurial cell basement membrane had a greater mean, but the number of perineurial cell layers was less than that of the diabetic group. The inner cellular layer of the perineurium of the diabetic nerves contained large vacuoles containing electron-dense degenerated myelin. A few specimens showed degenerated myelinated nerve fibers, while others showed recovering ones. Retracted axoplasms were encountered with albumin extravasation. Diabetes caused an increase in perineurial permeability. The diabetic sural nerve showed marked decrease in the myelinated nerve fibers, increase degenerated mitochondria, and decreased microtubules.

## **Neuronal Migration Disorders**

#### diagnosis

#### Pattern of childhood neuronal migrational disorders in Oman.

Koul, Roshan L.; Alfuitasi, Amna M.; Sankhla, Dilip K.; Javad, Hashim; William, Ranjan R.

E-mail:koulroshan@gmail.com

Sultan Qaboos University Hospital - College of Medicine - Department of Child Health

Neurosciences 2009; 14 (2): 158-162 (22 ref.)

**Keywords:** Corpus Callosum-abnormalities; Epilepsy; Lissencephaly; Seizures; Classical Lissencephalies and Subcortical Band Heterotopias; Malformations of Cortical Development; Holoprosencephaly; Child; Magnetic Resonance Imaging

Abstract: To record the pattern of different neuronal migrational disorders [NMD] and their associated neurological conditions. The data were collected at the Child Neurology Services of Sultan Qaboos University Hospital, Oman, from January 1993 to September 2006 from all children with psychomotor delay and epilepsy, who underwent brain imaging [mostly MRI]. The MR imaging was used for the diagnosis of a neuronal migration anomaly. There were 86 cases of NMD. Corpus callosum agenesis and lissencephaly/pachygyria formed the major group. There were 48 cases of corpus callosum agenesis, and 16 cases of lissencephaly/pachygyria. Other disorders were 10 cases of heterotopias, 5 schizencephaly, 3 holoprosencephaly, 2 polymicrogyria, and one each of hemimegalencephaly, and hydranencephaly. Developmental delay was the most common associated finding noted in 80 [93%] cases. Sixty-seven [77.9%] cases had motor deficit. Forty out of 86 [46.5%] cases had epilepsy. Partial/partial complex seizures were the most common at 13 out of 40 [32.5%]. Syndromic seizures were seen in 11 out of 40 [27.5%] cases. The seizures were controlled in only 3/40 [7.5%] cases. The NMD constitute a significant number of child neurology patients with psychomotor delay and intractable epilepsy. Exogenic and genetic factors affecting the early embryonic and fetal development from sixth to twenty-sixth weeks of gestation result in NMD. Recent genetic studies are defining the eurology in the underlying mechanism and these studies will help in early diagnosis and possible prevention of NMD.

## **Neurotransmitter Agents**

#### Neurotransmitters - a biochemical view.

Shalayel, Mohammed H.F.; Idris, Saadeldin A.; Al Noaemi, Mohammed; Ahmed, Salah A.M.

E-mail:drmhfs@hotmail.com

National College for Medical and Technical Studies - Department of Biochemistry

Sudan Journal of Medical Sciences 2009; 4 (2): 167-178 (24 ref.)

Keywords: Synaptic Transmission; Neurons; Synapses; Receptors, Neurotransmitter; Synaptic Vesicles; Acetylcholine; Opioid Peptides; gamma-Aminobutyric Acid; Parkinson Disease; Myasthenia Gravis

Abstract: The neurotransmission at most if not all synapses is chemical and is of great biochemical, physiological and pharmacological importance. Neurons communicate with each other at synapses by a process called synaptic transmission which is the release of small quantities of chemical messengers, called neurotransmitters that alter the electrical activity of neurons after they interact with receptors on post-synaptic cell surfaces. This review gives a biochemical view on the nature of neurotransmitters and presents the biochemical chart and the medical relevance of the most important neurotransmitters.

## **Nocturnal Enuresis**

## epidemiology

#### Prevalence of bedwetting for children in Mosul city.

Abdul Rahman, Shatha; Hussain, Rhadwan; Abdul Rahman, Shahd

E-mail:shathamosul@yahoo.com

Mosul University - College of Nursing - Community Medicine

Jordan Medical Journal 2009; 43 (1): 44-50 (13 ref.)

**Keywords:** Nocturnal Enuresis-etiology; Risk Factors; Family Characteristics; Birth Order; Educational Status; Social Class; Prevalence; Cross-Sectional Studies; Questionnaires; Child

Abstract: The mental and behavioral disorders, just as the other types of illnesses, creats significant economic difficulties for children, patients and their families. The main objective of this study was to determine the prevalence of bedwetting in Mosul city and some risk factors related to it. To achieve the above mentioned aim, a cross -sectional

study design was adopted, some primary schools were chosen as a study setting. The questionnaire forms were sent to the selected families. Out of 600 questionnaires, [596] were received [99.3%]. More than one tenth [13.8%] of pupils aged 6-8 years were bedwetters, while boys were more affected than girls. The present study revealed that bedwetting is significantly influenced by multiple factors including gender, child's age group, family size, birth order, education of parents, socioeconomic status of the family and diseases of father; as stressful life events, in addition to sleep pattern and family history of having the same condition. Whereas mothers disease is poorly associated with the occurrence of bedwetting. The present study shows that more than one tenth of the children suffered from bedwetting, which appeared in male children, small children, large family sizes, birth order, poor education of father and mother, and family history of holding the same condition.

## Nurses

## psychology

# Jordanian nurses' perception of leadership characteristics: descriptive phenomenological study. Hamdan Mansour, Avman M.; Dawani, Hania A.

E-mail:a.mansour@ju.edu.jo

University of Jordan - Psychiatric and Mental Health Nursing Chairperson - Department of Community Health Nursing Jordan Medical Journal 2009; 43 (1): 21-32 (20 ref.)

Keywords: Leadership; Schools, Nursing; Social Perception

Abstract: The purpose of this phenomenological descriptive study was to describe the Jordanian nurses' perception of the leadership characteristics and situational factors that affect nursing care as perceived by Jordanian nurses. A total sample of 19 registered nurses were selected conveniently from a major governmental hospital at the capital of Amman, and interviewed individually using critical incidents method at the work site. The study revealed up to 15 minor personal themes, collapsed into four major themes characterizing the leadership behavior, and eight situational factors. Most of the personal themes, and the situational factors were perceived as negative, while three personal themes and one situational factor were perceived as positive. Dishonesty, partiality and creating problems, were the most repeated personal themes respectively, while support was the most reported positive theme. Injustice was the most repeated situation factor. The results imply that there is an overwhelming situation that nurses suffer from at the personal and institutional levels. Institutions should emphasize on the role of nurse leaders through in-service education programs and recruitment procedures. Nursing curricula should also focus on teaching nursing students clinical leadership skills, emphasize leadership theory and practice, and support leadership qualities among nursing students.

## Nursing Education Research

# The appropriateness of educational programs' objectives for professional needs: the viewpoints of Khorramabad school of nursing andmidwifery graduates.

Toulabi, T.; Janani, F.; Mohammadi, E. Qurban

E-mail:toulabi\_t@yahoo.com

Tarbiat Modares University - School of Nursing and Midwifery - Department of Nursing

IJME - Iranian Journal of Medical Education 2009; 8 (2): 263-273 (51 ref.)

Keywords: Nursing Evaluation Research; Needs Assessment; Program Evaluation; Education, Nursing; Cross-Sectional Studies; Questionnaires; Midwifery

Abstract: Evaluating the educational programs from the viewpoints of graduates may identify the weaknesses of such programs and provide the opportunity for their improvement. This study was performed to determine the appropriateness of educational programs for professional needs from the viewpoints of graduates of Khorramabad School of Nursing and Midwifery. This descriptive cross-sectional study was performed in the years 2006-2007 on 407 nursing and midwifery graduates who had graduated during 1999-2005. A questionnaire containing items about demographic data, appropriateness of educational programs objectives for professional needs, and factors influencing the quality of educational programs was sent to participants by mail and completed by them. The data was analyzed by SPSS software using descriptive statistics and Chi-square. Most of the nursing [72.9%] and midwifery [72.4%] graduates evaluated their competencies in taking care of patients as high. They also evaluated the training courses more effective on professional efficacy compared to practical and theoretical courses. From the graduates' points of view, the acquired skills during their academic years fulfilled their professional needs moderately, and lacking the essential skills made the nurses more strained than the midwives [37.1% and 22.4%, respectively]. Factors affecting the quality of educational programs were reported by the graduates to be qualified faculty members and instructors, facilities for clinical education, educational environment, used teaching methods, educational facilities of the school, and the availability of scientific resources. Professional needs of nursing and midwifery graduates are not fully covered by educational programs. It seems necessary to change the educational programs and provide required means and facilities in order to achieve the professional objectives and train skilled and productive human resources.

# **Nursing Faculty Practice**

#### Performance evaluation of nursing faculty members: a qualitative study.

Pazargadi, M.; Khatiban, M.; Ashktorab, T.

E-mail:mehrnoosh\_Pazar@yahoo.com

Shahid Beheshti University of Medical Sciences - School of Nursing and Midwifery - Department of Nursing Management

IJME - Iranian Journal of Medical Education 2009; 8 (2): 213-227 (35 ref.)

Keywords: Faculty, Nursing; Self-Evaluation Programs; Qualitative Research; Employee Performance Appraisal Abstract: Performance evaluation [PE] of nurse faculty members is complicated and difficult but seems necessary. Deans of the faculties, their educational assistants, and faculty member nurses are responsible for planning, performing, and revising evaluation. Finding their common views in developing PE is of special importance. The aim of this study was to elucidate and describe PE of nurse faculty members. In this qualitative study, the required data was gathered through two methods of semi-structured interview with experts and examining the existing policies, procedures, and evaluation documents. Totally, the contents of 22 individual interviews and 26 series of subject materials went under qualitative content analysis using arbitrary approach. Purposive sampling and census methods were used for selecting the interviewees and evaluation documents, respectively. Participants had a wide-ranging perspective toward the PE of faculty member nurses. Having the analysis done, these perspectives and the content of the existing documents were placed in three major themes: individual qualifications of faculty member, performance process, and practice outcome. The items which were not in the concept of PE but had an effect on it were categorized as organizational factors. Findings of the current study confirms the suggestions of the experts, who agree a combination of individual attributes, behavior, and result-based systems for PE. But, it considers the qualifications of faculty members which are improvable and modifiable instead of individual attributes. Besides, paying attention to some organizational factors which affect PE is a matter of importance.

# **Occlusal Adjustment**

# An evaluation of occlusal contacts of remounted complete denture before final occlusal adjustment.

Atashrazm, P.; Lari, H. Ansari; Khorsand, M.

E-mail:p\_atashrazm@sbmu.ac.ir

Islamic Azad University - School of Dentistry - Department of Removable Prosthodontics

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 1-5 (27 ref.)

Keywords: Denture, Complete; Dental Occlusion; Cross-Sectional Studies

Abstract: There are various studies about the advantages and effect of remounting procedures on success of complete dentures; however, the number and distribution of occlusal contacts of remounted complete dentures before occlusal adjustment have not been sufficiently assessed. The purpose of this study was to evaluate the distribution and number of occlusal contacts of remounted complete dentures in centric relation before occlusal adjustment. In this cross-sectional study, 207 newly constructed complete dentures were remounted on a modified two dimensional articulators. For identification of occlusal contacts, a 60 micron articulating paper was used to mark the actual contacts of the opposing teeth. The articulating paper was interposed between the teeth, and contacts were obtained by holding the articulating paper between the opposing teeth. The number and distribution of the occlusal contacts on each complete dentures, 203 had occlusal contacts. Among 203 complete dentures, 138 [68%] and 65 [32%] had bilateral and unilateral occlusal contacts was 3.44 +/- 2.29. The results suggest that the number of occlusal contacts of remounted complete dentures before occlusal adjustments by articulating paper was low, the posterior teeth did not meet evenly all around the arch at the first contact, and delivery of such complete dentures may lead to occlusal error and unstable complete dentures.

# **Oculomotor Nerve**

## anatomy and histology

# Study on surgical approaches and electrode implantation of oculomotor nerve and inferior obliquus in beagle dogs.

Zhu, Ning-Xi; Meng, You-Qiang; Feng, Bao-Hui; Wang, Xu-Hui; Li, Xin-Yuan; Yang, Min; Zhu, Shu-Gan; Li, Shi-Ting Shandong University Qilu Hospital - Department of Neurosurgery

Saudi Medical Journal 2009; 30 (3): 358-364 (30 ref.)

**Keywords:** Oculomotor Muscles-anatomy and histology; Surgical Procedures, Operative; Electrodes, Implanted; Electromyography; Dogs

Abstract: To study the surgical anatomy and approaches of intracranial oculomotor nerve [OMN] and inferior obliquus [IO], and the methods of their electrode implantation in dogs. The research was performed on 30 adult beagle dogs at Shanghai Jiaotong University Medical College, Shanghai, China from November 2007 to August 2008. All animals were subjected to a right Trans frontotemperal approach to intracranial OMN, a transconjunctival route to IO, and the neuro-stimulating and recording electrode implantation under general anaesthesia. The OMN was stimulated and the electromyography of IO recorded and analyzed with the Power lab System. The security and reliability of the implanted electrodes were investigated. The surgical anatomy and approaches of both the OMN from its exit from midbrain to the

entrance into cavernous sinus and the IO were described. Moreover, the implantation methods of OMN stimulating electrode and the electromyographic recording electrode of IO were displayed. The implanted electrodes were safe and reliable. Some electrophysiologic data of IO were obtained in the healthy dogs. Also, some perioperative precautions for intracranial and ophthalmic surgical procedures in dog were exhibited. The mortality rate of the dogs was 0%, and no operative complications were observed. With the data provided, these surgical approaches and the methods of electrode implantation offer a choice to construct an animal model for studying various aspects of OMN regeneration.

# Odontogenic Cyst, Calcifying

## diagnosis

#### Ameloblastomatous calcifying cystic odontogenic tumor: a rare histologic variant.

Abbas, F. Mashhadi; Moshref, M.; Sargolzaie, S.; Kargahi, N.

E-mail:f\_mashhadi\_a@yahoo.com

Shahid Beheshti University of Medical Sciences - School of Dentistry - Department of Oral and Maxillofacial Pathology Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 45-48 (16 ref.)

Keywords: Mandibular Neoplasms-diagnosis; Ameloblastoma-diagnosis; Jaw Neoplasms; Odontogenic Cyst, Calcifying-pathology; Ameloblastoma-pathology; Mouth; Mandible; World Health Organization; Odontogenic Tumors Abstract: In agreement with the new classification of the World Health Organization [WHO] 2005, calcifying odontogenic cyst [COC] or calcifying cystic odont-ogenic tumor [CCOT] is an uncommon developmental odontogenic lesion that demonstrates histopathologic diversity. Predominantly, it occurs in the anterior region of the mouth and in the second and third decades of life. Odontogenic tumors such as ameloblastoma have been reported to be associated with CCOT. In this paper, we report a case of ameloblastomatous CCOT in a boy with involvement of mandibular ramus-an extremely rare histologic variant. The microscopic examination revealed a CCOT; ghost cell within ameloblastic islands in the connective tissue wall was observed.

## **Oral Hygiene**

#### Oral hygiene awareness among female Saudi school children.

Al Mendalawi, Mahmood D. Baghdad University - Al Kindy College of Medicine - Department of Pediatrics Saudi Medical Journal 2009; 30 (3): 453 (6 ref.) Keywords: Dental Health Services; School Health Services; Child; Awareness; Schools

# Orthodontics

# Assessment of orthodontic treatment needs of Iraqi Kurdish teenagers using the Dental Aesthetic Index.

Al Huwaizi, A.F.; Ali Rasheed, T.

E-mail:akram@alhuwaizi.net

University of Baghdad - College of Dentistry - Department of Orthodontics

EMHJ - Éastern Mediterranean Health Journal 2009; 15 (6): 1535-1541 (33 ref.)

Keywords: Needs Assessment; Esthetics, Dental; Rural Population; Urban Population; Dental Health Surveys

Abstract: This oral health survey aimed to determine the orthodontic treatment needs of teenagers in Sulaimaniya, Iraq. A clinical examination was made of a random sample of 998 Kurdish School children aged 13 years. Dental Aesthetic Index [DAI] scores ranged from 13 to 65, with a mean of 25.4 [SD 9.2]. From these scores, treatment needs were assessed as: no or slight need 58.6%, elective 18.5%, highly desirable 12.5% and mandatory [handicapping malocclusion] 10.3%. Highly desirable or mandatory treatment need [DAI >/= 31] was found in equal proportions of males [23.2%] and females [22.6%], but in more rural [25.1%] than urban [20.6%] residents.

## Oryza sativa

## genetics

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

Sharaf, Ahmed. N.; Abdelkader, Hayam S.; Abdel Hadi, Abd El Hadi A.; Ahmed, Dalia S.

E-mail:ahmedsharaf51@hotmail.com

Cairo University - Faculty of Agriculture - Department of Genetics

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

Keywords: Chitinase; Antifungal Agents; Plant Leaves

**Abstract:** Seven local fungal isolates of Pyricularia grisea were purified from infected rice leaves. The total proteins were extracted and SDS-PAGE was carried out to differentiate between the expression of proteins in infected and healthy plants. SDS-PAGE analysis revealed the accumulation of 35-kDa chitinase after 16, 20, 24 and 48 hr [hours post inoculation]. Rice chitinase gene [1.023 bp] was successfully amplified from the total RNA extracted from infected

rice using RT-PCR. The amplified fragment was cloned and over expressed in E. coli BL21 cells as 6x-His- fusion protein. Recombinant chitinase fusion protein was successfully purified using Ni-NTA affinity column chromatography. Two chitinase activity assays against P. grisea were carried by the filter disc and the dissimilar concentrations plates method. The results indicated that the expressed chitinase protein had an antifungal activity against P. grisea.

# Osteitis Deformans

## therapy

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

Louca, Nadia A.

National Research Center - Hormone Department

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

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

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

## Osteoporosis, Postmenopausal

## complications

Osteoporosis-related vertebral fractures in postmenopausal women: prevalence in a Saudi Arabian sample.

Sadat Ali, M.; Gullenpet, A.H.; Al Mulhim, F.; Al Turki, H.; Al Shammary, H.; Al Elq, A.; Al Othman, A.

E-mail:drsadat@hotmail.com

King Faisal University and King Fahd Hospital of the University - College of Medicine - Department of Orthopaedic Surgery

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1420-1425 (24 ref.)

**Keywords:** Spinal Fractures-etiology; Prevalence; Spinal Fractures-radiography; Retrospective Studies; Life Style **Abstract:** The study aimed to determine hospital-based prevalence of vertebral fractures in postmenopausal Saudi Arabian women. Chest radiographs from consecutive Saudi women over the age of 50 years visiting the emergency room at King Fahd Hospital of the University were evaluated. Of 785 radiographs analysed 159 [20.3%] patients had 198 vertebral fractures. The mean age of the women was 65.7 [SD 8.5] years. In only 37.8% of the radiographs with fractures were on antiresorptive therapy for osteoporosis.

## **Oxidative Stress**

#### Studies on biomarkers for oxidative stress in patients with chronic myeloid leukemia.

Singh, Raj K.; Tripathi, Anil K.; Tripathi, Payal; Singh, Sushma; Singh, Ranjana; Ahmad, Rizwan

E-mail:singhrk23a@hotmail.com

Chhatrapti Shahvj University - Department of Biochemistry and Medicine

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 285-288 (30 ref.)

**Keywords:** Biological Markers-blood; Leukemia, Myelogenous, Chronic, BCR-ABL Positive-genetics; Leukemia, Myelogenous, Chronic, BCR-ABL Positive-epidemiology; Reactive Oxygen Species; Spectrophotometry; Philadelphia Chromosome; Prospective Studies; Lipid Peroxidation

Abstract: Chronic myeloid leukemia [CML] is a myeloproliferative disorder with a unique genetic rearrangement, the Philadelphia chromosome. High reactive oxygen species [ROS] levels favor oxidative stress, which could play a vital role in normal processes and various path physiologies including neoplasm. Biomarkers of oxidative stress are measured as products of oxidized proteins and lipids. Plasma levels of protein carbonyl [PC], thiobarbituric acid reactive substances [TBARS] and total lipid hydro peroxide [LOOH] were used as biomarkers of oxidative stress in the past. The aim of this study was to evaluate the products of protein oxidation and lipid peroxidation in plasma as biomarkers of oxidative stress in CML patients. The study included 40 CML patients and 20 age- and sex-matched healthy volunteers. Of 40 CML patients, 28 were in chronic phase [CML-CP] and 12 in accelerated phase [CML-AP]. Plasma levels of PC, TBARS and LOOH as biomarkers of oxidative stress were evaluated by Spectrophotometry methods. There were significant differences [P<.05] in plasma levels of PC, TBARS and LOOH in CML, CML-CP and CML-AP patients as compared to controls. PC, TBARS and LOOH might reflect oxidative stress in CML patients.

# Paranasal Sinus Diseases

#### surgery

#### Causes and management of failure in endoscopic middle meatus antrostomies.

Ben Gamra, Olfa; Khamassi, Khaled; Hariga, Ines; Mediouni, Azza; Ben Amor, Mohamed; Zribi, Sara; Mbarek, Chiraz; El Khedim, Abdel Kader

E-mail:olfa.bengamra@rns.tn

Habib Thameur Hospital - Department of Otorhinolaryngology-Head and Neck Surgery

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 49-53 (17 ref.)

Keywords: Endoscopy; Treatment Failure; Tissue Adhesives; Sinusitis-surgery; Retrospective Studies; Disease Management

Abstract: The aim of this study is to analyse the causes and the management of failed endoscopic middle meatus antrostomies [EMMA] in chronic sinusitis and benign sinonasal lesions or tumors. We carried a retrospective study about 257 EMMA cases performed in our department for 201 patients between 1996 and 2006. All patients had complete ORL examination and preoperative sinonasal CT. After surgery, preoperative and postoperative symptoms were considered as a failure of surgery. In these cases, revision surgery was performed, either by endoscopic approach or by Caldwell-Luc procedure. Mean follow-up period was 2 years. The indication of surgery was the presence of chronic sinusits, benign lesions or benign tumors in 53.2%, 41.8% and 5% of cases respectively. Seventy-one EMMA procedures failed [27.6%]. Causes of failure were mainly represented by the presence of synechia [38%], ostium stenosis [24%], medical causes and comorbidity [15.5%], persistent or recurrent lesions [15.5%] and missed natural ostium [7%]. Nineteen patients [9.4%] required revision surgery because of persistent symptoms after medical therapy. Either endoscopic or vestibular approaches were performed. Seventy-three percent of the revision cases respond to surgical treatment with complete resolution of symptoms. Failure of EMMA can be due to numerous and variable causes. The management of failed EMMA includes medical therapy, revision endoscopic surgery or vestibular approaches.

## Patient Rights

#### When the patient says "no".

Kloub, A.G. <u>E-mail:Kloub@msn.com</u> Prince Hamza Hospital - Trauma and Surgical Critical Care Department **EMHJ - Eastern Mediterranean Health Journal** 2009; 15 (6): 1621-1623 (11 ref.) **Keywords:** Treatment Refusal; Neoplasms-psychology

## Pefloxacin

#### blood

# Development and validation of a HPLC method for determination of pefloxacin in tablet and human plasma.

Gauhar, Shahnaz; Ali, Syed Ayub; Shoaib, Harris; Naqvi, Syed Baqir Shyum; Muhammad, Iyad Naeem E-mail:shahnaz\_gauhar@yahoo.com

University of Karachi - Faculty of Pharmacy - Department of Pharmaceutics

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 33-42 (38 ref.)

Keywords: Pefloxacin-chemistry; Chromatography, High Pressure Liquid; Fluoroquinolones; Validation Studies as Topic; Tablets-analysis

**Abstract:** Developing and validating a simple, efficient, reproducible and economic reversed phase high performance liquid chromatographic [RP-HPLC] method for the quantitative determination of pefloxacin in bulk material, tablets and in human plasma. A shim-pack CLC-ODS column and a mobile phase constituting acetonitrile: 0.025 M phosphoric acid solution [13:87 v/v, pH 2.9 adjusted with KOH] was used. The flow rate was 1 ml/min and the analyses performed using ultraviolet [UV] detector at a wavelength of 275 nm using acetaminophen as an internal standard. The developed method showed good resolution between pefloxacin and acetaminophen. It was selective to pefloxacin and able to resolve the drug peak from internal standard and from formulation excipients. The percentage of coefficient variation [CV] of the retention times and peak areas of pefloxacin from the six consecutive injections were 0.566% and 0.989%, respectively. The results showed that the peak area responses are linear within the concentration range of 0.125 mg/ml-12 mg/ml [R2=0.9987]. The limits of detection [LOD] and limits of quantitation [LOQ] for pefloxacin were 0.03125 mg/ml and 0.125 mg/ml. The intra-day and inter-day variation, RSD were 0.1465-0.821 in plasma. The accuracy results of 70%, 100%, and 130% drugs were 100.72%, 100.34%, and 100.09%, respectively. The method is linear, quantitative, reproducible and could be used as a more convenient, efficient and economical method for the trace analysis of drug in biological fluids, in raw material and tablets.

# **Pemphigoid Gestationis**

## diagnosis

#### A 24 year old pregnant lady with skin rash over her body.

Al Sulaiti, Rola; Qarata, Ebrahim; Darwish, Abdulla

BDF Hospital - Department of Dermatology

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 228-229 (3 ref.)

Keywords: Exanthema; Pregnancy; Blister; Skin; Biopsy; Injections, Intralesional; Steroids; Autoimmune Diseases; Diagnosis, Differential

## **Penile Diseases**

### surgery

#### Clinical application of scrotal flap on penis lengthening.

Zhuo, Qinqiang; Li, Shirong; Wu, Julong; Wang, Zhenxiang; Yang, Dongyun; Tao, Ling

Third Military Medical University - Southwestern Hospital - Department of Plastic and Aesthetic Surgery

Saudi Medical Journal 2009; 30 (3): 418-421 (10 ref.)

**Keywords:** Surgical Flaps; Scrotum-blood supply; Surgical Procedures, Operative; Treatment Outcome; Postoperative Complications; Penis

Abstract: To investigate the clinical application of the scrotal flap on penis lengthening. One hundred and fifty-two patients were operated using the scrotal flap from July 1998 to January 2008 at the Department of Plastic and Aesthetic, Surgery Southwest Hospital, Chongqing, China. The procedure consisted of designing a positive sign shaped incision 1.5 cm above the root of the penis, dissect and release the superficial suspensory ligament and part of the deep suspensory ligament, then cover the elongated cavernosum with proper scrotal flap. Six-month to 5-year follow-up showed that all patients were satisfied with the good contour and function of the penis. The operation was successful. The method of using scrotal flap on penis lengthening has the following advantages: simple operation, reliable blood supply of the flap, one-stage operation, and satisfactory postoperative results. It is a preferable operation technique for penis lengthening.

# Peptides, Cyclic

## diagnostic use

# Comparison of the anti-cyclic citrullinated peptide and rheumatoid factor in rheumatoid arthritis at an arthritis center.

Attar, Suzan M.; Bunting, Peter S.; Smith, Charles D.; Karsh, Jacob <u>E-mail:suzan\_attar@hotmail.com</u> King Abdul Aziz University - Department of Internal Medicine **Saudi Medical Journal** 2009; 30 (3): 446-447 (5 ref.)

Keywords: Arthritis, Rheumatoid-diagnosis; Rheumatoid Factor-diagnostic use; Autoantibodies; Immunoglobulins; Sensitivity and Specificity; Enzyme-Linked Immunosorbent Assay; Nephelometry and Turbidimetry

# Peripheral Blood Stem Cell Transplantation

## statistics and numerical data

# A retrospective comparison of allogeneic peripheral blood stem cell versus bone marrow transplantation.

Bittencourt, Henrique; Lopes, Monalisa; Vaz de Macedo, Antonio; Teixeira, Elen Rose; Gomes, Gabriel Gomes Sabido; Ferreira, Galileu Galilei; Amaral, Leandro; Soares, Priscila; Vieira, Monica; Dusse, Luci Maria <u>E-mail:Hebit@terra.com</u>

Federal University of Minas Gerais - Internal Medicin Department

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 272-277 (36 ref.)

Keywords: Peripheral Blood Stem Cell Transplantation-mortality; Bone Marrow Transplantation-statistics and numerical data; Bone Marrow Transplantation-mortality; Antineoplastic Combined Chemotherapy Protocols-therapeutic use; Graft vs Host Disease-epidemiology; Retrospective Studies; Survival Rate

Abstract: Disease evolution depends in part on the source of transplanted cells. Therefore, we compared outcomes after allogeneic bone marrow [BM] and peripheral blood stem cell [PBSC] transplantation in patients who underwent transplant at Hospital das Clinicas of the Federal University of Minas Gerais, Brazil. We studied 364 patients who received allogeneic BM [n=142] or PBSC transplantation [n=222] between July 1995 and May 2005. The median age of the patients was 31 years [range, 3.1-58 years]. Chronic myeloid leukemia was the predominant diagnosis [41.2%]. A conditioning regimen with cycclosphosphamide and busulfan was used in 79.4% [n=289] and graft-versus-host disease [GVHD] prophylaxis was cyclosporine/methotrexate in 95.9% [n=349] of cases. The patients in the PBSC group had faster neutrophil [P<.001] and platelet engraftment [P=.03] but increased rates of acute GVHD [P < .001] vs. those in the BM group. There was no significant difference between the groups in chronic GVHD.

mortality, relapse and survival rates. Although allogeneic PBSC transplant results in a faster hematopoietic engraftment, there was an increase in acute GVHD. There was no clear benefit in relapse rate and no evidence that transplantation with PBSC benefits patient survival in our institution.

# **Pituitary Gland**

## radiography

#### Pituitary magnetic resonance imaging experience in Jordan.

Hadidy, Ázmy M.; Jallad, Dana G.; Haroun, Azmi A.; Mahafza, Waleed S.; Ajlouni, Kamel M. <u>E-mail:amshadidy@yahoo.com</u>

University of Jordan - Jordan University Hospital - Department of Diagnostic Radiology

Neurosciences 2009; 14 (2): 143-147 (20 ref.)

Keywords: Pituitary Diseases-radiography; Pituitary Neoplasms-radiography; Magnetic Resonance Imaging; Empty Sella Syndrome; G adolinium DTPA; Age Factors; Sex Factors

**Abstract:** To assess the pituitary findings as demonstrated on MRI and to compare the results with the data published in the literature. One thousand, one hundred and thirty-eight pituitary MRI's with and without intravenous contrast media [gadolinium] were performed over 6 years from 2001 to 2007 in the Department of Diagnostic Radiology, Jordan University Hospital, Amman, Jordan. The patients were referred from various departments and were evaluated for pituitary, other sellar, and juxtasellar abnormalities. The results were compared with those in the published literature. Four hundred and eight-three normal scans were excluded from the study. The remaining 655 were abnormal, pituitary adenoma was detected in 327 [49.9%], micro adenoma was present in 213 [32.5%], and macro adenoma in 114 [17.4%]. Partial empty sella was seen in 157 [24%], diffuse pituitary gland enlargement in 98 [14.9%], ectopic pituitary posterior lobe in 13 [2%], and other findings in 31 [4.7%]. The incidence of pituitary adenoma was equal in both genders; however, micro adenoma was more common, affected a younger age group, and was predominately seen in females. The other parameters showed agreement with the published literature.

## Plant Oils

## toxicity

# Biological studies on the protective role of artichoke and green pepper against potential toxic effect of thermally oxidized oil in mice.

Khalil, Wagdy K.B.; Abdel Kader, Heba A.M.; Eshak, Mariam G.; Farag, Ibrahim M.; Ghanem, Kadry Z.

National Research Centre - Cell Biology Department

Arab Journal of Biotechnology 2009; 12 (1): 27-39 (39 ref.)

Keywords: Protective Agents; Helianthus; Capsicum; Mice; Reproduction; Liver Function Tests; Oocytes; Polymerase Chain Reaction; Cynara scolymus

Abstract: The present investigation was designed to evaluate oocytes competence including quality, meiotic progression and expression of ERK2 gene and activities of liver enzymes [ALT, AST and gamma-GT] in female mice fed diets containing sunflower oil repeatedly used in frying processes [FO]. The protective role of artichoke and green pepper against such potential dangers were also studied. Results revealed that mice fed FO diet had a significant decrease in number of good collected acolytes compared with those fed normal oil [NO] diet. Mice fed FO diet and artichoke extract at two levels, 0.5% [FO-A1] and 1% [FO-A2] as drinking water or FO diet plus dried ground green pepper at two levels, 5% [FO-G1] and 10% [FO-G2] had a significant increase in number of good collected oocytes compared with those fed FO diet. Animals fed FO-A1 or FO-G1 diets had the highest percentage of good oocytes. A statistically significant increase in the percentages of mature oocytes occurred in mice fed FO-A1, FO-A2, and FO-G1 diets as compared to those fed FO diet. The animals fed FO-G2 diet had a non-significant increase of percentages of mature oocytes than the animals fed FO diet. The expression of ERK2 gene was high in ovary tissues collected from female mice fed NO, FO, FO-A1, or FO-G1 diets. However, the ERK2 gene expression was low in mice fed FO-A2 or FO-G2 diets. Biochemical assay showed that mice fed FO diet had significant decrease in AST and ALT activities. A significant increase in enzyme activity of gamma- GT compared with those fed NO diet was also observed. A statistically significant increase in activities of AST and ALT enzymes was observed in mice fed FO-A2, FO-G1 and FO-G2 diets. However, mice fed FO-A1, FO-A2, FO-G1 and FO-G2 diets had significant decrease in the activity of gamma-GT enzyme compared with those fed FO diet. The present study demonstrated evidence that prolonged intake of diets containing sunflower oil repeatedly used in frying processes could be considered a cause of induced abnormalities in reproductive materials and liver enzymes activities of female mice. However, artichoke and green pepper proved to be suitable protectors against hazards of such toxic materials.

# Pneumatosis Cystoides Intestinalis

## diagnosis

Pneumatosis intestinalis of small bowel in an adult: a case report. Arora, Rajan; Abdel Hameed, Amany; Al Harbi, Obaid

E-mail:arorarajan73@rediffmail.com

Al Farawaniya Hospital - Department of Pathology

KMJ - Kuwait Medical Journal 2009; 41 (2): 143-145 (10 ref.)

Keywords: Pneumatosis Cystoides Intestinalis-pathology; Intensive, Small; Adults; Peptic Ulcer Perforation; Abdomen, Acute; Enterocolitis, Necrotizing

Abstract: Pneumatosis Intestinalis [PI] is rare in adults although it can be seen in the pediatric population as a complication of necrotizing enter colitis. We report a case of PI affecting the small bowel in a 27-year-old patient who presented with signs and symptoms of acute abdomen due to perforated duodenal ulcer. Histopathologic findings are demonstrated and the pathogenesis is discussed with the objective of highlighting that PI is not a diagnosis but a finding which needs further evaluation and management in view of the underlying etiology.

## Pneumonia, Ventilator-Associated

## diagnosis

# Comparison of quantitative bronchoscopic lavage cultures [B-BAL] with blind NG Tube lavage [N-BAL] cultures in the diagnosis of ventilator associated pneumonia [VAP].

Hussain, Salma Muhammad; Abubaker, Jawed; Ali, Muhammad; Noor, Asim; Khurshid, Moazzam; Dildar, Babar; Khan, Safdar G.

E-mail:salma.hussain@aku.edu

Medical College - Liaquat National Hospital - Department of Pulmonary Medicine

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 245-248 (23 ref.)

**Keywords:** Pneumonia, Ventilator-Associated-epidemiology; Bronchoalveolar Lavage-methods; Intensive Care Units; Bronchoscopes; Intubation, Gastrointestinal-economics; Sensitivity and Specificity; Cross-Sectional Studies

Abstract: To compare quantitative Bronchoscopic Bronchoalveolar Lavage [B-BAL] cultures with blind nasogastric tube bronchoalveolar lavage [N-BAL] cultures in the diagnosis of Ventilator Associated Pneumonia [VAP]. Crosssectional comparative study. The study was conducted in Medical ICU and Chest ICU at Liaquat National Hospital [LNH], Karachi, from January till August, 2007. Patients admitted in ICU with clinical suspicion of VAP, fulfilling inclusion criteria viz. fever, leukocytosis, new or worsening infiltrate in chest radiograph or purulent secretions were included. Exclusion criteria were deranged coagulopathy, extreme ventilatory and oxygenation demands and tracheal obstruction. All patients had N-BAL using 16 fr Nasogastric tube [NG] without lubrication followed by B-BAL. Samples collected were submitted to the laboratory for quantitative cultures and sensitivities. Results were documented on predesigned proforma. Fifty-four patients underwent paired B-BAL and N-BAL sampling. The N-BAL showed sensitivity of 87.87%, specificity of 75.71%, positive predictive value of 89.65%, negative predictive value of 77.77% and p <0.001, which was statistically significant. Significant differences in time required for sample collection and cost of both procedures were also observed. The results favour the use of blind NG tube bronchoalveolar lavage quantitative cultures as it is simple, safe, cost-effective and minimally invasive method of diagnosing VAP.

## Pneumothorax

#### surgery

#### The results of thoracoscopic surgery for secondary spontaneous pneumothorax.

Ayed, Adel K.; Chandrasekran, Chazian

E-mail:adel@hsc.edu.ku

Kuwait University - Faculty of Medicine - Department of Surgery

KMJ - Kuwait Medical Journal 2009; 41 (2): 108-111 (17 ref.)

Keywords: Thoracoscopy; Pulmonary Emphysema; Pleurodesis; Forced Expiratory Volume; Vital Capacity; Treatment Outcome; Prospective Studies; Length of Stay

Abstract: To review our experience of video-assisted thoracoscopic surgery for the treatment of secondary spontaneous pneumothorax caused by bullous emphysema. Prospective study. Chest Diseases Hospital, Kuwait. Forty-six consecutive patients who under went thoraces copy for secondary spontaneous pneumothorax by a single surgeon during a five year period. Video-assisted thoracoscopic bullectomy and pleural symphysis procedure. Resolution of pneumothorax. Mean age of patients was 49.3 years [range: 38 - 70 years], and 44 were men [96%]. All patients had bullous emphysema; their mean preoperative forced expiratory volume in one second [FEV1] was 54.4% of predicted and mean forced vital capacity [FVC], 66.9% of predicted. Persistent pneumothorax was the most frequent indication for surgery, occurring in 35 patients. [76%]. The most common method of management was stapling of an identified bulla, which was done in all patients. Pleurodesis was achieved by gauze abrasion [n = 23] and apical pleurectomy [n = 23]. Postoperative prolonged air leak occurred in seven patients [15%], six in the pleural abrasion group and one in the apical pleurectomy group [p = 0.04]. The mean [+/- SD] postoperative hospital stay was 5.7 +/-4.5 days. Mean follow-up is 42 months [range = 36 - 54 months] for all patients. Pneumothorax recurred in three patients [6.5%] in whom pleural abrasion was done. The recurrences occurred in the first six months of follow-up. Video-assisted thoracoscopic surgery is a safe procedure in the treatment of select secondary spontaneous pneumothorax caused by bullous emphysema. Apical pleurectomy is a more effective way of producing pleural symphysis.

# POEMS Syndrome

### diagnosis

#### Autologous peripheral blood stem cell transplantation in a patient with POEMS syndrome.

Diaz Betancur, James; Cuervo Sierra, Jorge; Guzman Zapata, Alber; Mondragon Arismendi, Maria Cecilia; Cuellar Ambrosi, Francisco

Antioquia University - School of Medicine

Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 305-307 (17 ref.)

Keywords: POEMS Syndrome-therapy; Blood Protein Electrophoresis; Skin Pigmentation; Paraneoplastic Polyneuropathy; Vascular Endothelial Growth Factor; Tomography, X-Ray Computed; Peripheral Blood Stem Cell Transplantation

# Polyradiculoneuropathy

## diagnosis

#### Chronic inflammatory demyelinating polyradiculoneuropathy in two children.

Al Bloushi, Maliha Askar Soud; Habeeb, Yousif Kassim; Al Jumah, Eman Sadiq

E-mail:dr askar@hotmail.com

Mubarak Alkabeer Hospital - Department of Pediatrics

KMJ - Kuwait Medical Journal 2009; 41 (2): 156-161 (29 ref.)

**Keywords:** Demyelinating Diseases-diagnosis; Child; Chronic Disease; Gait Disorders, Neurologic; Lordosis; Steroidstherapeutic use; Steroids-administration and dosage; Azathioprine-therapeutic use; Immunosuppressive Agents; Plasma Exchange

Abstract: Chronic inflammatory demyelinating polyradiculoneuropathy [CIDP] is relatively rare in children. We report two cases diagnosed over a thirteen year period. One patient had a monophasic course resulting in complete recovery while the other case had a slowly progressive relapsing course with significant morbidity.

## Porphyria, Erythropoietic

## diagnosis

#### Gunther disease in an infant.

Bhat, Yasmeen; Sheikh, Mushtaq; Sheikh, Manzoor; Baba, Asif <u>E-mail:yasmeen\_bhat2001@yahoo.com</u> Sher i Kashmir Institute of Medical Sciences - Medical College - Department of Dermatology Hematology, Oncology and Stem Cell Therapy 2009; 2 (1): 308-309 (7 ref.)

**Keywords:** Porphyria, Erythropoietic-genetics; Uroporphyrinogen III Synthetase; Uroporphyrins; Coproporphyrins; Skin Pigmentation; Photosensitivity Disorders; Hypertrichosis; Bone Marrow Examination; Infant

# **Postnatal Care**

## standards

# A study to assess knowledge, practice and problems of baby health care among postnatal mothers in one of primary health care setting.

Karim, Enas T.A.

E-mail:enas\_yhy@yahoo.com

Al Nahrain University - Medical College - Department Community Medicine

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 42-48 (9 ref.)

**Keywords:** Quality of Health Care; Breast Feeding-statistics and numerical data; Umbilical Cord; Eye; Jaundice, Neonatal; Health Knowledge, Attitudes, Practice; Parity; Outcome and Process Assessment [Health Care]; Awareness; Cross-Sectional Studies; Questionnaires; Delivery of Health Care; Primary Health Care

Abstract: In many cases there is a lack of knowledge of what is needed for optimal newborn care. This study was undertaken to assess knowledge, practice and problems of postnatal mothers relating to different aspects of baby health care and breastfeeding among group of mothers attending primary health care center in one locality in Baghdad city. A cross-sectional study was conducted in Al-Noor primary health care center [PHCC] during the period from May-August 2006, a sample of 148 mothers were selected randomly [49 primipara and 99 multi para] using a well structured questionnaire form, information related to different aspects of baby care were included in the form. Although the majority of women in the sample had visited the primary health center for antenatal care, their sources of knowledge were from their relatives and friends. A good percentage of them had bad practice regarding the care of umbilical stump and the eyes with 49% of primipara and 53.5% of multi para will use white light at home when their baby get jaundice. When breast feeding was discussed, majority of women in the PHC center. Also there is a need for an awareness-raising program highlighting the availability and the quality of ourrent postnatal care.

# Postural Balance

# Effects of visual feedback balance training by using computerised dynamic posturography in patients with multiple sclerosis.

Ivanova, Maria Kondeva; Ahmed, Mohieldin M.; Mosalem, Doahoo M.; Al Busairi, Waleed Ahmed Ministry of Health - Physical Medicine and Rehabilitation Hospital

KMJ - Kuwait Medical Journal 2009; 41 (2): 134-139 (22 ref.)

Keywords: Multiple Sclerosis-rehabilitation; Retrospective Studies; Treatment Outcome; Vision, Ocular; Somatosensory Disorders

**Abstract:** To study the effects of the visual feedback balance training on the Berg Balance Scale [BBS] under static and dynamic conditions, the somatosensory, visual and vestibular systems by dynamic posturography before and after training program in patients with multiple sclerosis [MS]. Retrospective case training study. Physical Medicine and Rehabilitation Hospital, Ministry of Health, Kuwait. A total of 23 patients with MS were recruited. All patients were evaluated using both the BBS and the sensory organization test [SOT] using computerized dynamic posturography [CDP] before and three months after the training program. The SOT consists of six conditions and composite equilibrium score [CES]. CES [%] and SOT were calculated. Before training, all patients had a reduction of BBSS and parameters of the SOT. After training, a significant increase of BBS [p < 0.05], all parameters of the SOT [p < 0.05] and CES [p < 0.001] were observed. Improvement in all parameters of the SOT after training program could be explained by change in the somatosensory system of the posture control system. Also, there is impairment of the somatosensory system, rather than a specific lesion of vestibular and/or visual systems.

## Pre-Eclampsia

# Adiponectin and sex hormone-binding globulin in preeclampsia: Relationship to insulin resistance.

Mohammed, Samy H.; El Maghawry, I.; Ibrahim, Magdy M.; Moustafa, A.E.

E-mail:Samyla6l@yahoo.com

Zagazig University - Faculty of medicine - Medical Biochemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 47-60 (33 ref.)

**Keywords:** Adiponectin-blood; Sex Hormone-Binding Globulin-blood; Insulin Resistance; Testosterone-blood; Body Mass Index; Gestational Age; Hypertension; Proteinuria

**Abstract:** Preeclampsia [PE] which is characterized by pregnancy-induced hypertension and proteinuria complicates 3-4% of pregnancies and this is a leading cause of maternal and fetal morbidity and mortality. The present study was designed to investigate the circulating levels of adiponectin, sex hormone-binding globulin [SHBG], total and free testosterone in preeclamptic women in comparison with normotensive pregnant controls. The aim of this work was extended to study the correlations between these biochemical indices, and the insulin resistance parameters and clinical data. The study included 20 preeclamptic women and 20 normotensive pregnant women as controls. The levels of adiponectin and SHBG were significantly lower while that of total and free testosterone were significantly higher in PE as compared with the levels in normotensive pregnant women. Also the fasting levels of glucose and insulin were significantly higher in PE than normotensive pregnant women. There was a significant negative correlation [P < 0.05] between adiponectin and each of F. insulin, glucose, Homeostatic model assessment [HOMA] index, Body mass index [BMI], systolic and diastolic blood pressure in PE. A significant positive correlation [P < 0.05] between caliponectin [P < 0.05] between adiponectin [P < 0.05] between correlation [P < 0.05] between adiponectin [P < 0.05] between the even adiponectin and set of F. insulin, Bulcose, HOMA, BMI, systolic and diastolic blood pressure in PE. A significant positive correlation [P < 0.05] between adiponectin and between adiponectin and SHBG in PE.

# Pregnancy

# The effect of educating about common changes in pregnancy period and the way to cope with them on marital satisfaction of pregnant women.

Mangeli, M.; Ramezani, T.; Mangeli, S.

E-mail:mmangel120242@yahoo.com

Shahrbabak Islamic Azad University - Department of Nursing

IJME - Iranian Journal of Medical Education 2009; 8 (2): 305-313 (38 ref.)

Keywords: Education; Awareness; Questionnaires; Personal Satisfaction; Marriage

Abstract: Physical and emotional changes during pregnancy, could lead to family arguments and violence which may cause untimely delivery, premature neonate, and post partum depression. This study was performed to determine the effect of educating about common changes of pregnancy period and coping with them on marital satisfaction of pregnant women referring to health centers of Shahrbabak. This quasi-experimental study was performed using one group design, with pre and post tests. Data was gathered by Enriching, Relationship, Issues, Communication and Happiness [ENRICH] question-naire from 112 pregnant women who met the entrance criteria and were selected by random stratified sampling method from three health centers. The intervention was as introducing an educational pamphlet. The marital satisfaction was evaluated before and one month after intervention. Then, the data was analyzed using descriptive statistics indices, Wilcoxon, t-test, Mann Whitney U test, ANOVA, and Kruskal Wallis test.

Comparing the mean scores demonstrated a significant enhancement after receiving information, so that the marital satisfaction score increased from 168.8 +/- 28 into 187.3 +/- 18.2 points. In comparing the mean differences based on variables of gravidity, gestational age, employment status of pregnant woman and her spouse, beauty concerns, and enjoying familial support also a significant difference was observed. The results of this study signify the necessity of couples' awareness about common changes during pregnancy period. Hence, by doing so, health providers can play an active role in increasing marital satisfaction.

### immunology

The immune system in pregnancy: friend or foe?

Raghupathy, Raj

E-mail:raj@hsc.edu.kw

Kuwait University - Faculty of Medicine - Department of Microbiology

KMJ - Kuwait Medical Journal 2009; 41 (2): 93-102 (69 ref.)

Keywords: Immune System Phenomena; Fetus; Pregnancy Complications; Immunologic Factors; Cytokinesphysiology; Abortion, Spontaneous; Abortion, Habitual; Premature Birth; Pre-Eclampsia

Abstract: Pregnancy is an intriguing immunological paradox; how does an allogeneic fetus survive despite a potentially antagonistic maternal immune system, while tissue allograft succumb to rapid immunological rejection? While several hypothetical models have been proposed in the last five decades to explain the immunological success of pregnancy, the model that has survived the test of experimentation is the one that proposes a state of immunomodulation during pregnancy. Several factors appear to prevent the rejection of the fetus. Yet, pregnancy can be compromised by a variety of complications such as recurrent spontaneous miscarriage, preeclampsia and preterm delivery. Research in the field of immunology of pregnancy has opened up the possibility of cellular immune effectors that might underlie these pregnancy complications. Particularly interesting are the effects that pro-inflammatory and anti-inflammatory cytokines have on the concept us and thus on the success and failure of pregnancy. This review focuses on the association between some cytokines and successful pregnancy on the one hand, and between other cytokines and complications of pregnancy as also the possible pathways of effect or function of cytokines in pregnancy loss. This review proceeds to discuss the therapeutic redirection of cytokine profiles towards one that is favorable to the success of pregnancy.

## **Premarital Examinations**

Educational needs in premarital counseling: viewpoints of couples referring to health care centers in Mashhad.

Khaleghinejad, K.; Abbaspour, Z.; Afshari, P.; Atari, Y.; Rasekh, A. <u>E-mail:khoosheh7@yahoo.com</u>

Neyshabour Azad University

IJME - Iranian Journal of Medical Education 2009; 8 (2): 247-253 (17 ref.)

Keywords: Needs Assessment; Primary Health Care; Cross-Sectional Studies; Questionnaires; Counseling; Education; Quality of Life

**Abstract:** In recent years, premarital programs are considered important in order to promote the quality of married life. This study was performed to determine the educational needs in premarital stages from the viewpoints of married couples referring to health care centers of Mashhad. This descriptive cross-sectional study was performed on 223 couples [n = 446] referring to health centers in Mashhad during the years 2006-2007. The data gathering tool was a questionnaire containing 2 forms. The first form included 8 demographic questions and 4 questions related to samples' viewpoints about the way of holding sessions. The second form included 47 questions on 7 areas including fertility, family planning, congenital diseases; prevalent cancer prevention, sexual relationships, relationship with spouse and family, and Islamic and legal issues and 2 open questions were dedicated to other viewpoints of couples. Descriptive statistics and t-test were used for analyzing the data. The need to education in all areas was higher than average in both groups. Comparing the scores in 7 areas showed no significant difference between males and females. The most important need in both groups was concerning the relationship with spouse and family [3.97 +/- 0.067 in females and 3.95 +/- 0.077 in males]. Couples have a tendency for more education in the field of relationship with spouse and family, and are willing to increase the number of educational sessions to 3 or 4. Males and females had felt the need for providing educational programs in the mentioned priorities.

# Outcome of premarital counseling of hemoglobinopathy carrier couples attending premarital services in Bahrain.

Almutawa, Fahima Jaffar; Alqamish, Jehad Radhi

Ministry of Health - Primary Health Care Directorate - Maternal and Child Health

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 217-220 (14 ref.)

**Keywords:** Hemoglobinopathies-epidemiology; Hemoglobinopathies-diagnosis; Counseling; Marriage; Mass Screening; Genetic Counseling; Cross-Sectional Studies; Epidemiology; Anemia, Sickle Cell; Thalassemia; Glucosephosphate Dehydrogenase

Abstract: Premarital screening was introduced in 1993 as an optional service. Evaluation of 10 years statistics in 2003, showed only 25% attendance. Therefore, a Royal decree of compulsory testing before issuing marriage health certificate was introduced in 2005 in order to improve attendance aiming to decrease the prevalence of hereditary blood diseases. To determine the frequency of marriage among couples referred for hereditary blood diseases genetic

counselling. A cross sectional study involving 1070 individuals attending premarital screening in Bahrain during the period of 1st April and 15[th] May 2006. The frequency of sickle cell disease [SCD]; 14[1.3%], sickle cell trait [SCT]; 175[16.4%], 22 couples were both SCT. The frequency of G6PD was 268[24%]. One candidate [0.09%] was [beta thalassemia major, 30[2.8%] beta thalassemia trait, 3 couples were carriers. 365[34%] individuals with low RBC indices indicating possible alpha-thalassemia including 5 couples. Thirty couples [60 individuals] were referred for genetic counseling with a mean age of 25.7 years. 17 couples [56.7%] got married in spite of counseling. Based on this study; the current policy of premarital screening and counseling do not seem to be successful in discouraging most of the couples with high-risk for hereditary blood diseases from getting married.

## **Problem-Based Learning**

#### Evaluation of problem based learning by tutors and students in a medical faculty of Turkey.

Gurpinar, Erol; Senol, Yesim; Aktekin, Mehmet R.

E-mail:erolgurpinar@akdeniz.edu.tr

Akdeniz University - Faculty of Medicine - Department of Medical Education

KMJ - Kuwait Medical Journal 2009; 41 (2): 123-127 (21 ref.)

Keywords: Students, Medical; Faculty, Medical; Education, Medical; Questionnaires; Cross-Sectional Studies

**Abstract:** To determine the opinion of tutors and students in charge of problem-based learning [PBL] courses during the academic year of 2006-2007 about the extent of contribution of PBL to certain skills in comparison with conventional education and to clarify whether or not they are content with PBL. Cross sectional research. Akdeniz University Faculty of Medicine, Antalya, Turkey. One hundred and fifty three tutors in charge of PBL courses during the academic year of 2006-2007 and all of the first year medical students [n=170] were included. A questionnaire was sent to the study population in June 2007. Analysis of completed questionnaire. Independent sample t-test analysis was used to determine whether mean scores were different in two groups. Majority of the tutors [87.5%] and students [97.1%] responded to the questionnaire. The question's PBL an application that is in general beneficial to the student?" was answered as "yes" by 66.9% of the tutors. The question "Are you content with PBL2" was answered as "yes" by 54.9% of the students and they think that PBL offers significant contribution to the students in areas that are considered to be superior aspects of PBL when compared to conventional education. performing their education programs completely basedon PBL.

## Propofol

## pharmacology

**Oxidant and antioxidant activities of different anesthetic techniques. Propofol versus desflurane.** Ceylan, Berit G.; Yilmaz, Funda; Eroglu, Fusun; Yavuz, Lutfi; Gulmen Senol; Vural, Huseyin

E-mail:beritceylan@hotmail.com

University of Suleyman Demirel - Department of Anesthesiology and Reanimation

Saudi Medical Journal 2009; 30 (3): 371-376 (19 ref.)

**Keywords:** Propofol-administration and dosage; Isoflurane-analogs and derivatives; Anesthetics, Inhalation; Antioxidants; Malondialdehyde-blood; Tocopherols-blood; Glutathione Peroxidase-blood; Superoxide Dismutase-blood; Oxidative Stress

Abstract: To investigate the correlation between propofol and desflurane in terms of lipidperoxidation and antioxidant activity and to search the possible antioxidant anesthesia technique. The study was performed in the Department of Anesthesia and Reanimation, Medical Faculty, Suleyman Demirel University, Isparta, Turkey, between January 2006 and July 2006. Thirty, ASAI-II patients, with an age range of 19-55 years, undergoing elective surgery under general anesthesia were randomized to receive either propofol infusion [Group P] or desflurane inhalation [Group D] following standard induction. Malondialdehyde [MDA], glutathione peroxidase [GSH], super oxide dismutase [SOD] and alphatocopherol [Vitamin E] were measured preoperatively, at peroperatively first hour and postoperatively 12-hour. Malondialdehyde was found lower peroperatively in Group P compared to Group D [p < 0.05]. In Group D, Vitamin E levels were decreased significantly peroperatively compared to preoperative period [p = 0.001]. We observed asystemic oxidative stress increment with desflurane by terms of MDA; a lipid peroxidation product and endogenous antioxidant activity suppression by terms of Vitamin E at only peroperative period. This study may be defined to support the fact that free oxygen radicals were released more by desflurane than propofol.

## **Prostate-Specific Antigen**

## blood

# Detection of serum prostate specific antigen in lactating, pregnant, and advanced breast cancer Sudanese women.

Ahmed, Mohammed El Imam M.; Omran, Mustafa; Mohd, Elgaili; Elhassan, Elhassan Mohamed; Abu Idris, Dafalla Omer; Khalid, Khalid Eltahir; Miskeen, Elhadi

University of Gezira - Faculty of Medicine

Sudan Journal of Medical Sciences 2009; 4 (2): 163-166 (30 ref.)

Keywords: Breast Neoplasms-diagnosis; Pregnancy; Lactation; Women; Tumor Markers, Biological; Radioimmunoassay

**Abstract:** Although prostate-specific antigen [PSA] is the most valuable tumor marker for the diagnosis and management of prostate carcinoma, it is widely accepted that PSA is not prostate specific. The aim of this study is to address the possibility of using the PSA as marker for the sex assignment in different categories and relevance of this test in women problems. We have evaluated the measurement of serum total PSA for differentiation between Sudanese women with advanced breast cancer [n= 10], and those lactating [n=10], pregnant [n= 10] compared with 20 healthy women as control group. Serum total PSA [TPSA] was measured using immuno-radiometric assay [IRMA]. In this study the mean age was significantly higher in advanced breast cancer groups compared with lactating group [P < 0.01]. The mean serum PSA levels in the healthy control women examined [n=20] was 0.72 +/- 0.55 vs. 1.18 +/- 0.92, 1.42 +/- 2.43 and 0.51 +/- 0.13 ng/ml in serum from advanced breast cancer [n=10], pregnant [n=10] and lactating women [n=10] respectively. A significant high level of total PSA in serum of advanced breast cancer compared with the normal group [P < 0.05]. These results indicated the possible use of total PSA to distinguish between healthy women and/or women with advanced breast cancer.

# **Psychiatric Status Rating Scales**

# The Farsi version of the strength and difficulties questionnaire self-report form: the normative data and scale properties.

Alavi, A.; Mohammadi, M.R.; Mahmoudi, J.; Tehranidoost, M.; Shahrivar, Z.; Saadat, S.

E-mail:a alavi@razi.tums.ac.ir

Tehran University of Medical Sciences - Roozbeh hospital - Department of child and adolescent psychiatry

IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 27-34 (23 ref.)

Keywords: Adolescent Psychiatry; Mass Screening; Questionnaires; Adolescent

Abstract: This study was performed to evaluate the normative data and psychometric properties and the internal consistency of the Farsi [Persian] version of the Strength and Difficulties Questionnaire [SDQ] self-report form, as a screening tool in a community-based sample of 12 to 17 year-old adolescents of urban Tehran. In this investigation, 1105 adolescents [12 to 17 years old], selected from 250 clusters from all the 22 municipality areas of Tehran, responded to 25 questions of the Farsi version SDQ self-report form. The frequency of each symptom domains according to Goodman's cutoff points and 90th percentile and the mean score in each subscale were determined. The 90th percentile cutoff points were some what different from those of the previous reports. Using Goodman's cutoff points, the prevalence of symptom domains was relatively high. For example, 13.7 percent of the adolescents studied had total scores equal to 20 or more. There were significant correlations between different subscales and their constituting questions. Self-report form of SDQ is a valuable tool in the screening of adolescent psychopathologies. Frequency of majority of the symptom domains seems to be higher in the adolescents in Tehran urban areas.

## Public Health

# Application of geographical sciences and technologies to investigate health problems in the Eastern Mediterranean Region.

Rezaeian, M.

E-mail:moeygmr2@yahoo.co.uk

Rafsanjan University of Medical Sciences - School of Medicine - Department of Social Medicine

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1564-1569 (31 ref.)

Keywords: Epidemiology; Geographic Information Systems; Demography

Abstract: Recent developments in the geographical sciences and technologies, namely geographical epidemiology, geographical information systems, global positioning systems and spatial data analysis brings about a unique opportunity to investigate the role of "place" in human health in a scientific manner. The aim of the present communication is to open a discussion about the application of these advances to study the geography of public health problems within the Eastern Mediterranean Region of the World Health Organization.

# Pulmonary Artery

## abnormalities

Anatomical variations of pulmonary artery and associated cardiac defects in tetralogy of Fallot. Saeed, Sadia; Hyder, Syed Najam; Sadiq, Masood

E-mail:s-saaadia@yahoo.com

The Children's Hospital and Institute of Child Health - Department of Paediatric Cardiology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 211-214 (21 ref.)

**Keywords:** Heart Defects, Congenital-diagnosis; Tetralogy of Fallot-diagnosis; Tetralogy of Fallot-epidemiology; Heart Catheterization; Echocardiography; Cross-Sectional Studies; Ductus Arteriosus, Patent; Heart Septal Defects, Atrial; Heart Septal Defects, Ventricular

Abstract: To determine pulmonary artery variations and other associated cardiac defects inpatients with Tetralogy of Fallot [TOF]. Cross-sectional, descriptive study. The Children's Hospital and the Institute of Child Health, Lahore, from April 2006 to October 2007. All patients with TOF, who underwent cardiac catheterization during this period, were included. Standardcine-angiograms were recorded and pulmonary artery sizing was done using z-scoring. A total of 216 patients with TOF were catheterized. Pulmonary Artery [PA] abnormalities were present in 84[38.9%] patients. The commonest abnormality was isolated Left Pulmonary Artery [LPA] stenosis [n=27, 32.14%] followed by isolated hypoplasia of Main Pulmonary Artery [MPA] [n=18, 21.43%] and supra-valvular stenosis in [n=11, 13.1%] patients. LPA

was absent in one patient, while 2patients had both absent right and left PA with segmental branch pulmonary arteries originating directly from MPA. Associated cardiac lesions included right aortic arch in 34 [15%], additional muscular VSD vary in 13 [5.5%], Patent Ductus Arteriosus [PDA] in 11 [6%] and Major Aortopulmonary Collateral Arteries [MAPCA] in 2 [1.9%] patients. Significant coronary arteryabnormality was present in 10 [4.6%] children. Pulmonary artery abnormalities were present in 38.9% of patients with TOF. Isolated LPA origin stenosis and MPA hypoplasia were the mostcommon abnormalities. Significant associated cardiac lesions were present in one-third of the patients and included PDA, additional muscular VSD, coronary artery abnormalities and MAPCA.

## Pulmonary Disease, Chronic Obstructive

## genetics

# Genetic polymorphism of glutatfflone-s- transferase and susceptibility to and severity of chronic obstructive pulmonary disease.

Hemimi, Neveen Salah Eldin; Al Attar, May Mahmoud; Abdel Wahab, Mahmoud A.

E-mail:neveen59@yahoo.com

Ain Shams University - Faculty of Medicine - Biochemistry Department

EJB - Egyptian Journal of Biochemistry and Molecular Biology [The] 2009; 27 (1): 1117-128 (38 ref.)

Keywords: Glutathione Transferase-blood; Polymorphism; Smoking; Genotype; Respiratory Function Tests; Risk Factors; Polymerase Chain Reaction

Abstract: Chronic tobacco smoking is a major risk factor in the development of COPD. However, itis estimated that only 10-20% of chronic heavy smokers will develop symptomatic COPD. This indicates the possible contribution of environmental or genetic cofactors to the development of COPD in smokers. The present work aimed to study the relationship between GST polymorphism and susceptibility to and severity of COPD in smokers. A case control study was done on 140 patients with COPD and 140 matched controls. All subjects were smokers or exsmokers. The GSTM1 and GSTT1 genotypes were identified by polymerase chain reaction in peripheral blood DNA samples. Analysis of data was done by IBM computer using SPSS program. Results shown that the proportion of GSTMI-null genotypes was significantly higher in patients with COPD than incontrol subjects [62.2% versus 32.2%]. The odds ratio was 3.5 [95% confidence interval [CI] =2.1-5.7]. Moreover the patients with GSTM1 null genotype were at high risk of developing thesevere type of COPD. The odds ratio was 3.2 and [95% CI = 1.5-6.7]. However the genotype frequencies of GSTTI-null genotype of GSTM1 were more susceptible to develop the severe type of COPD.

## Purpura

## physiopathology

#### Immune-pathophysiology and -therapy of childhood purpura.

Elhabashy, Safinaz A. Ain Shams University - Department of Pediatrics

Egyptian Journal of Pediatric Allergy and Immunology [The] 2009; 7 (1): 3-13 (64 ref.)

**Keywords:** Purpura-immunology; Purpura-etiology; Child; Signs and Symptoms; Thrombocytopenia; Blood Platelets; Blood Coagulation Factors; Blood Vessels; Thrombasthenia; Prothrombin Time; Partial Thromboplastin Time

# **Radial Artery**

## ultrasonography

#### Ultrasound guided versus conventional radial artery cannulation.

El Maadawy, Maged Mohamed

Pain Relief El.Sahel Teaching Hospital General Organization of Teaching Hospitals and Institutes – Fellow of Anesthesia, Intensive Care - Pain Relief Department of Anesthesia

New Egyptian Journal of Medicine [The] 2009; 40 (1): 72-74 (5 ref.)

Keywords: Catheterization-methods; Catheterization-ultrasonography; Catheterization-complications

Abstract: This research was designed to study the values of ultrasound guidance in radial artery cannulation in comparison to conventional technique. Two groups of patients each is twenty cases for whom radial artery cannulation was indicated, first group [A] the artery were cannulated using the ultrasound guidance, and the second group [B] the radial artery was cannulated by the conventional technique. Both groups were studied regarding duration of cannulation success rate, incidence of complications. The ultrasound guided radial artery cannulation technique showed more short duration, high success rate lower incidence of complications in comparison to the conventional technique of cannulation. It was concluded that the ultrasound guided technique is highly valuable in annulations of radial artery.

# **Referral and Consultation**

Criteria for a good referral system for psychiatric patients: the view from Saudi Arabia.

Qureshi, N.A.; van der Molen, H.T.; Schmidt, H.G.; Al Habeeb, T.A.; Magzoub, M.E.M.

E-mail:gureshinaseem@live.com

Ministry of Health - Administration for Mental Health and Social Services - Research Unit

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1580-1595 (85 ref.)

Keywords: Ethics Consultation; Mental Disorders; Psychiatry; Quality Indicators, Health Care; Primary Health Care Abstract: The development and implementation of quality referral systems reflects sound national health planning.

Abstract: The development and implementation of quary referral system systems reflects sound hardran health planning. This review appraised the data on referral systems, in particular psychiatric referrals, with special reference to Saudi Arabia. A computer search was made of relevant literature in the past 2 decades. The rate and process of referring patients through referral letters varies globally across practice settings and is initiated by an array of factors linked with health consumers, health providers and delivery systems. Referral systems, including consultation-liaison services, are an essential component of any health care organization for offering a complete range of good quality, specialized health services.

## **Renal Dialysis**

## adverse effects

Changes in serum calcium, phosphate, albumin and parathyroid hormone before and after hemodialysis in Sudanese patients withend-stage renal failure.

Mohamed, Aida Ali Ahmed; Ahmed, Mohamed El Imam; Elamin, Anwaar Ali; El Sabiq, M.; Khalid, Khalid Eltahir; Mohmadani, Ahmed Abdallah; Mohamed, El Gaili; Miskeen, Elhadi

E-mail:mohammedimam@hotmail.com

University of Gezira - Deputy Dean Faculty of Medicine - Urologist, TX Surgeon

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 23-27 (18 ref.)

**Keywords:** Calcium-blood; Phosphates-blood; Parathyroid Hormone-blood; Urea-blood; Creatinine-blood; Albumins; Kidney Failure, Chronic; Cross-Sectional Studies

**Abstract:** To determine the concentrations of serum parathyroid hormone [PTH] and bone minerals and their association before and after hemodialysis. A cross sectional study was done on patients with end-stage renal disease [ESRD] on treatment with maintenance hemodialysis [HD]. Levels of serum calcium, phosphate, urea, creatinine, albumin, and intact parathormone [iPTH] were measured. The total number of patients studied was 50 [40 males; 10 females], the mean age was 40.3 +/- 26.5 years, and the average duration on hemodialysis [HD] was 53 months. Serum PTH level was significantly lower after hemodialysis treatment; it was 945.8 +/- 995.9 pg/ml and 781.7 +/- 928.1 pg/ml before and after HD respectively, but still over the normal range. Serum phosphate concentration was remarkably differ before and after HD [5.59 +/- 1.8 mg/ml vs 4.38 +/- 1.2 mg/ml respectively]. In contrast, the mean value of serum calcium concentration was changed significantly after HD [6.7 +/- 1.5 mg/dl] compared with the level before HD [5.6 +/- 6.7 mg/dl]. PTH correlated positively with phosphate [r=0.30, p=0.03], and negatively with calcium [r=-0.299, p=0.04] levels. A significant decrease in serum urea and creatinine levels was reported after HD. Serum albumin showed no significant difference before and after HD. PTH was remarkably decreased post dialysis in our patients with definite increased serum Ca[+]. There is no significant difference between PTH and patient's age, sex and duration in HD Sudanese patients.

# **Respiratory Paralysis**

## etiology

Diacetylmorphine [heroin] body packer presenting with respiratory arrest.

Naseem, Arshad; Abbas, Shahid

E-mail:an91104@yahoo.co.in

Military Hospital - Department of Pulmonology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 262-263 (10 ref.)

**Keywords:** Respiratory Paralysis-diagnosis; Respiratory Paralysis-therapy; Heroin-poisoning; Naloxone-therapeutic use; Ultrasonography; Tomography, X-Ray Computed; Radiography, Abdominal

Abstract: Intracorporeal concealment of illicit drugs known as 'body packing' is uncommonly reported. A body packer with swallowed capsules containing Diacetylmorphine [heroin] for smuggling purposes presented with respiratory arrest and recovered after ventilatory support and nalaxone infusion.

# **Role Playing**

The effect of teaching by role playing on students' counseling and screening skills toward IUD clients.

Erfanian, F.; Khadivzadeh, T.; Khadem, N.; Khajedelooie, M.

E-mail:fatierfanian@yahoo.com

Mashhad University of Medical Sciences - School of Nursing and Midwifery - Department of Midwifery

IJME - Iranian Journal of Medical Education 2009; 8 (2): 275-284 (36 ref.)

#### Keywords: Teaching; Students; Intrauterine Devices; Midwifery; Counseling

Abstract: One of the most important barriers for using IUD [Intra Uterine Device] is inadequate provision of appropriate counseling. Since, employing new training methods is necessary for enhancing midwives' roles in providing appropriate counseling, this study was performed to compare the effect of two methods of traditional training and role playing on students' skills in counseling. In this experimental study, 62 midwifery students were randomly allocated in role-playing and traditional training groups to participate in a 4 hour workshop about counseling skills for IUD clients. Before and after the workshop students' skills in counseling were assessed. The data gathering tools included a self evaluation form and evaluation checklists for assessing students' performance in counseling before and after IUD insertion. Comparisons were made using Chi square, Fisher exact text, t-student, Man-Whitney, paired t-test, and Wilcox on by SPSS software. Results: The mean of students' score in counseling before and after IUD insertion wasnot different between the two groups in pretest, but the post-tests of the 2 groups in both skills were significantly different. There was a significant difference between pretest and posttest scores in both groups regarding the two skills. Teaching by role playing leads to a better learning of counseling skills. Employing this educational method is recommended for training counseling skills to students.

## **Root Canal Therapy**

#### Proven strategies to improve endodontic success and promote natural tooth retention.

Mounce, Richard E.

E-mail:Lineker@comcast.net Smile Dental Journal 2009; 4 (1): 16-20 (29 ref.)

**Keywords:** Root Canal Obturation; Irrigation; Treatment Outcome

Abstract: A series of clinically relevant steps to enhance the clinical success of endodontic therapy is presented. Emphasis has been placed on use of the surgical operating microscope, straight line access, patency, copious irrigation, frequent recapitulation, passive rotary nickel titanium file use, bonded obturation and placement of an early coronal seal.

## Safety Management

#### Benchmarking of World Health Organization surgical safety checklist.

Messahel, Farouk M.; Al Qahtani, Ali S.

E-mail:fmamessahel@doctors.org.uk

Armed Forces Hospital - Department of Anaesthesia and Intensive Care

Saudi Medical Journal 2009; 30 (3): 422-425 (13 ref.)

Keywords: Surgical Procedures, Operative-standards; Benchmarking; World Health Organization

Abstract: To compare the quality of our services with the World Health Organization [WHO] surgical safety recommendations as a reference, to improve our services if they fall short of that of the WHO, and to publish our additional standards, so that they may be included in future revision of WHO checklist. We conducted this study on 15th July 2008 at the Armed Forces Hospital, Wadi Al-Dawasir, Kingdom of Saudi Arabia. We compared each WHO safety standard item with its corresponding standard in our checklist. There were 4 possibilities for the comparison: that our performance meet, was less than or exceeded the quality-of-care measures in the WHO checklist, or that there are additional safety measures in either checklist that need to be considered by each party. Since its introduction in 1997, our checklist was applied to 11828 patients and resulted in error-free outcomes. Bench marking proved that our surgical safety areas [for example measures to prevent Perioperative hypothermia and venous thromboembolism]. Benchmarking is a continuous quality improvement process aimed at providing the best available at the time in healthcare, and we recommend its adoption by health care providers. The WHO surgical safety checklist is a bold step in the right direction towards safer surgical outcomes. Feedback from other medical establishments should be encouraged.

## Salvia

## chemistry

#### Review of the pharmacological and toxicological effects of Salvia leriifolia.

Hosseinzadeh, Hossein; Sadeghnia, Hamid Reza; Imenshahidi, Mohsen; Bazzaz, Bibi Sedigheh Fazly

E-mail:hosseinzadehh@mums.ac.ir

Mashhad University of Medical Sciences - Pharmaceutical Research Center and School of Pharmacy -Department of Pharmacodynamy and Toxicology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 1-8 (33 ref.)

**Keywords:** Salvia-toxicity; Herbal Medicine; Anti-Inflammatory Agents; Antioxidants; Anticonvulsants; Anti-Bacterial Agents; Antimutagenic Agents; Hypoglycemic Agents

Abstract: Salvia leriifolia Benth. [vernacular names such as Nuruozak and Jobleh] is a perennial herbaceous plant that grows exclusively in south and tropical regions of Khorasan and Semnan provinces, I. R. Iran. Unlike other species of Salvia genus, the chemical constituents of S. leriifolia are not well recognized. The stem oil of the plant consisted mainly both monoterpenes and sesquiterpenes, while in leaf and flower oils monoterpenes predominated over

sesquiterpenes. In recent years, the different properties of this plant such as the attenuation of morphine dependence, hypoglycemic, antinociceptive and anti-inflammatory, antioxidant, antiischemia, anticonvulsant, antiulcer effects, antibacterial activities and antimutagenic effects were evaluated. These effects introduce this plant for more toxicological and clinical trials evaluations as a herbal medicine.

# **School Admission Criteria**

# [The association between interview and written exam in graduate student admission of medical education and rehabilitation management]

Dehnavi, A. Mehri

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

Isfahan University of Medical Sciences - School of Medicine - Department of Physics and Medical Engineering IJME - Iranian Journal of Medical Education 2009; 8 (2): 315-322 (12 ref.)

Keywords: Interviews as Topic; Education, Medical; Students, Medical

Abstract: In 2007 and the years before, the Ministry of Health and Medical Education invited MS volunteers in different disciplines such as rehabilitation management and medical education for interview in addition to written exam. This study tried to determine the role of interview in students' admission in medical education and rehabilitation management during the years 2006 and 2007 and also the association between interview and written exam. In this study, the scores of interview, written exam, total exam, and written exam materials were extracted separately. Then, statistical parameters such as mean, standard deviation, and correlation between scores were calculated by MINITAB-15 software. It was tried to investigate the medical education and rehabilitation management examination results using correlation coefficient and frequency distribution. This study also investigated the association between interview and written exam and their role in students' admission. The correlation coefficient between interview and written exam scores in medical education examinations was higher than the ones for rehabilitations management which demonstrates a closer linear correlation between interview score and written exam score in medical education examination. Correlation coefficient and frequency distribution in rehabilitation management examination, showed no logical relation-ship between interview and written exam scores. Considering non-equivalent changes appeared in medical education and rehabilitation management examinations, we can learn about lack of coordination in interviews of different groups. Therefore, it seems that it is better to change the interviews more toward structural, multi-aspect, and individual instead of accumulative and qualitative.

## Schools, Medical

# Use of OSCE in undergraduate assessment of psychiatry at the college of medicine and medical sciences- Arabian Gulf university, Bahrain.

Al Haddad, M.K.

Arabian Gulf University - College of Medicine and Medical Sciences - Department of Psychiatry

JBMS - Journal of the Bahrain Medical Society 2009; 21 (1): 221-222 (8 ref.)

Keywords: Education, Medical, Undergraduate; Psychiatry; Educational Measurement

Abstract: The college of Medicine and Medical Sciences [CMMS] at the Arabian Gulf University [AGU] is amongst the first Medical Schools in the Arab World to implement OSCE in Undergraduate assessment of Psychiatry. Despite the matured implementation of OSCE, as a valuable assessment tool, in other medical fields it remains a novelty in terms of its application in Psychiatry. This paper provides a description of assessment methods at CMMS with particular emphasis on the use of OSCE, its content, examination structure, and learning outcomes and conclusions derived from implementation and application of the program. Overarching results indicate that OSCE is a valid and fair test of the immediately relevant abilities relevant to their future careers within the medical field of pratice.

# Self Mutilation

#### Male genital self-mutilation with special emphasis on the sociocultural meanings.

Qureshi, Naseem A.

E-mail:qureshinaseem@live.com

Ministry of Health - Psychiatrist and Head of Research Unit

Neurosciences 2009; 14 (2): 178-181 (15 ref.)

Keywords: Genitalia, Male; Psychotic Disorders; Culture; Psychotherapy

Abstract: Complete genital self-mutilation [GSM], mostly a non-suicidal behavior, is a rare occurrence among patients with psychotic and non-psychotic disorders. This case report is on a patient who, in the shadow of severe psychotic manifestations with overwhelming socio-cultural contents, completely self-mutilated his external genitals. Emergency surgical and psychiatric management improved his condition over 4 weeks. In the light of this case, the psychodynamic and socio-cultural meanings of GSM are discussed.

## Seminoma

### diagnosis

#### Giant intra-abdominal seminoma.

Nader, Albsoul M.; Moaath, Alsmady M.; Jamal, Almasad K.; Mujalliy, Murshidi M.

E-mail:albsoul@yahoo.com

Jordan University Hospital - Department of General Surgery and Urology

Saudi Medical Journal 2009; 30 (3): 441-442 (5 ref.)

**Keywords:** Seminoma-pathology; Seminoma-therapy; Cryptorchidism-complications; Cryptorchidism-epidemiology; Abdominal Pain; Chorionic Gonadotropin, beta Subunit, Human; Biopsy, Fine-Needle; Tomography, X-Ray Computed

## **Spermatic Cord Torsion**

#### surgery

#### Perinatal testicular torsion: some facts and figures.

Kashif, Muhamad; Riazul Haq, Muhamad; Hussain, Naweed Nishtar Hospital - Paediatric Surgery

Medical Forum Monthly 2009; 20 (1): 28-31 (18 ref.)

Keywords: Spermatic Cord Torsion-diagnosis; Congenital, Hereditary, and Neonatal Diseases and Abnormalities; Orchiectomy; Surgical Procedures, Operative; Treatment Outcome; Retrospective Studies; Infant, Newborn

Abstract: Perinatal testicular torsion is a different entity from testicular torsion in the general paediatric population. Delay in management may result in testicular loss and grave consequences like anorchia. To determine the effectiveness of immediate surgical exploration in salvaging perinatal testicular torsion. A retrospective analysis was carried out between July 2003 to June 2008 on 11 surgically proved neonates with testicular torsion. All neonates underwent immediate surgical exploration irrespective of duration of symptoms. If a nonviable testis was determined intraoperatively, it was removed, otherwise detorsion and orchiopexy was done and at the same time contralateral orchiopexy was performed. Eleven patients underwent immediate surgical exploration of symptoms was less than 12 hours. Seven [64%] underwent orchiectomy due to trank necrosis, later on proved by histopathology. Neonates younger than 30 days of age presenting with clinical findings suggestive of extravaginal testicular torsion. Urgent bilateral exploration is strongly advised in all newborns presenting with either unilateral or bilateral torsion. Such policy carries diagnostic, potential therapeutic and prognostic implications.

# Spinal Cord Injuries

## blood

Evaluation of blood and serum markers in spinal cord injured patients with pressure sores.

Gurcay, Eda; Bal, Ajda; Gurcay, Ahmet G.; Cakci, Aytul

E-mail:dredagurcay@gmail.com

Ministry of Health - Diskapi Yildirim Beyazit Education and Research Hospital - Department of Physical Therapy and Rehabilitation

Saudi Medical Journal 2009; 30 (3): 413-417 (30 ref.)

Keywords: Biological Markers-blood; Pressure Ulcer-epidemiology; Blood Sedimentation; Hematocrit; Leukocyte Count; Erythrocyte Count; C-Reactive Protein; Iron-blood; Ferritins-blood; Albumins; Vitamin B12; Zinc; Cross-Sectional Studies

Abstract: To evaluate blood and serum markers in traumatic spinal cord injured [SCI] patients, with and without pressure sores. This cross-sectional study was performed at the Ministry of Health Diskapi Yildirim Beyazit, and Numune Education and Research Hospitals, Ankara, Turkey, from 2006-2008. A total of 23 SCI patients with pressure sores [group I] and a control group of 25SCI patients without pressure sores [group I] and a control group of 25SCI patients without pressure sores [group I] and a control group of 25SCI patients without pressure sores [group I] were evaluated. Characteristics of sores were examined with respect to duration, location, grade, tissue types, surface area, and exudateamount. Recorded laboratory parameters included erythrocyte sedimentation rates [ESR], C-reactive protein [CRP], hemoglobin [Hb], hematocrit [Htc], lymphocytes, white blood cells [WBC], red blood cells [RBC], serum iron, transferrin, total iron-binding capacity [TIBC], ferritin, total protein, albumin, vitamin B12, and zinc. The most common pressure sore location was the sacrum [38%]. Compared to the control group, the patients with pressure sores showed anemia with reduced serum iron, transferrin, TIBC, and increased ferritin. They also had increased ESR, CRP, and WBC and reduced lymphocytes, RBC, WBC, and serum markers, in order to determine any risks for pressure sores, and they should perform immediate preventive measures based on the patient's condition.

#### complications

#### Evaluation of the results of cervical spine and spinal Cord trauma in children.

Bahadorkhan, G.R.; Samini, F.; Ehsaei, M.R.

E-mail:bahadorkhangh@mums.ac.ir

Mashhad University of Medical Sciences - Emdadi Hospital Neurotrauma Center - Department of Neurosurgery IJCN - Iranian Journal of Child Neurology 2009; 3 (1): 49-56 (25 ref.)

Keywords: Spinal Cord Injuries-radiography; Spinal Cord Injuries-etiology; Spinal Cord Injuries-surgery; Cervical Vertebrae-injuries; Age Factors; Accidents, Traffic-statistics and numerical data; Mortality; Child; Retrospective Studies Abstract: Major differences exist in the anatomy and biomechanics of the growing spine that causes failure patterns different from those in adults. Spinal injury in the pediatric patient is a main concern because timely diagnosis and appropriate treatment can prevent further neurologic damage and deformity and potentiate recovery. We conducted a retrospective clinical study of 137 cases [93 boys, 44 girls] of pediatric cervical spine injuries, managed over fifteen years, to present data from a large series of pediatric patients with cervical spine injuries from a single regional trauma center. The aim was to assess and analyze complications, etiology, pathogenesis, site of injuries and age difference of cervical spine and spinal cord injury in a pediatric age group and compare the findings with current literature. One hundred and thirty seven children with cervical spine injuries, seen over twelve years, were divided into two age groups: 54 patients were in group one [0-9 years] and 83 patients were in group two [10-17 years]. We managed them according to status at presentation and type of injury. Forty seven patients were managed surgically and ninety non surgically [52 wore a halo brace and 38 wore different hard collars and braces]. T-test and Chi-squares were used to analyze differences between groups. The most common cause of injury was motor vehicle accidents [MVA]. Our younger patients [Group 1] had sustained more neurological injuries than the older ones [Group 2], 77% vs. 48%; upper cervical spine was the most common site involved in 76%, while 43% suffered head injuries. In group two, 88% of children two sustained fractures or fracture/ subluxations; also in this group, subluxation, and fracture/ subluxation was present in 10 and 25% of children respectively. The most common radiological findings were vertebral fracutes [38%]. Solid fusions were demonstrated in all patients at late follow-up review[mean 6 years]. None of the children developed neurological deterioration; however 18% mortality was documented. Various fusion techniques were used and neurological and fusion out comes improved as compared with the previous reports. Outcomes of cervical spine injuries in children are more positive than in adults, particularly in patients with in complete injuries. The prognosis for children with complete spinal cord injuries, however, is still discouraging. Upper cervical spine injuries are more common between birth and 9 years of age; however fractures and fracture/subluxation are rare in this group. Surgical intervention with appropriate instrumentation and fusion are very effective in children with cervical spine instability.

## Splenosis

## diagnosis

#### Intrahepatic splenosis mimicking hepatocellular carcinoma in a cirrhotic liver.

Kashgari, Amna A.; Al Mana, Hadeel M.; Al Kadhi, Yusuf A.

E-mail:Kashgari\_amna@hotmail com

King Abdulaziz Medical City - Department of Medical Imaging

Saudi Medical Journal 2009; 30 (3): 429-432 (14 ref.)

**Keywords:** Splenosis-radiography; Carcinoma, Hepatocellular; Liver Cirrhosis-complications; Ultrasonography; Splenectomy-adverse effects; Magnetic Resonance Imaging; Biopsy, Needle; Liver Neoplasms

Abstract: We report a patient who has a cirrhotic liver secondary to hepatitis C virus infection with a liver lesion incidentally found on routine liver ultrasound. The patient had a history of Splenectomy 30 years earlier. The magnetic resonance imaging [MRI] characteristics suggested the diagnosis of intrahepatic splenosis, which is confirmed by core needle biopsy. Knowledge of these imaging findings makes this entity important to be considered in the differential diagnosis of a hepatic tumor in the presence of a history of Splenic trauma or surgery.

# Staphylococcal Vaccines

## chemical synthesis

# Construction of a new fusion protein vector associated to fibronectin binding protein A and clumping factor A derived from Staphylococcusaureus NCTC 8325.

Faghri, J.; Bagheri, Kamran Pooshang; Žadeh, Delavar Shahbaz; Yazdani, Rahmatolah; Sadeghi, Hamid Mirmohammad; Moghim, Sharareh

E-mail:faghri@med.mui.ac.if

Isfahan University of Medical Sciences - Faculty of Medicine - Department of Bacteriology and Virology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 18-24 (37 ref.)

**Keywords:** Staphylococcus aureus-pathogenicity; Coagulase; Nucleic Acid Hybridization; Taq Polymerase; Polymerase Chain Reaction; Community-Acquired Infections; Cross Infection; Fibronectins; Staphylococcal Protein A **Abstract:** Staphylococcus aureus is a leading cause of many nosocomial and community acquired infections. According to many reports, antibiotic therapy cannot guarantee the eradication of S.aureus infections. Thus designing an adhesin based vaccine could restrain the S. aureusinfections. This study designed for construction of a new fusion protein vaccine against S.aureus infections based on adhesin molecules fibronectin binding protein A [FnBPA] and clumping factor A[ClfA]. Bioinformatic experiments were performed using Oligo analyzer and DNAMAN soft-wares. The

fragments corresponding to fnbA binding domain and a C-terminal fragment from clfA were amplified from S. aureus NCTC8325 genomic DNA. Purified PCR products and the vector, pET15b, were digested with Ncol and BamHI. The digested PCR products were hybridized together and then ligated to digested vector. Finally incomplete construct was assembled by Taq DNA polymerase. To quick confirmation of cloning procedure the new construct designated of fnbAclfA was digested with Ncol and BamHI. To further verification, the product was sent for sequencing. The data based on bioinformatics analysis showed no homology between fusion protein and human proteins. Digestion of new vector with Ncol and BamHI confirmed the ligation of fusion protein sequence into pET15b. Sequencing results verified the integrity of target sequences. This study is the first effort to construct a new fusion protein vector based on S. aureus adhesions using a new design. This project is being continued to study the expression and biological activity of the fusion protein in a cell culture model.

## Stomach Neoplasms

## diagnosis

Gastric cancer in Khartoum; presentation and management.

Elmahi, Self I.M.; Elsamani, Mohamed El.; Ahmed, Mohamed E.

University of Khartoum - Faculty of Medicine - Department of Surgery

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 54-59 (20 ref.)

Keywords: Stomach Neoplasms-pathology; Stomach Neoplasms-surgery; Mortality; Patient Satisfaction; Treatment Outcome; Lymph Nodes; Endoscopy, Gastrointestinal; Survival Rate; Prospective Studies; Disease Management

Abstract: Gastric cancer is a dreadful killer worldwide. There is enormous variation in the occurrence of the disease throughout the world. Only scarce data is available about the features and the prognosis of the disease in Africa. This study was conducted to determine clinic pathological characteristics, and the treatment outcome of patients with gastric malignancy in Sudan. A prospective descriptive study of 105 patients presented with gastric cancer over 2 year period in a general surgical unit in Khartoum Teaching Hospital [KTH]. The mean age at presentation was 57 years [range 23-78 years], and most of patients were males [80%]. The most frequent mode of presentation was epigastria pain [90%], loss of weight [90%] and anorexia [70%].Upper gastric tumor location accounted for 42%. Histologically; carcinoma accounted for 100 cases, lymphoma in 3 and leiomyosarcoma in 2 cases. Adenocarcinoma was the most frequent [94%], well differentiated Adenocarcinoma and intestinal type were also commonest varieties[31%] and [17%] respectively. Most of the patients had blood group O[+] [50%]. Palliative resection was attempted in 48 patients [45%] with a survival duration of 14 months compared with 5 month for those who had no resection [n=20]. Morbidity rate was significantly higher in the resection group compared with non-resectively. Patients satisfaction was significantly better in the resection group. Gastric cancer is a disease affecting younger males presenting very late where palliative resection is an option in 45% of patients with satisfactory outcome and a mean of 14 months survival.

## Thoracic Injuries

## diagnosis

#### Right main bronchial disruption due to blunt trauma.

Kayani, Asif Gul; Pervaiz, Aftab Ahmed; Umair, Bilal; Siddique, Khalid; Khalique, Khalid

E-mail:asifgulkayani@hotmail.com

Combined militatry Hospital - Department of Anaesthesia

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2009; 19 (4): 249-251 (12 ref.)

**Keywords:** Thoracic Injuries-therapy; Rib Fractures; Pneumothorax-therapy; Bronchial Fistula; Subcutaneous Emphysema; Bronchoscopes; Respiratory Distress Syndrome, Adult-diagnosis; Respiratory Distress Syndrome, Adult-therapy; Parenteral Nutrition; Surgical Procedures, Operative; Bronchi-injuries; Wounds, Nonpenetrating

Abstract: A young soldier was crushed between two vehicles sustaining severe injury to right side of chest leading to multiple rib fractures, tension pneumothorax, bronchopleural fistula, and lateron gross surgical emphysema. Rigid Bronchoscopy confirmed injury to right upper bronchus. Surgical repair and postoperative care of such a major, although rare, injury was successfully achieved in this small hospital by a team augmented by a specialist from thoracic surgery centre. The risks of transport of a major thoracic injury should be employed as early as possible in all suspected cases of major airways injury. An outreach service by a thoracic surgery centre can belief-saving.

# Thyyrotoxicosis

## diagnosis

#### Atypical progression of thyrotoxic manifestations while awaiting laboratory confirmation.

Nagarajan, Venkatesan; Al Shubaili, Asmahan

E-mail:nagarajanusharani@hotmail.com

Ibn Sina Hospital - Department of Neurology

KMJ - Kuwait Medical Journal 2009; 41 (2): 162-165 (12 ref.)

**Keywords:** Thyyrotoxicosis-drug therapy; Respiratory Tract Infections; Motor Neuron Disease; Paraplegia; Myasthenia Gravis; Graves Ophthalmopathy; Thyroid Function Tests; Thyroid Crisis; Hypokalemic Periodic Paralysis

Abstract: n ill-nourished man, whose hyperthyroid state was unmasked by respiratory infection, had more than one attack of thyroid storm and rapidly went through several unusual complications which included thyrotoxic periodic paralysis, upper and lower motor neuron manifestations, neuropsychiatric and metabolic disturbances. Diagnosis of hyperthyroidism was established after 14 days with the arrival of thyroid function test which was drawn on admission. Though his symptoms improved after initiating treatment, he continued to suffer from thyroid associated ophthalmopathy and myasthenia gravis. Although these manifestations of hyperthyroidism are well known, their occurrence in a single patient is unusual. This report highlights the need for the physicians to be alert regarding these rare manifestations of thyrotoxicosis in their patients and initiate treatment as it is difficult toots in rapid laboratory confirmation in emergency department.

## Tobacco

#### genetics

# Transformation and expression of Na+/H+antiporter vacuolar [AtNHX1] gene in tobacco plants under salt stress.

Soliman, Mohamed H.; Omar, Hanaa S.; El Awady, Mohamed A.; Al Assal, Sallah; Gamal El Din, Abd Alkader Y.

Cairo University - Faculty of Agriculture - Department of Genetics

Arab Journal of Biotechnology 2009; 12 (1): 99-107 (20 ref.)

Keywords: Plant Leaves; Salts; Polymerase Chain Reaction; Plants, Genetically Modified; Sodium-Hydrogen Antiporter

Abstract: Saline soil is a serious problem worldwide, and it is necessary to improve the salt tolerance of plants to avoid the progressive deterioration of saline soil. Agro bacterium based system was employed to transfer a vacuolar Na[+]/H[+] antiporter [AtNHX1] gene into tobacco leaf discs. Hundred thirty putative transgenic tobacco plants were obtained. The leaf painting as say was applied to select the transform ants containing the bar gene [basta herbicide resistance]. Inaddition, the stable integration of the AtNHX1 gene was confirmed by PCR analysis. The expression of encoding sequence AtNHX1 gene was detected by the accumulation of salt in the transgenic tobacco plants under the salt stress conditions. Transgenic tobacco plants expressing the AtNHX1 gene were able to grow in the presence of 150 to 300 mM NaCl and accumulated significantly at high concentrations of sodium ions in the leaves. However, the wild type plants could not tolerate a concentration up to 150 mM NaCl. This remarkable high salit tolerance intransgenic tobacco plants and by tobacco plants could not tolerate accomplying important phytoremdiation plants in high saline lands.

## Tocotrienols

## therapeutic use

# Vitamin E derivative alpha-tocotrienol failed to show neuroprotective effects after embolic stroke in rats.

Allahtavakoli, Mohammad; Pourshanazari, Aliasghar; Heshmatian, Behnam

E-mail:alahtavakoli@razi.tums.ac.ir

Rafsanjan University of Medical Sciences - School of Medicine - Department of Physiology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 9-17 (31 ref.)

Keywords: Tocotrienols-pharmacology; Neuroprotective Agents; Stroke-therapy; Infarction, Middle Cerebral Arterychemically induced; Brain Damage, Chronic; Rats, Wistar

Abstract: Previous studies have demonstrated that pretreatment with alpha-tocotrienol [a-TCT] can reduce ischemic damage in mice following middle cerebral artery [MCA] occlusion. It is also reported to decrease stroke dependent brain tissue damage in 12-Lox-deficient mice and spontaneously hypertensive rats. In the present study, the neuroprotective effects of a-TCT and rosiglitazone [RGZ] at 3 hr after cerebral ischemia were investigated. Stroke was induced by embolizing a preformed clot into the MCA. Rats were assigned to vehicle, a-TCT [1 or 10 mg/kg], RGZ and sham-operation. Compared to the control group, only RGZ decreased infarct volume [P < 0.05], neurological deficits [P < 0.05] and sensory impairments [P < 0.01] but low and high doses of a-TCT did not show any significant neuroprotective effect. Our data showed that a-TCT was not neuroprotective at 3 hr after the embolic model of stroke. Further studies should be undertaken to clarify the neuroprotective effects of a-TCT after stroke.

# Tonsillectomy

## adverse effects

#### Surgical emphysema after tonsillectomy in Jordan University Hospital.

Al Layla, Abdul M.; Al Barzangi, Bassam; Badran, Izdiad <u>E-mail:aallayla44@hotmail.com</u> Jordan University Hospital - ENT-Surgeon Jordan Medical Journal 2009; 43 (1): 51-54 (23 ref.) **Keywords:** Subcutaneous Emphysema-diagnosis; Subcutaneous Emphysema-therapy; Tomography, X-Ray Computed; Postoperative Complications; Hospitals, University Abstract: We report a case of a twenty-year old female patient who got subcutaneous emphysema following tonsillectomy. The patient had general anesthesia, intubation and ventilation air bubbles were noticed intraoperatively by the surgeon; then the patient developed surgical emphysema involving the face, neck and upper chest. Clinical and radiological assessment revealed a previous surgery in emphysema which extend to the anterior mediastinum and anterior chest wall and bilateral axillae with air in the retro peritoneal cavity. Management and follow-up where discussed, and to the best of our knowledge, our case is the first to be published from Jordan.

# Tooth Bleaching

# The effect of 15% carbamide peroxide bleaching on the shear bond strength of composite to enamel.

Mortazavi, V.; Fathi, M.H.; Ataei, E.; Khodaeian, N.

E-mail:v mortazavi@dnt.mui.ac.ir

Isfahan University of Medical Sciences - School of Dentistry, Dental Research Center - Department of Operative Dentistry

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 24-30 (46 ref.)

Keywords: Peroxides; Urea-analogs and derivatives; Drug Combinations; Shear Strength; Dental Bonding; Composite Resins; Dental Enamel; Molar

Abstract: Carbamide peroxide bleaching has been implicated to adversely affect the bond strength of composite to enamel. The purpose of this study was to evaluate the effect of car amide peroxide bleaching on the shear bond strength of composite to bleached enamel bonded with a three step total etch system; Scotch bond Multipurpose [SBMP], and two simplified all-in-one systems; Prompt L-Pop [PLP] and i bond. Seventy two human molar teeth were randomly assigned to three control and three experimental groups. The experimental groups were subjected to a%15 carbamide peroxide bleaching system. Twenty four hours later, all the control and experimental groups were bonded with cylinders of composite, using three dental bonding agents. After thermo cycling, shear bond strengths were determined by a universal testing machine. The data were evaluated using one way ANOVA and Duncan tests [P < 0.05]. The composite bond strengths of SBMP were 19.52 +/- 15.21 MPa to the unbleached and 7.95 +/- 4.16 MPa to the bleached enamel. For PLP, the unbleached enamel exhibited bond strengths of 9.6612.89 MPa and, the bleached one showed a bond strength value of 5.3910.66 MPa. For i-bond the composite bond strengths were 11.46 +/- 4.31 MPa to the unbleached and 6.41 +/- 2.01 MPa to the bleached enamel. There was a statistically significant difference between the shear bond strength of the control and experimental groups of each dental bonding agent [SBMP, P < 0.001, PLP, P < 0.001, i bond: P = 0.002]. Bleaching with 15% carbamide peroxide used in this study reduced the bond strengths of the composite to the enamel bonded with a three step total etch and two simplified one step all-in-one dental bonding agents.

# **Tooth Erosion**

## epidemiology

Dental erosion and its risk factors in 12-year-old school children in Mashhad.

Talebi, M.; Saraf, A.; Ebrahimi, M.; Mahmodi, E.

E-mail:talebim@mums.ac.ir

Mashhad University of Medical Sciences - School of Dentistry - Department of Pedodontics

Journal of Dentistry - Shiraz University of Medical Sciences 2009; 9 (Supp.): 13-18 (16 ref.)

Keywords: Risk Factors; Schools; Child; Cross-Sectional Studies; Incisor; Carbonated Beverages-adverse effects; Swimming; Prevalence

**Abstract:** The dental hard tissues might be destroyed by different factors. One is dental erosion defined as the progressive loss of hard dental tissues by a chemical process not involving bacterial action. The purpose of this study was to determine the prevalence of dental erosion and its risk factors in 12-year-old school children. This cross-sectional study was carried out on 483 12-year-old school children in Mashhad, 2007. Dental erosion was recorded for the labial and palatal surfaces of the upper incisors. For measurement purposes, the O'sullivan's index was adopted, and the results were statistically analyzed by T-student and Chi-Square tests. The prevalence of dental erosion was 38.1%, with no significant sex difference. Dental erosion was significantly higher in private school children [P < 0.001] and in underprivileged areas [P = 0.005]. Matt appearance of the involved cases, more than half of their surfaces were diagnosed as affected by erosion [24.4% central incisors, 5.2% lateral incisors]. The frequency consumption of carbonated beverages and night drinks illustrated a significant relation with dental erosion [P = 0.01, P = 0.023]. Children who swam professionally in swimming pools had significantly higher dental erosion [P < 0.001]. Based on the findings of this study, individually tailored preventive programs may be recommended to patients and a comprehensive case history should be taken so that all risk factors can be revealed.

## Triticum

#### Effect of exogenous ascorbic acid on wheat tolerance to salinity stress conditions.

Zeid, Farghal A., El Shihy, Osama M.; Ghallab, Abdel Rahman M.; Ibrahim, Fatma El Zahraa A. Cairo University - Faculty of Agriculture - Department of Agricultural Botany, Plant Physiology Division **Arab Journal of Biotechnology** 2009; 12 (1): 149-173 (94 ref.) Keywords: Sodium Chloride; Ascorbic Acid; Plant Components; Oxidative Stress; Protective Agents; Seawater; Salinity

Abstract: In vitro experiments were performed to determine responses of wheat calli to ascorbic acid [AsA] concentrations [0, 250, 500, 1000 and 2000 ppm] under different levels of sea water [0, 15, 30 and 45%] and to determine suitable concentrations of AsA for exogenous treatments to enhance wheat tolerance to salinity. Results of this study indicated that AsA of [500, 1000 and 2000 ppm] concentrations improved tolerance of wheat calli to salinity. Two pot experiments were conducted during the two successive seasons 2004-2005 and 2005-2006 to determine the effect of exogenous AsA of 0, 500, 1000 and 2000 ppm concentrations at 45 and 75 days after sowing on growth, chemical composition and yield of wheat plants cv. Giza 168 [salt sensitive] irrigated with different levels of sea water [0, 15, 30 and 45%] in comparison with plants of cv. Sids 1 [partially salt tolerant]. The obtained results in this study clearly proved the role of AsA in increasing tolerance of wheat plants under salinity stress. Exogenous AsA enhanced plant growth, chemical composition and consequently the productivity of wheat plants under salinity stress conditions. These effects may be attributed to the protective role of AsA in plant cells from the oxidative stress induced by salinity. It could be concluded that exogenous AsA of 1000 ppm concentration at 45 and 75 days after sowing is the most effective treatment to increase wheat tolerance to salinity.

## Tuberculosis

## diagnosis

Optimizing double repetitive PCR for molecular typing of mycobacterium tuberculosis.

Rahmo, Abdulkader E-mail:ak.rahmo@scs-net.org

National Commission for Biotechnology

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 7-12 (17 ref.)

Keywords: Mycobacterium tuberculosis-isolation and purification; Polymerase Chain Reaction; Tuberculosis, Multidrug-Resistant

Abstract: Establishing a simple, cost effective and efficient method for the molecular epidemiologic examination of Mycobacterium tuberculosis based on double repetitive element polymerase chain reaction technique. Fourteen isolated and characterized Mycobacterium tuberculosis provided genomic samples for the amplification using the double repetitive element polymerase chain reaction method, the resulting DNA fragments were stained using silver staining and results were compared with the original detection method. The introduction of relatively simple modifications improved significantly the efficiency of isolate stain discrimination, without rendering the method more costly. The proposed improved method can be expected to better serve as a molecular epidemiologic technique for the fight against the widespread mounting threat of tuberculosis in developing countries.

## history

#### History of TB in the Sudan.

Zaki, A.M.; Mirghani, M.; Eltilib, H.A.

E-mail:drtuti@yahoo.com Omdurman Islamic University - Faculty of Medicine

Sudan Journal of Medical Sciences 2009; 4 (2): 179-187 (12 ref.)

Keywords: Tuberculosis-epidemiology; Retrospective Studies; Disease Susceptibility; Prevalence

Abstract: Medical history in Sudan is far from being complete. There are no reliable records. Attempt to write on the projects and development of history of TB in the Sudan is a difficult task. To study and trace the progress of TB in Sudan during the last century through their historical development. A retrospective study. Data were collected from the annual reports of the Sudan Medical Services. Libraries and a number of previous studies were consulted. The route of entry of TB in the Sudan is mainly from the North. The South was virgin from TB up to 1930s. Northern Sudanese tribes have a high susceptibility and incidence of TB during 1925-1932 [3.7/1000]. The south and the Nuba Mountains were almost free from infection or disease. The infectivity rate was highest in North 4.3% while Khartoum showed 3%. In the South, Rumbek district, no TB cases were reported before the age of puberty up to 1930. Prevalence of tuberculosis in 1959/1960 was 26.0% and the detection rate was only 30%. Northern Sudanese contracted tuberculosis while serving in the Egyptian army and cities. The Southern and Western tribes who were almost free from TB infection became highly susceptible to both infection and disease. The infectivity ratere mains static during the last 50 years.

# Tuberculosis, Endocrine

#### Tuberculosis of pancreas and peripancreatic lymph nodes: a case report.

Taher, M.T.; Hashemi, S.M.H.; Mohammadi, M.; Hashemi, F.

E-mail:mtalebitaher200@yahoo.com

Firoozgar University Hospital - Infectious Diseases Unit - Department of Internal Medicine EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1617-1620 (20 ref.) Keywords: Tuberculosis, Lymph Node; Pancreas-pathology; Tomography, X-Ray Computed

# Tuberculosis, Multidrug-Resistant

# Comparison of the effectiveness of 2 treatment regimens in patients with isoniazid-resistant tuberculosis.

Tabarsi, P.; Baghaei, P.; Hemmati, N.; Mirsaeidi, M.; Kazempour, M.; Mansouri, D.; Masjedi, M.R.

E-mail:tabarsi@nritld.ac.ir

Shaheed Beheshti University of Medical Sciences - National Research Institute of Tuberculosis and Lung Disease - Mycobacteriology Research Centre

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1346-1350 (18 ref.)

Keywords: Isoniazid; Ant tubercular Agents; Mycobacterium tuberculosis-drug effects; Treatment Outcome

**Abstract:** We compared the effectiveness of 2 treatment regimens for isoniazid-resistant tuberculosis [TB] in 42 patients attending a TB referral centre in the Islamic Republic of Iran. The patients were divided into 2 treatment groups: 26 received the 6-month standard HRZE treatment and 16 received a modified treatment of RZE for 6 months. There were no significant differences in age or sex of the groups. With the standard method of treatment, 21 [80.8%] patients were cured, 4 [15.4%] resulted in treatment failure, and 1 [3.8%] died. In the modified treatment group, 16 [100%] patients were cured. These differences were not statistically significantly different [P =0.194].

# Tuberculosis, Pulmonary

## epidemiology

# Incidence of AFB sputum smears positive patients of pulmonary tuberculosis attending out patient department of chest medicine, Nishtarhospital, Multan.

Atiq, Salman; Iqbal, Tehseen; Anjum, Naveed

E-mail:dr\_tehsiniqbal@yahoo.com

Nishtar Medical College - Department of Physiology

Medical Forum Monthly 2009; 20 (1): 3-8 (22 ref.)

Keywords: Tuberculosis, Pulmonary-diagnosis; Sputum-microbiology; Mycobacterium tuberculosis; Retrospective Studies; Prevalence; World Health Organization; Incidence

**Abstract:** To find out the incidence of AFB smear positive patients of pulmonary tuberculosis who presented to outpatient department of chest medicine from January 2005 to October 2007. This retrospective study was carried out in the Department of Physiology in collaboration with Department of Chest Medicine and Tuberculosis Nishtar Hospital Multan. In this study, the hospital records of newly diagnosed patients of pulmonary tuberculosis were analyezd. The patients were classified into, various groups according to age and gender. The incidence of AFB smear positive patients and frequency of the presentation was calculated. The overall percentage of AFB smear positive cases between January 2005 and October 2007 in region of Multan was 22.16%, but it has dropped gradually from 2005 to 2007 both in male and female patients. A higher incidence was seen in population ranging in age between 10-30 years. Sputum smear examination for AFB is simple and cost-effective method to provide a fairly realistic estimate of the incidence or prevalence of tuberculosis. Although there was a decreasing trend in the incidence of AFB smear positive cases from 2005 to 2007, the high burden of tuberculosis among Pakistani population still warrants renewed and enhanced efforts to control TB. The higher prevalence of persistent cough and AFB-positive sputum smears need further exploration.

# Urethral Obstruction

## diagnosis

## Evaluation of renal transit time [RTT] in children with MR urography.

Abou Hashed, Ahmed; Mansour, Magdy

Al Azhar University - Faculty of Medicine - Radio diagnosis Department

New Egyptian Journal of Medicine [The] 2009; 40 (1): 19-33 (31 ref.)

**Keywords:** Urethral Obstruction-radiography; Urography; Magnetic Resonance Imaging; Contrast Media; Child; Retrospective Studies; Hydronephrosis-diagnosis; Hydronephrosis-etiology; Hydronephrosis-radiography

**Abstract:** To evaluate use of dynamic contrast material-enhanced. Magnetic resonance [MR] urdgraphy for measurement, of renal transit time [RTT of a contrast agent through the kidney and collecting system so as to identify obstructive uropathy in children. One hundred twenty-six children suspected of having hydronephrosis were hydrated prior to undergoing both conventional and dynamic contrast-enhanced MR urography of the kidneys and urinary tract. A three-dimensional sequence was used to track passage of contrast agent through the kidneys. Time between the appearance of contrast material in the kidney and its appearance in the ureter at or below the level of the lower pole of the kidney was defined as RTT. Bland-Altman plots were used to quantify intra- and interobserver performance. In 30 children, a nuclear medicine renogram was also obtained, and the half-life of renal signal decay after furosemide administration was derived and compared with the MR imaging RTT by using receiver operating characteristic curves. On the basis of RTT, kidneys were classified as normal [RTT

## Varicocele

#### surgery

#### Varicocelectomy for scrotal pain. when and how?

Al Hawary, Mohamed Abo El Saud M.

Ahmed Maher Teaching Hospital

New Egyptian Journal of Medicine [The] 2009; 40 (1): 67-71 (9 ref.)

Keywords: Scrotum; Pain; Pain Measurement; Postoperative Complications; Treatment Outcome

Abstract: The aim of the present study was to assess and compare pre-and postoperative scrotal pain in patients with vasicocele who underwent varicocelectomy with different approaches. The study included 72 consecutive patients with left-sided varicocele who had left scrotal pain for more than 3 months. All patients underwent varicocele ligation using either a sub inguinal or inguinal approach with or without external spermatic vein ligation. The intensity of Scrotal Pain was assessed both before and after the surgery. 60 patients have attended the follow-up. Of the 60 patients available for follow up, the surgery was successful in 50 [83.4%], 37 [61.1%] patients reported the complete resolution of pain while 13 patients [22.3%] reported partial resolution. Symptoms worsened in a single case and pain persisted postoperatively in 9 cases [15.7%]. There were no statistically significant differences in the characteristics of the pain and grade of varicocele between postoperative groups. A significant difference was observed in postoperative success between patients who had external spermatic vein ligation and those who did not, regardless of the surgical approaches is an effective and reasonable treatment option in this patient group and should include external spermatic vein ligation for a satisfactory outcome.

## Vascular Resistance

**Does heart affect peripheral vascular resistance following myocardial ischemia and reperfusion?** Kazerani, Hamid Reza; Mousavi, Seyyed Yousof

E-mail:kazrani@yahoo.co.uk

Ferdowsi University - The School of Veterinary Medicine - Department of Physiology

Iranian Journal of Basic Medical Sciences 2009; 12 (1): 51-60 (53 ref.)

Keywords: Myocardial Ischemia; Myocardial Reperfusion Injury-physiopathology; Cardiovascular Agents; Atrial Natriuretic Factor; Femoral Artery; Rabbits; Heart

**Abstract:** The aim of this study was to investigate the overall effect of cardiac vasoactive factors during coronary occlusion and reperfusion on peripheral vascular tone, using a sequential isolated rabbit heart-ear perfusion model. Isolated ears were perfused with the effluent of isolated hearts subjected to ischemia [30 min] and reperfusion [180 min, n=6]. The comparator groups consisted of a sham operated group [no ischemia, n=5] and the ears that were directly perfused with modified Krebs [n=10]. At the end of previous experiment, the perfusion mode of the sequentially perfused ears was converted to non-sequential perfusion with modified Krebs for 10 min and vice versa. In a separate experiment, samples collected from heart effluent during different stages of the first experiment were perfused to isolate stabilized ears [3 min; n=5] or hearts [1 min; n=5]. The possible effects of the samples on the tone of isolated femoral artery rings were also studied using an organ bath [n=5]. Coronary occlusion and reperfusion did not exert significant effects on the heart rate or the perfusion pressure of the sequentially perfused ears. The samples collected during different stages of ischemia and reperfusion did not exert significant effects on the current study suggests that isolated heart, even following ischemia and reperfusion, does not release vasoactive substances in concentrations sufficient enough to affect peripheral resistance.

## Violence

## statistics and numerical data

#### Physical violence against school children.

Lafta, Riyadh K.; Al Neami, Maha A.; Adnan, Lubab

E-mail:riyadhlafta@yahoo.com

Mustansiriya University - College of Medicine - Epidemiology

Journal of the Arab Board of Medical Specializations 2009; 10 (1): 34-41 (30 ref.)

Keywords: Child Abuse-statistics and numerical data; Parent-Child Relation; Students; Prevalence; Parents; Cross-Sectional Studies; Child; Schools

**Abstract:** To find out the prevalence of violence against children in Iraq through a sample of primary school children, and to throw light on some of the associated factors. Sixty primary schools were surveyed. A total of 4528 students [2396 boys and 2132 girls age between 8-11 years] were interviewed to collect information about age, gender, number of sisters and brothers, father's and mother's occupation, in addition to information about exposure to violence [source, frequency, reasons for violence, sequel of violence, reaction and feeling of the child towards violence]. The results showed that 64% of the sample children were exposed to violence. The main source was the mother [62.5%] followed by the father [59.2%]. Quarrels were the main reason for violence [74.9%]. Regarding gender; 75.5% of the boys and 52.5% of the girls were exposed to violence. The most common reaction of the child was silence 38.6%, crying 33.6%

and violence 14.1%. While 44.7% agreed that violence was not good, 29.3% take it as a natural norm. The results also showed that 93% of children living in families with domestic violence were exposed to violence. Two thirds of the children are subjected to violence at home, school, or street. The perpetrators are mainly the parents. Some of children tolerate violence and consider it as normal. There is a link between domestic violence against women and that against children. There was a highly significant association between large family size and violence.

## von Willebrand Factor

## blood

#### Plasma level of von Willebrand factor: an indicator of severity in sickle cell disease.

Omer, Nawal Eltayeb; Satti, Maria M. Hamad; Mohamed, Abdelrahim Osman

University of El Imam El Mahdi - Faculty of Medicine and Health Sciences - Department of Pathology

Sudan Journal of Medical Sciences 2009; 4 (2): 123-127 (23 ref.)

Keywords: Anemia, Sickle Cell; Severity of Illness Index; beta-Globulins; Gene Mutation; Homozygote; Thrombosis; Ischemia; Enzyme-Linked Immunosorbent Assay; Hemoglobin

**Abstract:** Sickle cell anaemia is a congenital hemolytic disorder caused by mutation in the beta-globin gene at position 6 with replacement of glutamic acid by valine. Patients who are homozygous for this mutation suffer from hemolytic anaemia and other serious complications. The underlying pathology of many of these complications is the occurrence of recurrent vasoocclusion due to microthrombi formation resulting in organs ischaemia. In this study we investigated the role of vWF as a determinant of sickle cell disease severity through its contribution to the formation of such microthrombi. The clinical disease severity was determined using two different scoring methods, and vWF antigen level in the plasma was estimated by using ELISA technique. Seventy Sudanese patients were investigated in this study. They were 35 females and 35 males, the mean of their ages +/- standard deviation was 6.8 +/- 4.7 years. Seventeen controls with normal haemoglobin were also included with mean age of 6.5 years. Thirty four patients presented during vasoocclusive crisis and 36 presented in steady state. vWF was high [179.83%] among patients compared to controls [82.4%], p< 0.001 there was positive correlation between severity score and vWF level in the plasma in steady state in the two scoring methods used [r = 0.79, p = 0.008 for method I and r = 0.78, p = 0.009 for method II]. So, severity of sickle cell disease increases with elevation of vWF level in the plasma in the steady state.

## Waist Circumference

#### Cut point of waist circumference in Egyptian diabetic patients.

Qmar, Belal; Emara, Ibraheim; El Gazar, Helmy

Internal medicine national institute of diabetes and endocrinology

New Egyptian Journal of Medicine [The] 2009; 40 (1): 51-57 (17 ref.)

Keywords: Diabetes Mellitus; Risk Factors; Obesity; Body Mass Index; Body Constitution; Mass Screening; Cholesterol; Triglycerides; Sensitivity and Specificity; Cardiovascular Diseases-etiology

Abstract: Abdominal obesity is increasingly recognized as a major] risk factor for cardiovascular disease [CVD]. Compared with body mass index [BMI], waist circumference appear to be more strongly associated with metabolic risk factors. There are contradictor about the cut point of waist circumference in different ethnic group. Our aim therefore was to measure waist circumference and other criteria of the metabolic syndrome in Egyptian diabetic patients to determine Egyptian cut point for waist. 2651 diabetic patients with different duration of diabetes participated in this study. There is ethnic variation as regard waist circumference in diabetic Egyptian patients, mean WC [M = 102 cm. F = 109 cm]. It is clear that female waist is bigger than male and this is Egyptian variation- So cut point for metabolic syndrome must be changed due to ethnic variation. By using receiver-operating characteristic curves [ROC] the best point was [M = 94 cm, F = 98 cm] for waist cut point to determine metabolic syndrome and 30 kg/m2 for body mass index. Correlation analysis proof that waist is better than BMI as a tool to detect diabetic complications like retinopathy and IHD. and regression analysis show that in diabetic female patient's glycaemic state is linked to BMI.

#### Waist Circumference in recently diagnosed type 2 diabetics.

Omar, Belal; Khalid, Mohsen; El Bana, Hassan; Mafouz, Mohamed H.

National Institute of Diabetes and Endocrinology - Internal Medicine

New Egyptian Journal of Medicine [The] 2009; 40 (1): 34-39 (17 ref.)

Keywords: Diabetes Mellitus, Type 2-diagnosis; Body Constitution; Body Mass Index; Cholesterol; Triglycerides; Metabolic Syndrome X; Waist-Hip Ratio; Obesity-diagnosis

Abstract: Body mass index [BMI] is often used to reflect total body fat amount [general obesity] whereas waist circumference [WC], waist-to-hip ratio or waist-to height ratio is used as a surrogate of body fat centralization [central obesity]. The clustering of cardiovascular risk factors in association with disturbance of glucose and lipid metabolism is referred to as metabolic syndrome. Men and women who have waist circumference > 94 cm and 80 cm respectively, are considered to be at increased risk for cardio metabolic disease. The relation between waist circumference and clinical outcome is consistently strong for diabetes risk, and waist circumference is a stronger predictor of diabetes than BMI. Our study is the first study to measure waist circumference in newly diagnosed Egyptian diabetic patients. We found that, 56% of newly diagnosed Egyptians diabetic patients have metabolic syndrome. At the same time we found a statistically significant difference as regard metabolic syndrome components between low waist and high waist groups but the difference was statistically insignificant when we compared low BMI with high BMI groups in newly diagnosed diabetics. This means that waist circumference is a simple tool to predict diabetes and metabolic syndrome between.

## Water

#### [Quality of water and access to it in the Occupied Palestinian Territory]

Al Khatib, I.A.; Al Remawi, I.S.; Ghait, L.I.; Takrouri, A.A.

E-mail:ikhatib@birzeit.edu

Birzeit University - Institute of Environmental of Water Studies

EMHJ - Eastern Mediterranean Health Journal 2009; 15 (6): 1542-1552 (26 ref.)

Keywords: Water Supply; Water Microbiology; Water Purification

**Abstract:** We investigated access to and quality of water in the Occupied Palestinian Territory. As regards access, 89.2% of Palestinian families live in households connected to the public water network: 84.1% in the West Bank and 99.3% in the Gaza Strip. In the north and south West Bank, 2.3% of households depend on buying water from tanks but this is not available in the mid-West Bank and Gaza Strip. Rain-fed cisterns are used in 13% of households in the West Bank and 0.2% in the Gaza Strip. Overall, 63% of households considered the water quality good, 88.0% in the West Bank and 13.3% in the Gaza Strip. There was a significant relationship between water-related diseases and water quality: the spread of such diseases was greater in the Gaza Strip.

## Wounds and Injuries

## epidemiology

#### Childhood injuries seen at emergency department DHQ hospital Rawalpindi in 2007.

Hanif, Muhamad; Hamid, A.; Abdur Rashid, Mian; Anwaar; Alvina; Uz Zaman, Fasseh

FLJMC Rawalpindi

Medical Forum Monthly 2009; 20 (1): 32-35 (25 ref.)

**Keywords:** Child; Emergency Service, Hospital; Accidental Falls-statistics and numerical data; Retrospective Studies **Abstract:** To determine the frequency and pattern of injuries in children less than 15 years of age 500 oases are studied in children less than 15 years of age at Emergency Department, DHQ Hospital Rawalpindi. Emergency Department DHQ Hospital Rawalpindi. Retrospective study to determine the relative frequency and pattern of injuries in children less than 15 yrs of age. A total number of 500 children were seen in ED and ages ranged from 1 month to 15 years. There were 321 males and 179 Females representing about 61.2% and 35.8% female respectively with ratio of about 2: 1. A total no of 210 children were injured by fall. In 0-5 year age group fall is either from stair furniture, beds or walker. In 5-15 years age group the playground injuries like fall from Owings, slide and sea saws. The injuries were mostly on head and upper limbs.

# Yoghurt

#### The effect of natamycin on keeping quality and organoleptic characters of yoghurt.

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

Omar El Mokhtar University - Faculty of Veterinary Medicine

Arab Journal of Biotechnology 2009; 12 (1): 41-47 (16 ref.)

Keywords: Natamycin-pharmacology; Hydrogen-Ion Concentration; Antifungal Agents; Sensation

**Abstract:** This study was planned to evaluate the shelf life and the changes occurring in the organoleptic characters of yoghurt supplemented with natamycin during the storage period. Yoghurt samples were prepared and divided into two groups; natamycin was added to the first group at the levels of 10 and 20 mg / kg, while the second group of yoghurt was prepared without natamycin and kept as a control. Yoghurt cups were stored all over the experimental period [35 days] at 4 +/- 1°C. Organoleptic examinations, estimation of pH and titertable acidity as well as enumeration of total moulds and yeasts were done on both treated and control yoghurts. The yoghurts were examined at the 3[rd] and 7[th] days, then weekly till the end of storage period. The treated group of yoghurt showed acceptable degree of organoleptic examination, while yeasts and moulds were not detected till the end of the storage time. On the other hand, control samples of yoghurt showed unacceptable degrees of examination and contamination with moulds and yeasts. Natamycin was proved to be a suitable and effective antifungal agent which increases the shelf life of yoghurt without changing in the normal characters of the products.

Appendix I

# **Author Index**

Ababneh, Nida A. LEUKEMIA, MYELOGENOUS, CHRONIC, BCR-ABL POSITIVE (genetics)

Abbas, Dina E. LYCOPERSICON ESCULENTUM (genetics)

Abbas, F. Mashhadi ODONTOGENIC CYST, CALCIFYING (diagnosis)

Abbas, Ghulam ASCITES (etiology)

Abbas, Shahid RESPIRATORY PARALYSIS (etiology)

Abbaspour, Z. PREMARITAL EXAMINATION

Abd Elwahab, H.M. DIABETES MELLITUS, TYPE 1 (diet therapy)

Abdalla, Ahmad Abdalazim ELECTROLYTES (blood)

Abdalla, Elmuataz Elmansi ELECTROLYTES (blood)

Abdallah, Naglaa A. LYCOPERSICON ESCULENTUM (genetics) CUCUMOVIRUS (Genetics)

Abdel Fattah, M. HABITS

Abdel Gader, A.G.M. HOMOCYSTEINE (blood)

Abdel Gader, Abdul Jalil M. LIPOPROTEIN [A] (blood)

Abdel Gayoum, Abdel Gayoum A. DIABETES MELLITUS, TYPE 2 (diagnosis)

Abdel Hadi, Abd El Hadi A. ORYZA SATIVA (genetics)

Abdel Hai, R. HEALTH PROMOTION

Abdel Hameed, Amany PNEUMATOSIS CYSTOIDES INTESTINALIS (diagnosis)

Abdel Kader, Heba A.M. PLANT OILS (toxicity)

Abdel Maksoud, Awatif M. BETA-THALASSEMIA (blood)

Abdel Salam, M. HELICOBACTER INFECTIONS

Abdel Salam, Mona Mohamed HYPERTENSION (genetics)

Abdel Wahab, Mahmoud A. PULMONARY DISEASE, CHRONIC OBSTRUCTIVE (genetics) HYPERTENSION (genetics) Abdelkader, Hayam S. ORYZA SATIVA (genetics) CUCUMOVIRUS (genetics)

Abdolrahmani, Mohammad GENICULATE BODIES (anatomy and histology)

Abdrabou, A.M. CUCUMOVIRUS (Genetics)

Abdul Karim, E.T. CHLAMYDIA TRACHOMATIS (immunology)

Abdul Muhymen, N. CHLAMYDIA TRACHOMATIS (immunology)

Abdul Rahman, Shahd NOCTURNAL ENURESIS (epidemiology)

Abdul Rahman, Shatha NOCTURNAL ENURESIS (epidemiology)

Abdullah, A. MEDROXYPROGESTERONE 17-ACETATE (administration and dosage) CHILD ABUSE

Abdullah, S.H. HOMOCYSTEINE (blood)

Abdulle, A.M. MICRONUTRIENTS

Abdulsamad, Abdulsamad M. DNA (isolation and purification)

Abdur Rashid, Mian WOUNDS AND INJURIES (epidemiology)

Abed, Kawther BACILLUS (genetics) CORYNEBACTERIUM (genetics)

Abo El Haythim, Rafik E. DERMATITIS, ATOPIC

Abo Zeid, Tarek ANIMALS, DOMESTIC

Abou Hashed, Ahmed URETHRAL OBSTRUCTION (diagnosis)

Abou Zeid, A.H. HABITS

Abou Zeina, H. HEALTH PROMOTION

Abu Halaweh, Sami A. DEXMEDETOMIDINE (pharmacology)

Abu Idris, Dafalla Omer PROSTATE-SPECIFIC ANTIGEN (blood) NEOPLASMS (therapy)

Abu Salem, Osama BREAST NEOPLASMS

Abu Sham'a, R.A.H. METABOLIC SYNDROME X (etiology) Abu Sulaiman, Riyadh M. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Abubaker, Jawed PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Abuhamed, Mutasem M. EPILEPSY (chemically induced)

Abul, Nabila A. MENINGOCOCCAL INFECTIONS (complications)

Adam, Mohammed Alnour DIABETIC FOOT (therapy)

Adnan, Lubab VIOLENCE (statistics and numerical data)

Afshari, P. PREMARITAL EXAMINATION

Agha, Syed Farid-ud-din HEMATOMA, EPIDURAL, CRANIAL (surgery)

Aghazadeh, Behzad MYOCARDIAL INFARCTION (mortality)

Ahmad Nia, S. CESAREAN SECTION

Ahmad, Rizwan OXIDATIVE STRESS

Ahmad, Shamweel KLEBSIELLA INFECTIONS (epidemiology)

Ahmadi, A. EDUCATION, MEDICAL, CONTINUING

Ahmed, Anas Osman NEOPLASMS (therapy)

Ahmed, Dalia S. ORYZA SATIVA (genetics)

Ahmed, Ejaz ALPHA-TOCOPHEROL (pharmacology)

Ahmed, Elhadi M. DIABETES MELLITUS, TYPE 1 (diet therapy)

Ahmed, Hameda MISOPROSTOL (administration and dosage)

Ahmed, Mohamed E. STOMACH NEOPLASMS (diagnosis)

Ahmed, Mohamed El Imam RENAL DIALYSIS (adverse effects)

Ahmed, Mohammed El Imam M. PROSTATE-SPECIFIC ANTIGEN (blood)

Ahmed, Mohieldin M. POSTURAL BALANCE

Ahmed, Salah A.M. NEUROTRANSMITTER AGENTS

Ahmed, Taha Umbeli LABOR, INDUCED Ahsaan, Akram ASCITES (etiology)

Ajem, A. FACTOR V (genetics)

Ajlouni, Kamel M. PITUITARY GLAND (radiography)

Akaberian, S. EDUCATION, MEDICAL, UNDERGRADUATE

Akay, Ahmet DEPTH PERCEPTION (physiology)

Akay, Melih ANESTHESIA, SPINAL (adverse effects)

Akbar, H. HELICOBACTER INFECTIONS

Akbar, Mousa A.J. MYOCARDIAL ISCHEMIA (diagnosis)

Akbarzadeh, M. BREAST SELF-EXAMINATION

Akhavan, A. CORONARY DISEASE

Akhoondian, J. LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Akhoundzadeh, S. EDUCATION, MEDICAL, CONTINUING

Akhtar, Naureen GITELMAN SYNDROME (diagnosis)

Akin, Yasemin ANEMIA (complications)

Aktekin, Mehmet R. PROBLEM-BASED LEARNING

Al adil, O. CEREBELLAR DISEASES (diagnosis)

Al Aghbari, Khaled CATHA (adverse effects)

AI Akhfash, Ali A. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Al Akhras, N. DISABLED PERSONS

Al Ali, Nihal R. MISOPROSTOL (administration and dosage)

Al Allaf, Luma I.K. ALKALINE PHOSPHATASE

Al Amad, Suhail Hani FORENSIC DENTISTRY

Al Aseri, Zohair LIPOPROTEIN [A] (blood)

Al Assadi, Ali F. MISOPROSTOL (administration and dosage)

Al Assal, Sallah TOBACCO (genetics) AI Attar, May Mahmoud PULMONARY DISEASE, CHRONIC OBSTRUCTIVE (genetics)

Al Awaidy, S. MENINGITIS (epidemiology)

Al Barzangi, Bassam TONSILLECTOMY (adverse effects)

Al Batayneh, Ola.B. CASEINS

Al Bloushi, Maliha Askar Soud POLYRADICULONEUROPATHY (diagnosis)

Al Busairi, Waleed Ahmed POSTURAL BALANCE

Al Dousary, Ahmad Ali MYOCARDIAL ISCHEMIA (diagnosis)

Al Edwan, Ghazi M. DEXMEDETOMIDINE (pharmacology)

AI EIq, A. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Al Farha, Manal Abd Al Monim CARNITINE (therapeutic use)

AI Habeeb, T.A. REFERRAL AND CONSULTATION

Al Haddad, M.K. SCHOLL, MEDICAL

AI Harbi, Obaid PNEUMATOSIS CYSTOIDES INTESTINALIS (diagnosis)

Al Hashash, Wafaa Ahmed HEPATITIS, AUTOIMMUNE (diagnosis)

Al Hawary, Mohamed Abo El Saud M. VARICOCELE (surgery)

Al Hayani, Abdulmonem A. NERVE FIBERS, MYELINATED (ultrastructure)

Al Hebbi, Homoud A. LIVER TRANSPLANTATION (adverse effects)

Al Huwaizi, A.F. ORTHODONTICS

Al Jabre, Salih Hamad M. BENZOQUINONES (therapeutic use)

Al Janoubi, Nada MYELITIS, TRANSVERSE (diagnosis)

Al Juaid, Nami Fawazan KLEBSIELLA INFECTIONS (epidemiology)

Al Jumah, Eman Sadiq POLYRADICULONEUROPATHY (diagnosis)

Al Kabaisi, Noora DIABETIC RETINOPATHY (diagnosis)

Al Kadhi, Yusuf A. SPLENOSIS (diagnosis) Al Kayyali, Bassam Sulaaiman CARCINOMA, ACINAR CELL (diagnosis)

Al Khatib, I.A. WATER

Al Khusaiby, S. MENINGITIS (epidemiology)

Al Kofide, Amani A. HODGKIN DISEASE

Al Layla, Abdul M. TONSILLECTOMY (adverse effects)

Al Mana, Hadeel M. SPLENOSIS (diagnosis)

Al Medhagi, Anwar G. HEPATITIS B VACCINES (immunology)

Al Mendalawi, Mahmood D. BETA-THALASSEMIA ANEMIA, SICKLE CELL (epidemiology) ORAL HYGIENE

Al Moyed, Tageia Abdul Karim HEPATITIS B VACCINES (immunology)

Al Mulhim, F. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Al Mustafa, Mahmoud M. DEXMEDETOMIDINE (pharmacology)

Al Nahhas, Samar A. LEISHMANIASIS, CUTANEOUS (diagnosis)

Al Neami, Maha A. VIOLENCE (statistics and numerical data)

Al Noaemi, Mohammed NEUROTRANSMITTER AGENTS

AI Nsoor, Nariman CATHETERIZATION, CENTRAL VENOUS (utilization)

Al Nuaimy, Wahda M.T. ALKALINE PHOSPHATASE

Al Othman, A. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Al Qahtani, Ali S. SAFETY MANAGEMENT

AI Qattan, Hanan Y. MENINGOCOCCAL INFECTIONS (complications)

Al Qurashi, Mansour M. ANEMIA, SICKLE CELL (epidemiology)

AI Raway, Ahmed M. DIABETES MELLITUS, TYPE 1 (complications)

Al Remawi, I.S. WATER

Al Saadi, Khalid A. FOREIGN BODIES (diagnosis) Al Saadie, M. CHLAMYDIA TRACHOMATIS (immunology)

Al Saati, Ameen FASCIITIS, NECROTIZING (therapy)

Al Salam, Suhail CARCINOMA, ACINAR CELL (diagnosis)

Al Selwi, Abd Al Hafid CATHA (adverse effects)

Al Shamahy, Hassan A. HEPATITIS B VACCINES (immunology)

AI Shammary, H. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Al Shaqrani, Mohammad A. LIVER TRANSPLANTATION (adverse effects)

Al Shubaili, Asmahan THYYROTOXICOSIS (diagnosis)

Al Sobhi, E. MULTIPLE MYELOMA (complications)

Al Sulaiti, Rola PEMPHIGOID GESTATIONIS (diagnosis)

Al Tonbary, Youssef LIVER NEOPLASMS (diagnosis)

AI Turki, H. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Al Waeely, Faiz A. MISOPROSTOL (administration and dosage)

Al Wayli, Hessa M. HEPATITIS B (epidemiology)

Al Zaher, Nabil CARCINOMA, ACINAR CELL (diagnosis)

Alaedini, F. EDUCATION, MEDICAL, CONTINUING

Alakloby, Omar M. BENZOQUINONES (therapeutic use)

Alam, Altaf GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Alam, Nadeem INFERTILITY, MALE (diagnosis)

Alavi, A. PSYCHIATRIC STATUS RATING SCALES

Alavi, A.A. COMPOSITE RESINS

Alavi, G. COMPOSITE RESINS

Alenzi, Paris Q. KLEBSIELLA INFECTIONS (epidemiology)

Alfuitasi, Amna M. NEURONAL MIGRATION DISORDERS (diagnosis) Alhani, F. EDUCATION, NURSING

Ali Rasheed, T. ORTHODONTICS

Ali, Ehab M. Mohamed ASPARAGINASE (isolation and purification)

Ali, Fahmy T. DIABETES MELLITUS, TYPE 1 (complications)

Ali, Huma DEPRESSION (epidemiology)

Ali, Mostafa Z. HYPERTENSION (drug therapy)

Ali, Muhammad PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Ali, Syed Ayub PEFLOXACIN (blood)

Ali, Yousif DISINFECTION (methods)

Alimohammadian, M. BREAST NEOPLASMS (epidemiology)

Alizadeh, R. MOUTH NEOPLASMS

Aljubran, Ali CARCINOMA, NON-SMALL-CELL LUNG (therapy)

Alkattan, Hisham Abd Alkarem FINGERSUCKING (adverse effects)

Allahtavakoli, Mohammad TOCOTRIENOLS (therapeutic use)

Allen, Hugh NATIONAL HEALTH PROGRAMS (organization and administration)

Almasad, Jamal MAMMOGRAPHY (utilization)

Almogren, Adel ASTHMA (diagnosis)

Almutairi, Abdullah HEMOSIDEROSIS (diagnosis)

Almutawa, Fahima Jaffar PREMARITAL EXAMINATIONS

Alnasir, Faisal Abdul Latif FAMILY PRACTICE

Aloweidi, Abdel Karim S. DEXMEDETOMIDINE (pharmacology)

Alqamish, Jehad Radhi PREMARITAL EXAMINATIONS

Alvina WOUNDS AND INJURIES (epidemiology)

Aly, Gamal S. ASTHMA (epidemiology) Alzahrani, Alhusain J. BENZOQUINONES (therapeutic use)

Amani, A. HYPERTENSION (prevention and control)

Amaral, Leandro PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Amin, Joher GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Amirlak, I. MICRONUTRIENTS

Ammari, Bassam A. DEXMEDETOMIDINE (pharmacology)

Anjum, Naveed TUBERCULOSIS, PULMONARY (epidemiology)

Ankarali, Handan C. ELECTROENCEPHALOGRAPHY

Ankarali, Seyit ELECTROENCEPHALOGRAPHY

Anousheh, M. EDUCATION, NURSING

Ansari, Shuaib DIABETIC NEUROPATHIES (epidemiology)

Anwaar WOUNDS AND INJURIES (epidemiology)

Anwar, Ashraf M. HEART DISEASES (diagnosis)

Arain, Zahid B. LIVER TRANSPLANTATION (adverse effects)

Arora, Rajan PNEUMATOSIS CYSTOIDES INTESTINALIS (diagnosis)

Arslan, Sinan CARBOXYLIC ESTER HYDROLASES (blood)

Asgari, S. CORONARY DISEASE

Ashktorab, T. NURSING FACULTY PRACTICE

Ashrafi, F. CORONARY DISEASE

Askar, Faiza S. CATHA (adverse effects)

Ata Ullah, Nabila METFORMIN (therapeutic use)

Ataei, E. TOOTH BLEACHING

Atari, Y. PREMARITAL EXAMINATION

Atashrazm, P. OCCLUSAL ADJUSTMENT Atiq, Salman TUBERCULOSIS, PULMONARY (epidemiology)

Attar, Suzan M. PEPTIDES, CYCLIC (diagnostic use)

Awad, Faisal METHICILLIN-RESISTANT STAPHYLOCACCUS AUREUS (drug effects)

Awidi, Abdallah LEUKEMIA, MYELOGENOUS, CHRONIC, BCR-ABL POSITIVE (genetics) MAMMOGRAPHY (utilization)

Awwad, Ziad M. DEXMEDETOMIDINE (pharmacology)

Aydinlar, Ali CARBOXYLIC ESTER HYDROLASES (blood)

Ayed, Adel K. PNEUMOTHORAX (surgery)

Azari, A. DENTAL VENEERS

Baba, Asif PORPHYRIA, ERYTHROPOIETIC (diagnosis)

Badran, Izdiad TONSILLECTOMY (adverse effects)

Baghaee, B. CANDIDIASIS, CHRONIC MUCOCUTANEOUS (diagnosis)

Baghaei, P. TUBERCULOSIS, MULTIDRUG-RESISTANT

Baghcheghi, N. MEDICATION ERRORS

Bagheri, Kamran Pooshang STAPHYLOCOCCAL VACCINES (chemical synthesis)

Bahadorkhan, G.R. SPINAL CORD INJURIES (complications)

Baharoon, Salim A. ARTHRITIS, INFECTIOUS (diagnosis)

Bahou, Yacoub G. CEREBRAL HEMORRHAGE (epidemiology)

Bahratni, Gholamreza CLARITHROMYCIN (blood)

Baig, Lubna MENOPAUSE

Bajaj, Doulat Rai HEALTH KNOWLEDGE, ATTITUDES, PRACTICE

Bakheet, Osama El Sayed KLEBSIELLA INFECTIONS (epidemiology)

Bakry, S. MEDROXYPROGESTERONE 17-ACETATE (administration and dosage)

Bal, Ajda SPINAL CORD INJURIES (blood) Baran, Ibrahim CARBOXYLIC ESTER HYDROLASES (blood)

Barzegar, H. GUILLAIN-BARRE SYNDROME (diagnosis)

Barzkar, Mosayeb DYSPEPSIA (epidemiology)

Basahi, Mohamed NATIONAL HEALTH PROGRAMS (organization and administration)

Basak, Ramen C. HYPERTHYROIDISM (diagnosis)

Bashi, Ahmed Yahya Dallal CARNITINE (therapeutic use)

Basiri, Keivan ARTERIOVENOUS MALFORMATIONS (diagnosis)

Bassos, Atef F. LIVER TRANSPLANTATION (adverse effects)

Bazzaz, Bibi Sedigheh Fazly SALVIA (chemistry)

Behbehani, Nasser HEMOSIDEROSIS (diagnosis)

Behlim, T. MENINGITIS (epidemiology)

Behmanesh, F. LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Belbeisi, Adel MAMMOGRAPHY (utilization)

Belgaumi, Asim HODGKIN DISEASE

Ben Amor, Mohamed PARANASAL SINUS DISEASES (surgery)

Ben Gamra, Olfa PARANASAL SINUS DISEASES (surgery)

Bessiouni, Ibrahim E. FOREIGN BODIES (diagnosis)

Bhat, Venkatraman S. FOREIGN BODIES (diagnosis)

Bhat, Yasmeen PORPHYRIA, ERYTHROPOIETIC (diagnosis)

Bhatti, Muhammad Afzal GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Bidram, F. CANDIDIASIS, CHRONIC MUCOCUTANEOUS (diagnosis)

Bigdeli, H. MOYAMOYA DISEASE (diagnosis)

Bittencourt, Henrique PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Bo, Xiao EPILEPSY (chemically induced) Bodenschatz, C. INJECTIONS

Bokhari, Asma GENITAL DISEASES, FEMALE (epidemiology)

Borzu, R. EDUCATION, NURSING

Boshehri, S. CLOTRIMAZOLE (pharmacology)

Bou Antoun, R. JOB SATISFACTION

Bunting, Peter S. PEPTIDES, CYCLIC (diagnostic use)

Burkes, Ronald CARCINOMA, NON-SMALL-CELL LUNG (therapy)

Bushra, Rabia DEPRESSION (epidemiology)

Butt, Arshad K. GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Cabs, Bassim M. Ashoor FASCIITIS, NECROTIZING (therapy)

Cakci, Aytul SPINAL CORD INJURIES (blood)

Camara Lopes, Luiz H. LYMPHOMA, MANTLE-CELL (diagnosis)

Celebi, Gurbuz DEPTH PERCEPTION (physiology)

Celik, Ilhami BONE SUBSTITUTES (therapeutic use)

Ceylan, Berit G. PROPOFOL (pharmacology)

Chahine, L.M. MENTAL HEALTH SERVICES

Chamsi Pasha, Hassan HEART DISEASES (diagnosis)

Chamsi Pasha, Mohammed A. HEART DISEASES (diagnosis)

Chandrasekran, Chazian PNEUMOTHORAX (surgery)

Chatterjee, Manas HYPERTHYROIDISM (diagnosis)

Chaudhary, Ahmed Khan LYMPHOMA, NON-HODGKIN (diagnosis)

Chemali, Z. MENTAL HEALTH SERVICES

Comert, S. ANTHROPOMETRY

Comert, Serdar ANEMIA (complications)

Crisci, Carlos D. ALLERGY AND IMMUNOLOGY (education) Cuellar Ambrosi, Francisco POEMS SYNDROME (diagnosis)

Cuervo Sierra, Jorge POEMS SYNDROME (diagnosis)

Dabbaghian, I. MOUTH NEOPLASMS

Dadjou, Yahya HEART NEOPLASMS (diagnosis)

Daneshvar, R. LASERS, SOLID-STATE

Darwazah, A.K. METABOLIC SYNDROME X (etiology)

Darwish, Abdulla PEMPHIGOID GESTATIONIS (diagnosis)

Darwish, Nevine S. CHROMIUM COMPOUNDS (adverse effects)

Dash, N. MENINGITIS (epidemiology)

Dashti, Ali A. DNA (isolation and purification)

Dashti, Hussein M. DNA (isolation and purification)

Dawani, Hania A. NURSES (psychology)

Dawodu, A. MICRONUTRIENTS

Dawson, K.P. MICRONUTRIENTS

Dehnavi, A. Mehri SCHOOL ADMISSION CRITERIA

Del Giacco, Sergio ALLERGY AND IMMUNOLOGY (education)

Delavar, B. CESAREAN SECTION

Demir, Serif ELECTROENCEPHALOGRAPHY

Dhaif, Ghassan FASCIITIS, NECROTIZING (therapy)

Diab, Yousef HEART DEFECTS, CONGENITAL (complications)

Diaz Betancur, James POEMS SYNDROME (diagnosis)

Dildar, Babar PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Doumi, El Bushra Ahmed ABDOMEN, ACUTE (diagnosis)

Driedger, Albert NATIONAL HEALTH PROGRAMS (organization and administration) Dusse, Luci Maria PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Ebrahemi, M. BLOOD PRESSURE

Ebrahimi, H. BURNING MOUTH SYNDROME (drug therapy) MODELS, NURSING

Ebrahimi, M. TOOTH EROSION (epidemiology)

Edraki, M.R. MIDAZOLAM (pharmacology)

Ehsaei, M.R. SPINAL CORD INJURIES (complications)

Eini Zinab, H. CESAREAN SECTION

Ekhtiari, Hamed FASTING

El Ashry, Rasha LIVER NEOPLASMS (diagnosis)

El Awady, Mohamed A. TOBACCO (genetics)

El Bana, Hassan WAIST CIRCUMFERENCE DIABETES MELLITUS (complications)

El Barrany, Wagih G. NERVE FIBERS, MYELINATED (ultrastructure)

El Bessoumy, Ashraf BACILLUS THURINGIENSIS (enzymology)

El Deftar, Mervat M. BREAST NEOPLASMS (genetics)

El Derwi, D. HEALTH PROMOTION

EI Diasty, Eman M. YOGHURT DAIRY PRODUCTS (microbiology) MILK (microbiology) EGGS

El Enezy, Saleh MYOCARDIAL ISCHEMIA (diagnosis)

El Gazar, Helmy WAIST CIRCUMFERENCE DIABETES MELLITUS (complications)

El Gendy, Essam A. CHICKENS (genetics)

El Gerzawi, Shadia M. BREAST NEOPLASMS (genetics)

El Hashash, Osama AEF. MENINGOCOCCAL INFECTIONS (complications)

El Imam, Mohamed INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use) El Kaseh, R.M. YOGHURT MILK (microbiology) EGGS

EI Kattawy, Azza M. ANIMALS, DOMESTIC

El Khayat, Zakaria A. BREAST NEOPLASMS (genetics)

El Khedim, Abdelkader PARANASAL SINUS DISEASES (surgery)

El Maadawy, Maged Mohamed RADIAL ARTERY (ultrasonography)

El Maghawry, I. PRE-ECLAMPSIA

EI Nasser, Ziad METHICILLIN-RESISTANT STAPHYLOCACCUS AUREUS (drug effects)

El Nouman, A HEALTH PROMOTION

El Sabiq, M. RENAL DIALYSIS (adverse effects)

El Shallaly, Gamal E.H.A. CARCINOID TUMOR (complications)

El Sharouny, Ebaa BACILLUS THURINGIENSIS (enzymology)

El Shazly, Samir A. ANIMALS, DOMESTIC

El Shihy, Osama M. TRITICUM

El Tahir, Ammar CEREBELLAR DISEASES (diagnosis)

El Toukhy, Safinaz E. BREAST NEOPLASMS (genetics)

Elamin, Anwaar Ali RENAL DIALYSIS (adverse effects)

Elbarbary, Mahmoud A. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Elcioglu, Omur HISTORY OF MEDICINE

Elgaili, Elgaili Mohamed NEOPLASMS (therapy)

Elhabashy, Safinaz A. PURPURA (physiopathology)

Elhassan, Elhassan Mohamed PROSTATE-SPECIFIC ANTIGEN (blood)

Elmadani, Ahmed Elkhidir NEOPLASMS (therapy)

Elmahi, Self I.M. STOMACH NEOPLASMS (diagnosis)

Elrefai, Jamil M. DIABETIC NEUROPATHIES (epidemiology) Elsamani, Mohamed El. STOMACH NEOPLASMS (diagnosis)

Eltayeb, Elgaylani Abdalla NEOPLASMS (therapy)

Eltilib, H.A. TUBERCULOSIS (history)

Eltoum, H.A. CEREBELLAR DISEASES (diagnosis)

Elwali, Nasreldin Abdalla NEOPLASMS (therapy)

Elwatidy, Sherif M. CEREBROSPINAL FLUID SHUNTS (adverse effects)

Emara, Ibraheim WAIST CIRCUMFERENCE

Emara, Ibrahem DIABETES MELLITUS (complications)

Enemuo, Valantine ASPERGILLOSIS (diagnosis)

Erdinc, Selda CARBOXYLIC ESTER HYDROLASES (blood)

Erfanian, F. ROLE PLAYING

Erfanian, Youssef LYMPHATIC DISEASES (etiology)

Erginoz, E. ANTHROPOMETRY

Erginoz, Ethem ANEMIA (complications)

Erk, Gulcan ANESTHESIA, SPINAL (adverse effects)

Eroglu, Fusun PROPOFOL (pharmacology)

Eshak, Mariam G. PLANT OILS (toxicity)

Essali, Mohamed Adib BIOMEDICAL RESEARCH (methods)

Ezimokhai, M. MICRONUTRIENTS

Ezzat, Mohamed H. DERMATITIS, ATOPIC

Faghri, J. STAPHYLOCOCCAL VACCINES (chemical synthesis)

Falahzadeh, Ahmadreza BELL PALSY (epidemiology)

Fallah, A. HEPATOLENTICULAR DEGENERATION (diagnosis)

Farag, Ibrahim M. PLANT OILS (toxicity) Fard, M. Yazdankha EDUCATION, MEDICAL, UNDERGRADUATE

Farooq, Fareeha DYSLIPIDEMIAS (diagnosis)

Farooq, Muhammad Asif ENDOSONOGRAPHY

Farshchi, Amir CLARITHROMYCIN (blood)

Fateh, Ali BELL PALSY (epidemiology)

Fatehi, Farzad ARTERIOVENOUS MALFORMATIONS (diagnosis)

Fathi, M.H. TOOTH BLEACHING

Fatima, Naheed MISOPROSTOL (therapeutic use)

Fattahi, F. DRUG TOXICITY

Feng, Bao-Hui OCULOMOTOR NERVE (anatomy and histology)

Ferreira, Galileu Galilei PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Feteih, R. HELICOBACTER INFECTIONS

Fouda, Ashraf LIVER NEOPLASMS (diagnosis)

Fournie, Kate NATIONAL HEALTH PROGRAMS (organization and administration)

Frew, Anthony J. ALLERGY AND IMMUNOLOGY (education)

Gaber, Osama Abdel Aziz METHYLENETETRAHYDROFOLATE REDUCTASE NADPH2

Gadour, M.O.H. CEREBELLAR DISEASES (diagnosis)

Gamal El Din, Abd Alkader Y. TOBACCO (genetics)

Ganjgahi, Habib FASTING

Garcia, Bertha NATIONAL HEALTH PROGRAMS (organization and administration)

Gauhar, Shahnaz PEFLOXACIN (blood)

Gencer, Mehmet MYASTHENIA GRAVIS (diagnosis)

Ghadami, Mohammad R. FASTING

Ghafoornia, Maryam BELL PALSY (epidemiology) Ghait, L.I. WATER

Ghallab, Abdel Rahman M. TRITICUM

Ghanem, Hala M. CHROMIUM COMPOUNDS (adverse effects)

Ghanem, Kadry Z. PLANT OILS (toxicity)

Gharibi, T. EDUCATION, MEDICAL, UNDERGRADUATE

Ghiasi, Golbarg CLARITHROMYCIN (blood)

Ghofrani, M. KETOGENIC DIET

Gholami, K. DRUG TOXICITY

Ghorbani, A. BREAST NEOPLASMS (epidemiology)

Gilchrist, James NATIONAL HEALTH PROGRAMS (organization and administration)

Gokce, Fatih M. ELECTROENCEPHALOGRAPHY

Gokcil, Zeki ANESTHESIA, SPINAL (adverse effects)

Golparvar, Sadegh LYMPHATIC DISEASES (etiology)

Goma, Hala M. HYPERTENSION (drug therapy)

Gomes, Gabriel Gomes Sabido PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Goraya, Azimullah Asif Jah HEMATOMA, EPIDURAL, CRANIAL (surgery)

Govindan, Sujatha ENDOMETRIOSIS (genetics)

Gue, T.B. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Gullenpet, A.H. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Gullulu, Sumeyye CARBOXYLIC ESTER HYDROLASES (blood)

Gulmen Senol PROPOFOL (pharmacology)

Gurcay, Ahmet G. SPINAL CORD INJURIES (blood)

Gurcay, Eda SPINAL CORD INJURIES (blood)

Gurpinar, Erol PROBLEM-BASED LEARNING Guzman Zapata, Alber POEMS SYNDROME (diagnosis)

Habaibeh, Emad CATHETERIZATION, CENTRAL VENOUS (utilization)

Habeeb, Yousif Kassim POLYRADICULONEUROPATHY (diagnosis)

Habib, Syed S. LIPOPROTEIN [A] (blood)

Habibi, M. DYSPEPSIA (epidemiology)

Hadadgar, A. CAREER CHOICE

Hadidy, Azmy M. PITUITARY GLAND (radiography)

Hafeez, Farkhanda GITELMAN SYNDROME (diagnosis)

Hafeez, Muhammad ENDOSONOGRAPHY

Haghani, F. EDUCATION, MEDICAL

Haghighi, M. CORONARY DISEASE

Hajinezhad, F. EDUCATION, MEDICAL, UNDERGRADUATE

Halileh, S. CHILD ABUSE

Hamdan Mansour, Ayman M. NURSES (psychology)

Hamdan, M. DISABLED PERSONS

Hamdy, Raid M. NERVE FIBERS, MYELINATED (ultrastructure)

Hamed, Kamal Eldein NEOPLASMS (therapy)

Hamid, A. WOUNDS AND INJURIES (epidemiology)

Hammad, A. CEREBELLAR DISEASES (diagnosis)

Hamza, Aamir Abdullahi DIABETIC FOOT (therapy)

Hanif, Muhamad WOUNDS AND INJURIES (epidemiology)

Haq, Irum LYMPHOMA, NON-HODGKIN (diagnosis)

Hariga, Ines PARANASAL SINUS DISEASES (surgery)

Haroun, Azmi A. PITUITARY GLAND (radiography)

Hasan, Qurratulain ENDOMETRIOSIS (genetics) Hashemi, F. TUBERCULOSIS, ENDOCRINE

Hashemi, S.M.H. TUBERCULOSIS, ENDOCRINE

Hasosah, Mohammed Y. ASPERGILLOSIS (diagnosis)

Hassan, Fayyaz ENDOSONOGRAPHY

Hassan, H.A. CUCUMOVIRUS (Genetics)

Hassan, Hussam Z. BACILLUS (genetics) CORYNEBACTERIUM (genetics)

Hassan, Ibrahim F. ANIMALS, DOMESTIC

Hassan, Montaha Abdulla BREAST NEOPLASMS

Hassanzadeh, Parichehr CYCLOOXYGENASE INHIBITORS (pharmacology)

Hassoon, Abbas Fadhel DIARRHEA, INFANTILE (therapy)

Hegazy, Ali Mohamad MYOCARDIAL ISCHEMIA (diagnosis)

Hegde, Belle M. CELL PHYSIOLOGICAL PHENOMENA

Heidari, S. HYPERTENSION (prevention and control)

Hemimi, Neveen Salah Eldin PULMONARY DISEASE, CHRONIC OBSTRUCTIVE (genetics) HYPERTENSION (genetics)

Hemmati, N. TUBERCULOSIS, MULTIDRUG-RESISTANT

Heshmat, H. COMPOSITE RESINS

Heshmatian, Behnam TOCOTRIENOLS (therapeutic use)

Hifnawy, T.M. HABITS

Holi, M.A. BOTTLE FEEDING

Hollisaz, M.T. CEREBRAL PALSY (therapy)

Hosny, Omneya M.S. BREAST NEOPLASMS (genetics)

Hosseinzadeh, Hossein SALVIA (chemistry)

Hubail, Zakariya BETA-THALASSEMIA

Hummieda, Sami LABOR, INDUCED Hussain, Amro A. LEARNING

Hussain, Karamat MYELITIS, TRANSVERSE (diagnosis)

Hussain, Naweed SPERMATIC CORD TORSION (surgery)

Hussain, Rhadwan NOCTURNAL ENURESIS (epidemiology)

Hussain, Salma Muhammad PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Hussain, Tassawar ENDOSONOGRAPHY

Hussein, Abbashar CEREBELLAR DISEASES (diagnosis)

Hussein, M.E. BOTTLE FEEDING

Hussein, Mona H. CARCINOMA, EHRLICH TUMOR (drug therapy)

Hyder, Syed Najam PULMONARY ARTERY (abnormalities)

Ibrahiem, Magdy M. METHYLENETETRAHYDROFOLATE REDUCTASE NADPH2

Ibrahim, Alguili Elsheikh DIABETIC FOOT (therapy)

Ibrahim, Fatma El Zahraa A. TRITICUM

Ibrahim, Magdy M. PRE-ECLAMPSIA

Ibrahim, Maged I. CARCINOMA, EHRLICH TUMOR (drug therapy)

Idris, Saadeldin A. NEUROTRANSMITTER AGENTS

Ihde, Stefan DENTAL IMPLANTS

Imenshahidi, Mohsen SALVIA (chemistry)

Intisar ul Haq LYMPHOMA, NON-HODGKIN (diagnosis)

Iqbal, Muhammad Pervaiz HEALTH KNOWLEDGE, ATTITUDES, PRACTICE

Iqbal, Shafique MISOPROSTOL (therapeutic use)

Iqbal, Tehseen TUBERCULOSIS, PULMONARY (epidemiology)

Iranmanesh, Farhad DEPRESSION (epidemiology)

Isik, Kubilay BONE SUBSTITUTES (therapeutic use)

Ismaeil, Wafaa Muhammad BETA-THALASSEMIA (blood) Ismail, Said I. LEUKEMIA, MYELOGENOUS, CHRONIC, BCR-ABL POSITIVE (genetics)

Ivanova, Maria Kondeva POSTURAL BALANCE

Izadian, Shahla LYMPHATIC DISEASES (etiology)

Jabary, M. MOYAMOYA DISEASE (diagnosis)

Jackson, Denis GENITAL DISEASES, FEMALE (epidemiology)

Jadaon, Mehrez M. DNA (isolation and purification)

Jalalah, Sawsan M. NERVE FIBERS, MYELINATED (ultrastructure)

Jallad, Dana G. PITUITARY GLAND (radiography)

Jamal, Almasad K. SEMINOMA (diagnosis)

Jamal, Wafaa DISINFECTION (methods)

Jamand, T. EDUCATION, MEDICAL, UNDERGRADUATE

Jameie, Seyed B. GENICULATE BODIES (anatomy and histology)

Jamil Malik, Rubina HODGKIN DISEASE

Jamjoom, H. HELICOBACTER INFECTIONS

Jamshidian, S. EDUCATION, MEDICAL

Janani, F. NURSING EDUCATION RESEARCH

Jarjees, Mohamed T.T. ALKALINE PHOSPHATASE

Javad, Hashim NEURONAL MIGRATION DISORDERS (diagnosis)

Jelli, Kawther A. CARCINOID TUMOR (complications)

Jemikalajah, Johnson D. HIV INFECTIONS (epidemiology)

Joseph, Nicey HODGKIN DISEASE

Kabbani, Mohamed S. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Kabiraj, Mohammed MYELITIS, TRANSVERSE (diagnosis)

Kader, A.A. FECES (microbiology)

KAhilo, Khatid A. ANIMALS, DOMESTIC Kaliner, Michael A. ALLERGY AND IMMUNOLOGY (education)

Kamali, F. EDUCATION, MEDICAL, UNDERGRADUATE

Kamath, K.A. FECES (microbiology)

Kandeel, A. INJECTIONS

Karaoglu, Mehmet A. ANXIETY (epidemiology)

Karaoglu, Nazan ANXIETY (epidemiology)

Karar, A. MULTIPLE MYELOMA (complications)

Kargahi, N. ODONTOGENIC CYST, CALCIFYING (diagnosis)

Karim, Enas T.A. POSTNATAL CARE (standards)

Karim, Saadiya A. MENOPAUSE

Karimzadeh, P. KETOGENIC DIET

Karsh, Jacob PEPTIDES, CYCLIC (diagnostic use)

Kashgari, Amna A. SPLENOSIS (diagnosis)

Kashif, Muhamad SPERMATIC CORD TORSION (surgery)

Kayani, Asif Gul THORACIC INJURIES (diagnosis)

Kazemi, Babak MYOCARDIAL INFARCTION (mortality)

Kazemipour, S. CESAREAN SECTION

Kazempour, M. TUBERCULOSIS, MULTIDRUG-RESISTANT

Kazerani, Hamid Reza VASCULAR RESISTANCE

Kececi, Hulusi ELECTROENCEPHALOGRAPHY

Kehinde, Elijah O. DISINFECTION (methods)

Kelishadi, R. HYPERTENSION (prevention and control)

Kella, Nandlal HERNIA, DIAPHRAGMATIC (diagnosis)

Khadem, N. ROLE PLAYING

Khadivzadeh, T. ROLE PLAYING

Khafaga, Yasser HODGKIN DISEASE Khair, Randa Z.A. BREAST NEOPLASMS (diagnosis)

Khajedelooie, M. ROLE PLAYING

Khalafii, Abdolrasool DYSPEPSIA (epidemiology)

Khaledi, A.A.R. CLOTRIMAZOLE (pharmacology)

Khaleghinejad, K. PREMARITAL EXAMINATION

Khalfalla, K. CEREBELLAR DISEASES (diagnosis)

Khalid, Khalid Eltahir RENAL DIALYSIS (adverse effects) INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use) PROSTATE-SPECIFIC ANTIGEN (blood)

Khalid, Mohsen WAIST CIRCUMFERENCE DIABETES MELLITUS (complications)

Khalil, Hany ASTHMA (epidemiology)

Khalil, Wagdy K.B. PLANT OILS (toxicity)

Khalique, Khalid THORACIC INJURIES (diagnosis)

Khamassi, Khaled PARANASAL SINUS DISEASES (surgery)

Khan, Anwaar A. GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Khan, Iftikhar A. LIVER TRANSPLANTATION (adverse effects)

Khan, Safdar G. PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Khanian, M. MOUTH NEOPLASMS

Khanjani, H. EDUCATION, MEDICAL, CONTINUING

Khatiban, M. NURSING FACULTY PRACTICE

Khazaie, Habibolah FASTING

Khereba, A.H. CUCUMOVIRUS (Genetics)

Khodaeian, N. TOOTH BLEACHING

Khodakhast, Fathima DISINFECTION (methods)

Khodamoradi, N. DENTAL VENEERS Khodavisi, M. EDUCATION, NURSING

Khoharo, Haji Khan DIABETIC NEUROPATHIES (epidemiology)

Khoramroudi, R. EDUCATION, MEDICAL, UNDERGRADUATE

Khorsand, M. MOYAMOYA DISEASE (diagnosis) OCCLUSAL ADJUSTMENT

Khosravi, A. HYPERTENSION (prevention and control)

Khreisha, Hussein CATHETERIZATION, CENTRAL VENOUS (utilization)

Khurshid, Moazzam PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Kirk, Catherine NATIONAL HEALTH PROGRAMS (organization and administration)

Kloub, A.G. PATIENT RIGHTS

Koc, Filiz MYASTHENIA GRAVIS (diagnosis)

Kochiyil, J. MICRONUTRIENTS

Kodati, Vijaylakshmi ENDOMETRIOSIS (genetics)

Kordofani, A.Y. HOMOCYSTEINE (blood)

Kouhestani, H. MEDICATION ERRORS

Koul, Roshan L. NEURONAL MIGRATION DISORDERS (diagnosis)

Kourorian, Z. DRUG TOXICITY

Kucukkolbasi, Hasan BONE SUBSTITUTES (therapeutic use)

Kufri, F.H. METABOLIC SYNDROME X (etiology)

Kurdi, Mohammad I. LIPOPROTEIN [A] (blood)

Lafta, Riyadh K. VIOLENCE (statistics and numerical data)

Lari, H. Ansari OCCLUSAL ADJUSTMENT

Lehri, Iqbal Ahmed HEMATOMA, EPIDURAL, CRANIAL (surgery)

Lehri, Shabir Ahmed HEMATOMA, EPIDURAL, CRANIAL (surgery)

Leighl, Natasha CARCINOMA, NON-SMALL-CELL LUNG (therapy) Li, Shi-Ting OCULOMOTOR NERVE (anatomy and histology)

Li, Shirong PENILE DISEASES (surgery)

Li, Xin-Yuan OCULOMOTOR NERVE (anatomy and histology)

Liu, A. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Liu, Guanghui ALLERGY AND IMMUNOLOGY (education)

Lohiniva, A.L. INJECTIONS

Lopes, Monalisa PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Louca, Nadia A. OSTEITIS DEFORMANS (therapy)

Mabrouk, Naglaa Abdul Zaher BETA-THALASSEMIA (blood)

Madkour, Magdy M. LYCOPERSICON ESCULENTUM (genetics)

Mafouz, Mohamed H. WAIST CIRCUMFERENCE

Magzoub, M.E.M. REFERRAL AND CONSULTATION

Mahabadi, Mahmood Khaksari ECHINACEA

Mahafza, Waleed S. PITUITARY GLAND (radiography)

Maher, Menerva BIOMPHLARIA (analysis)

Mahmodi, E. TOOTH EROSION (epidemiology)

Mahmoud, Amany Abdel Ghaffar CHROMIUM COMPOUNDS (adverse effects)

Mahmoudi, J. PSYCHIATRIC STATUS RATING SCALES

Mahmoudirad, G. EDUCATION, NURSING

Mahoney, F. INJECTIONS

Mahran, Nevien A. DIABETES MELLITUS, TYPE 1 (complications)

Mahvelati, F. KETOGENIC DIET

Mahyar, A. BLOOD PRESSURE

Malekzadeh, R. BREAST NEOPLASMS (epidemiology)

Malik, Kashif GASTRIC ANTRAL VASCULAR ECTASIA (therapy) Malk, M. CEREBELLAR DISEASES (diagnosis)

Mangeli, M. PREGNANCY

Mangeli, S. PREGNANCY

Mansoor, Samina GENITAL DISEASES, FEMALE (epidemiology)

Mansour, Magdy URETHRAL OBSTRUCTION (diagnosis)

Mansouri, D. TUBERCULOSIS, MULTIDRUG-RESISTANT

Mansuri, Farah Asad MENOPAUSE

Masjedi, M.R. TUBERCULOSIS, MULTIDRUG-RESISTANT

Maspero, Jorge ALLERGY AND IMMUNOLOGY (education)

Massad, Diana MAMMOGRAPHY (utilization)

Massumoto, Celso LYMPHOMA, MANTLE-CELL (diagnosis)

Matlani, Bhajan Lal HEALTH KNOWLEDGE, ATTITUDES, PRACTICE

Mattar, Essam H. KLEBSIELLA INFECTIONS (epidemiology)

Mazaheri, F. CORONARY DISEASE

Mbarek, Chiraz PARANASAL SINUS DISEASES (surgery)

Mediouni, Azza PARANASAL SINUS DISEASES (surgery)

Mehboob, Khadija ALPHA-TOCOPHEROL (pharmacology)

Mehboob, Zara ALPHA-TOCOPHEROL (pharmacology)

Mehdi, Sabih Salih DIARRHEA, INFANTILE (therapy)

Mehjoub, T. FACTOR V (genetics)

Mehryar, A.H. CESAREAN SECTION

Memarzadeh, M. EDUCATION, MEDICAL

Meng, You-Qiang OCULOMOTOR NERVE (anatomy and histology)

Messahel, Farouk M. SAFETY MANAGEMENT

Minhas, Fareed Aslam DEPRESSION, POSTPARTUM (epidemiology) Mirghani, M. TUBERCULOSIS (history)

Mirsaeidi, M. TUBERCULOSIS, MULTIDRUG-RESISTANT

Mirzaei, K. EDUCATION, MEDICAL, UNDERGRADUATE

Miskeen, Elhadi RENAL DIALYSIS (adverse effects) INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use) PROSTATE-SPECIFIC ANTIGEN (blood)

Moaath, Alsmady M. SEMINOMA (diagnosis)

Moattari, M. BREAST SELF-EXAMINATION

Mogheib, Reda A. CARCINOMA, EHRLICH TUMOR (drug therapy)

Moghim, Sharareh STAPHYLOCOCCAL VACCINES (chemical synthesis)

Moghimi Dehkordi, Bijan DYSPEPSIA (epidemiology)

Mohamed, Abdelrahim Osman VON WILLEBRAND FACTOR (blood)

Mohamed, Adam CEREBELLAR DISEASES (diagnosis)

Mohamed, Aida Ali Ahmed RENAL DIALYSIS (adverse effects)

Mohamed, El Gaili RENAL DIALYSIS (adverse effects)

Mohamed, Mahassen A. CUCUMOVIRUS (Genetics)

Mohammadi, A. MENINGITIS (epidemiology)

Mohammadi, E. MENINGITIS (epidemiology)

Mohammadi, E. Qurban NURSING EDUCATION RESEARCH

Mohammadi, M. TUBERCULOSIS, ENDOCRINE

Mohammadi, M.R. PSYCHIATRIC STATUS RATING SCALES

Mohammed, Mohammed Ibrahim ABDOMEN, ACUTE (diagnosis)

Mohammed, Samy H. PRE-ECLAMPSIA

METHYLENETETRAHYDROFOLATE REDUCTASE NADPH2

Mohammed, Tareq M.M.A. HEMOSIDEROSIS (diagnosis)

Moharramzad Yashar HEART NEOPLASMS (diagnosis) Mohd, Elgaili PROSTATE-SPECIFIC ANTIGEN (blood)

Mohmadani, Ahmed Abdallah RENAL DIALYSIS (adverse effects)

Molabashi, R. EDUCATION, MEDICAL

Molazem, Z. EDUCATION, NURSING

Mondragon Arismendi, Maria Cecilia POEMS SYNDROME (diagnosis)

Moon, Hee Bom ALLERGY AND IMMUNOLOGY (education)

Moreira Leite, Katia R. LYMPHOMA, MANTLE-CELL (diagnosis)

Morsy, Mohamed Mofeed BETA-THALASSEMIA

Morsy, Mohamed Mofeed F. BETA-THALASSEMIA

Mortazavi, V. TOOTH BLEACHING

Mosalem, Doahoo M. POSTURAL BALANCE

Moshref, M. ODONTOGENIC CYST, CALCIFYING (diagnosis)

Mostafa, Mohamed Mostafa Abdelwahab LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Mostafa, Salah ASTHMA (epidemiology)

Motallebnejad, M.M. MOUTH NEOPLASMS

Motamedi Mohammad Hasan Kalantar HEART NEOPLASMS (diagnosis)

Motamedi, Mohammad Hosein Kalantar HEART NEOPLASMS (diagnosis)

Mothana, Azal BACILLUS THURINGIENSIS (enzymology)

Mounce, Richard E. ROOT CANAL THERAPY

Mousavi, Seyyed Yousof VASCULAR RESISTANCE

Moustafa, A.E. PRE-ECLAMPSIA

Movahedian, Bijan BELL PALSY (epidemiology)

Muhammad, Iyad Naeem PEFLOXACIN (blood)

Mujalliy, Murshidi M. SEMINOMA (diagnosis)

Mujeeb, Faiza DEPRESSION, POSTPARTUM (epidemiology) Muneer, Ather DEPRESSION, POSTPARTUM (epidemiology)

Murshidi, Mujalli M. DEXMEDETOMIDINE (pharmacology)

Musa M.I, Mohamed T. BREAST NEOPLASMS (diagnosis)

Musa, Abdalla S. DIABETES MELLITUS, TYPE 2 (diagnosis)

Musa, H.A. BOTTLE FEEDING

Mutlu, Necip BONE SUBSTITUTES (therapeutic use)

Muzaffar, Rana GENITAL DISEASES, FEMALE (epidemiology)

Nabulsi, Basem CATHETERIZATION, CENTRAL VENOUS (utilization)

Nader, Albsoul M. SEMINOMA (diagnosis)

Naeimi, Mohammad LYMPHATIC DISEASES (etiology)

Nagarajan, Venkatesan THYYROTOXICOSIS (diagnosis)

Naghavi, M. CESAREAN SECTION

Nagi, Nadeem NATIONAL HEALTH PROGRAMS (organization and administration)

Najm, Hani K. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Nakagawa, Takemasa ALLERGY AND IMMUNOLOGY (education)

Namazi, M.R. INDOMETHACIN (therapeutic use)

Namdar, H. MODELS, NURSING

Naqvi, Hassan Raza GENITAL DISEASES, FEMALE (epidemiology)

Naqvi, Syed Baqir Shyum PEFLOXACIN (blood)

Naseem, Arshad RESPIRATORY PARALYSIS (etiology)

Nasr, Mohsen LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Nasr, Mona Ramadan BETA-THALASSEMIA (blood)

Naveed, Abdul Khaliq DYSLIPIDEMIAS (diagnosis) ALPHA-TOCOPHEROL (pharmacology) Nie, H. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Niknam, M. COMPOSITE RESINS

Nikzad, S. DENTAL VENEERS

Nizamani, Naseer M. GENITAL DISEASES, FEMALE (epidemiology)

Nizami, Asad Tamiz ud Din DEPRESSION, POSTPARTUM (epidemiology)

Noor, Asim PNEUMONIA, VENTILATOR-ASSOCIATED (diagnosis)

Noorbakhsh, M. CORONARY DISEASE

Nosir, Youssef F. HEART DISEASES (diagnosis)

Nouraie, M. BREAST NEOPLASMS (epidemiology)

Nsoor, Nariman BRAIN NEOPLASMS (diagnosis)

Obeid, Amani CARCINOMA, ACINAR CELL (diagnosis)

Okogun, Godwin Ray A. HIV INFECTIONS (epidemiology)

Olam, Zakia BACILLUS THURINGIENSIS (enzymology)

Omar, Belal WAIST CIRCUMFERENCE DIABETES MELLITUS (complications)

Omar, Hanaa S. TOBACCO (genetics)

Omer, Nawal Eltayeb VON WILLEBRAND FACTOR (blood)

Omran, M.R. Salehi MIDAZOLAM (pharmacology)

Omran, Mustafa PROSTATE-SPECIFIC ANTIGEN (blood)

Orken, Cihat MYASTHENIA GRAVIS (diagnosis)

Osoba, A.O. MULTIPLE MYELOMA (complications)

Ozdabakoglu, Osman CARBOXYLIC ESTER HYDROLASES (blood)

Ozdemir, Bulent CARBOXYLIC ESTER HYDROLASES (blood)

Oznurlu, Yasemin BONE SUBSTITUTES (therapeutic use)

Pajoumand, A. EDUCATION, MEDICAL, CONTINUING Pakfetrat, A. CANDIDIASIS, CHRONIC MUCOCUTANEOUS (diagnosis)

Patel, Umang J. INTRACRANIAL ANEURYSM (surgery)

Pazargadi, M. NURSING FACULTY PRACTICE

Pervaiz, Aftab Ahmed THORACIC INJURIES (diagnosis)

Pintilie, Melania CARCINOMA, NON-SMALL-CELL LUNG (therapy)

Poirier, Susan NATIONAL HEALTH PROGRAMS (organization and administration)

Potter, Paul C. ALLERGY AND IMMUNOLOGY (education)

Pouladi, S. EDUCATION, MEDICAL, UNDERGRADUATE

Pourhoseingholi, Asma DYSPEPSIA (epidemiology)

Pourhoseingholi, Mohamad A. DYSPEPSIA (epidemiology)

Pourpak, Z. DRUG TOXICITY

Pourshahidi, S. BURNING MOUTH SYNDROME (drug therapy)

Pourshanazari, Aliasghar TOCOTRIENOLS (therapeutic use)

**Qarata, Ebrahim** PEMPHIGOID GESTATIONIS (diagnosis)

Qayyum, Kanwal GENITAL DISEASES, FEMALE (epidemiology)

Qmar, Belal WAIST CIRCUMFERENCE

Qureshi, Fatima DIABETIC NEUROPATHIES (epidemiology)

Qureshi, Mohammad Ali HERNIA, DIAPHRAGMATIC (diagnosis)

Qureshi, N.A. REFERRAL AND CONSULTATION

Qureshi, Naseem A. SELF MUTILATION

Radwan, E. INJECTIONS

Raghupathy, Raj PREGNANCY (immunology)

Rahmani, A. MODELS, NURSING

Rahmani, Y. BLOOD PRESSURE Rahmo, Abdulkader TUBERCULOSIS (diagnosis)

Rajab, Khalid Kareem DUODENUM (injuries)

Ramadan, Kholoud S. BETA-THALASSEMIA (blood)

Ramezani, M.A. HYPERTENSION (prevention and control)

Ramezani, T. PREGNANCY

Ramsay, Micheal A. DEXMEDETOMIDINE (pharmacology)

Ramzy, Fatem BIOMPHLARIA (analysis)

Randhawa, Mohammad A. BENZOQUINONES (therapeutic use)

Ranjbar, M.A. CLOTRIMAZOLE (pharmacology)

Rao, Kaipa Prabhakar ENDOMETRIOSIS (genetics)

Rao, Shahid Irshad METFORMIN (therapeutic use)

Rasekh, A. PREMARITAL EXAMINATION

Rasoolinejad, M. DRUG TOXICITY

Rassem, Mahmoud W. HYPERTHYROIDISM (diagnosis)

Rathi, Prem Kumar HERNIA, DIAPHRAGMATIC (diagnosis)

Refaat, A. CIRCUMCISION, FEMALE

Rehan, N. GENITAL DISEASES, FEMALE (epidemiology)

Rezaeian, M. PUBLIC HEALTH

Rezaii Yazdi, Z. LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Riazul Haq, Muhamad SPERMATIC CORD TORSION (surgery)

Richard, G. CAREER CHOICE

Robinsong, Martin NATIONAL HEALTH PROGRAMS (organization and administration)

Rosenwasser, Lanny J. ALLERGY AND IMMUNOLOGY (education)

Rotimi, Vincent O. DISINFECTION (methods)

Saadat, S. PSYCHIATRIC STATUS RATING SCALES Saadatnia, Mohammad BELL PALSY (epidemiology) ARTERIOVENOUS MALFORMATIONS (diagnosis)

Sabbah, Rajeh, S. HODGKIN DISEASE

Sabouri, M. CAREER CHOICE

Sadat Ali, M. OSTEOPOROSIS, POSTMENOPAUSAL (complications)

Sadeghi, Hamid Mirmohammad STAPHYLOCOCCAL VACCINES (chemical synthesis)

Sadeghi, M. CORONARY DISEASE

Sadeghnia, Hamid Reza SALVIA (chemistry)

Sadiq, Masood PULMONARY ARTERY (abnormalities)

Sadjadi, A. BREAST NEOPLASMS (epidemiology)

Sadri, Gh. HYPERTENSION (prevention and control)

Saeed, Osman K. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Saeed, Sadia PULMONARY ARTERY (abnormalities)

Safaee, Azaaeh DYSPEPSIA (epidemiology)

Safaei, Homan FASTING

Safari M. EDUCATION, NURSING

Sahsah, Mohammed DISINFECTION (methods)

Sajid, Tanveer LYMPHOMA, NON-HODGKIN (diagnosis)

Salamat, Amjad ENDOSONOGRAPHY

Salameh, P. JOB SATISFACTION

Salem, Ehab M. METHYLENETETRAHYDROFOLATE REDUCTASE NADPH2

Salem, R.M. YOGHURT DAIRY PRODUCTS (microbiology) EGGS

Sallam, Mohamed A. DERMATITIS, ATOPIC

Salman, Salman A. ARTHRITIS, INFECTIOUS (diagnosis) Samini, F. SPINAL CORD INJURIES (complications)

Sanatkhani, M. CANDIDIASIS, CHRONIC MUCOCUTANEOUS (diagnosis)

Sankhla, Dilip K. NEURONAL MIGRATION DISORDERS (diagnosis)

Saraf, A. TOOTH EROSION (epidemiology)

Sarandol, Emre CARBOXYLIC ESTER HYDROLASES (blood)

Sarayrah, Majed CATHETERIZATION, CENTRAL VENOUS (utilization)

Sargolzaie, S. ODONTOGENIC CYST, CALCIFYING (diagnosis)

Sarrafzadegan, N. HYPERTENSION (prevention and control)

Sarrafzadegann, N. CORONARY DISEASE

Satti, Maria M. Hamad VON WILLEBRAND FACTOR (blood)

Sboo, Ibraheem CATHETERIZATION, CENTRAL VENOUS (utilization)

Schmidt, H.G. REFERRAL AND CONSULTATION

Seddighi, A. BRAIN ABSCESS (radiography)

Seddighi, A.S. BRAIN ABSCESS (radiography)

Senol, Yesim PROBLEM-BASED LEARNING

Senturk, Tunay CARBOXYLIC ESTER HYDROLASES (blood)

Seoudi, Dina M. DIABETES MELLITUS, TYPE 1 (complications)

Seyedin, A. Vaghar EDUCATION, NURSING

Seyrafi, H. EDUCATION, MEDICAL, CONTINUING

Shafqat, Farzana GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Shah, Mian Munawar HAND INJURIES (diagnosis)

Shah, Waqar GASTRIC ANTRAL VASCULAR ECTASIA (therapy)

Shahabi, Ghorbanali NATURAL CYTOTOXICITY TRIGGERING RECEPTOR 2 Shaheen, Kareem Y. DERMATITIS, ATOPIC

Shahrivar, Z. PSYCHIATRIC STATUS RATING SCALES

Shahsavari, A. BLOOD PRESSURE

Shaik, Noor Ahmad ENDOMETRIOSIS (genetics)

Shaikh, Imran Ali DIABETIC NEUROPATHIES (epidemiology)

Shalayel, Mohammed H.F. NEUROTRANSMITTER AGENTS

Shalchi, M.H.A. LASERS, SOLID-STATE

Shamsoddini, A.R. CEREBRAL PALSY (therapy)

Sharaf, Ahmed. N. ORYZA SATIVA (genetics)

Sharif, Karam Kamal Y. INTESTINAL VOLVULUS (diagnosis)

Sharifi, Amin LYMPHATIC DISEASES (etiology)

Sheikh, Manzoor PORPHYRIA, ERYTHROPOIETIC (diagnosis)

Sheikh, Mushtaq PORPHYRIA, ERYTHROPOIETIC (diagnosis)

Shikeiri, A.B. BOTTLE FEEDING

Shirani, S. HYPERTENSION (prevention and control)

Shirazi, M. EDUCATION, MEDICAL, CONTINUING

Shirzad, Hedayatollah NATURAL CYTOTOXICITY TRIGGERING RECEPTOR 2

Shoaib, Harris PEFLOXACIN (blood)

Siddique, Khalid THORACIC INJURIES (diagnosis)

Siddique, Shazia METFORMIN (therapeutic use)

Siddiqui, Khawar S. HODGKIN DISEASE

Sidhom, Gloria G. BREAST NEOPLASMS (genetics)

Sidig, A. CEREBELLAR DISEASES (diagnosis)

Singh, Raj K. OXIDATIVE STRESS

Singh, Ranjana OXIDATIVE STRESS Singh, Sushma OXIDATIVE STRESS

Slama, A. FACTOR V (genetics)

Slama, F.B.H. FACTOR V (genetics)

Smith, Charles D. PEPTIDES, CYCLIC (diagnostic use)

Soares, Priscila PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Sohrabi, Bahram MYOCARDIAL INFARCTION (mortality)

Soliman, Mohamed H. TOBACCO (genetics)

Soliman, Mona M. LIPOPROTEIN [A] (blood)

Soomro, Farooque Rehman HEALTH KNOWLEDGE, ATTITUDES, PRACTICE

Sousa Canavez, Juliana M. LYMPHOMA, MANTLE-CELL (diagnosis)

Sun, W. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Surrun, Soondal Koomar LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Syed, Shakir HAND INJURIES (diagnosis)

Tabarestani, S. KETOGENIC DIET

Tabarsi, P. TUBERCULOSIS, MULTIDRUG-RESISTANT

Tabatabaei, H. BREAST SELF-EXAMINATION

Tabatabaeifar, S.M. BRAIN ABSCESS (radiography)

Tadbir, A. Andisheh BURNING MOUTH SYNDROME (drug therapy)

Tageldin, Mohamed A. ASTHMA (epidemiology)

Taghadosinejad, F. EDUCATION, MEDICAL, CONTINUING

Taghdiri, M.M. MOYAMOYA DISEASE (diagnosis)

Taghi, S. EDUCATION, NURSING

Taghipour, Hamid Reza HEART NEOPLASMS (diagnosis)

Taha, Mahmoud S. INTRACRANIAL ANEURYSM (surgery) Taher, M.T. TUBERCULOSIS, ENDOCRINE

Tahmasian, Masoud FASTING

Taj Eldin, Imad M. DIABETES MELLITUS, TYPE 1 (diet therapy)

Taj, Nergis MISOPROSTOL (therapeutic use)

Takrouri, A.A. WATER

Talaat, M. INJECTIONS

Talebi, M. TOOTH EROSION (epidemiology)

Talebi, S. LUPUS ERYTHEMATOSUS, SYSTEMIC (diagnosis)

Talebian, M. EDUCATION, MEDICAL, CONTINUING

Tamimi, Omar R. HYPOPLASTIC LEFT HEART SYNDROME (surgery)

Tao, Ling PENILE DISEASES (surgery)

Tardieu, Philippe DENTAL IMPLANTATION (methods)

Tareen, Muhamad Saleh HEMATOMA, EPIDURAL, CRANIAL (surgery)

Taseer, Ijaz-ul-Haque ASCITES (etiology)

Taspinar, Vildan ANESTHESIA, SPINAL (adverse effects)

Tehranidoost, M. PSYCHIATRIC STATUS RATING SCALES

Teixeira, Elen Rose PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Telatar, B. ANTHROPOMETRY

Telatar, Benin ANEMIA (complications)

Teleb, Zakaria A. CARCINOMA, EHRLICH TUMOR (drug therapy)

Thomas, L. MICRONUTRIENTS

Tireli, Hulya MYASTHENIA GRAVIS (diagnosis)

Tofighi, H. EDUCATION, MEDICAL, CONTINUING

Tonekaboni, S.H. KETOGENIC DIET Torkaman, B. EDUCATION, NURSING

Torok, N.I. METABOLIC SYNDROME X (etiology)

Toulabi, T. NURSING EDUCATION RESEARCH

Tripathi, Anil K. OXIDATIVE STRESS

Tripathi, Payal OXIDATIVE STRESS

Tuffaha, Amjad S. FOREIGN BODIES (diagnosis)

Tutkavul, Kemal MYASTHENIA GRAVIS (diagnosis)

Umair, Bilal THORACIC INJURIES (diagnosis)

Unal, Nedim HISTORY OF MEDICINE

Usmani, Asma Tanvir DEPRESSION, POSTPARTUM (epidemiology)

Uz Zaman, Fasseh WOUNDS AND INJURIES (epidemiology)

Vakilian, Alireza DEPRESSION (epidemiology)

van der Molen, H.T. REFERRAL AND CONSULTATION

Vanaki, Z. EDUCATION, NURSING

Vandenberg, Theodore NATIONAL HEALTH PROGRAMS (organization and administration)

Varzi, Hossein Najafzadeh ECHINACEA

Vaz de Macedo, Antonio PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Velayati, Arash LYMPHATIC DISEASES (etiology)

Vieira, Monica PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (statistics and numerical data)

Vitrinel, A. ANTHROPOMETRY

Vitrinel, Ayca ANEMIA (complications)

Vojdani, M. CLOTRIMAZOLE (pharmacology)

Vural, Huseyin PROPOFOL (pharmacology)

Waheed, Palvasha DYSLIPIDEMIAS (diagnosis)

Wall, Sami H. LIVER TRANSPLANTATION (adverse effects) Wang, Xu-Hui OCULOMOTOR NERVE (anatomy and histology)

Wang, Zhenxiang PENILE DISEASES (surgery)

William, Ranjan R. NEURONAL MIGRATION DISORDERS (diagnosis)

William, Samia BIOMPHLARIA (analysis)

Wu, Julong PENILE DISEASES (surgery)

Yang, Dongyun PENILE DISEASES (surgery)

Yang, Min OCULOMOTOR NERVE (anatomy and histology)

Yassin, I.H. METABOLIC SYNDROME X (etiology)

Yavuz, Lutfi PROPOFOL (pharmacology)

Yazdani, Rahmatolah STAPHYLOCOCCAL VACCINES (chemical synthesis)

Yazdanpanah, S. EDUCATION, MEDICAL, UNDERGRADUATE

Yerdelen, Deniz MYASTHENIA GRAVIS (diagnosis)

Yilmaz, Funda PROPOFOL (pharmacology)

Yosif, Nasrden INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Younis, Ali CEREBELLAR DISEASES (diagnosis)

Yousefie, A.R. CAREER CHOICE

Yuksel, Gulbun MYASTHENIA GRAVIS (diagnosis)

Zadeh, Delavar Shahbaz STAPHYLOCOCCAL VACCINES (chemical synthesis)

Zaghloul, Ashraf S. BREAST NEOPLASMS (genetics)

Zahmatkeshan, N. EDUCATION, MEDICAL, UNDERGRADUATE

Zaki, A.M. TUBERCULOSIS (history)

Zalata, Khaled LIVER NEOPLASMS (diagnosis)

Zali, Mohammad R. DYSPEPSIA (epidemiology)

Zamanzad, Behnam NATURAL CYTOTOXICITY TRIGGERING RECEPTOR 2 Zangiabadi, M. BREAST SELF-EXAMINATION

Zare, Mohammad ARTERIOVENOUS MALFORMATIONS (diagnosis)

Zeid, Farghal A. TRITICUM

Zein, H.S. CUCUMOVIRUS (Genetics)

Zeyinlou, A. EDUCATION, MEDICAL, CONTINUING

Zhang, J.Z. INTERCELLULAR SIGNALING PEPTIDES AND PROTEINS (therapeutic use)

Zhi, Song EPILEPSY (chemically induced) Zhu, Ning-Xi OCULOMOTOR NERVE (anatomy and histology)

Zhu, Shu-Gan OCULOMOTOR NERVE (anatomy and histology)

Zhuo, Qinqiang PENILE DISEASES (surgery)

Zibaei, M. CLOTRIMAZOLE (pharmacology)

Zomorodian, K. CLOTRIMAZOLE (pharmacology)

Zribi, Sara PARANASAL SINUS DISEASES (surgery)

Zuraiki, A.M. MULTIPLE MYELOMA (complications)

Appendix II

## List of EMR Journals Indexed in IMEMR

(by country)

## BAHRAIN (3)

Arab Journal for Food and Nutrition	1608-8352
Bahrain Medical Bulletin	1012-8298
JBMS - Journal of the Bahrain Medical Society	1015-6321
EGYPT (130)	
AAMJ - Al-Azhar Assiut Medical Journal *	1687-1693
African Journal of Urology	1110-5704
Afro - Arab Liver Journal	1687-224X
Ain-Shams Journal of Forensic Medicine and Clinical Toxicology *	1687-1030
Ain-Shams Medical Journal	0002-2144
AJAIC - Alexandria Journal of Anaesthesia and Insentive Care	N/A
Al Azhar Medical Journal	1110-0400
Al-Azhar Journal of Dental Science *	N/A
Alexandria Dental Journal *	1110-015X
Alexandria Journal of Food Science and Technology	N/A
Alexandria Journal of Hepatogastroenterology New	2090-1879
Alexandria Journal of Pediatrics	N/A
Alexandria Journal of Pharmaceutical Sciences *	1110-1792
Alexandria Journal of Veterinary Science	1110-2047
Alexandria Medical Journal [The] *	0516-5849
Annals of Pediatric Surgery	1687-4137
Arab Journal of Biotechnology	1110-6875
Arab Journal of Gastroenterology (New)	1687-1979
Arab Journal of Laboratory Medicine [The]	1110-1822
Applied Endocrinology in Egypt	1110-1776
ASJOG - Ain Shams Journal of Obstetrics and Gynecology *	1687-2193

ASNJ - Alexandria Scientific Nursing Journal	N/A
Assiut Medical Journal	1110-0494
Assiut University Bulletin for Environmental Researches	1110-6107
Benha Medical Journal	1110-208X
Bulletin of Alexandria Faculty of Medicine	1110-0834
Bulletin of Alexandria Thoracic Association *	N/A
Bulletin of Faculty of Pharmacy - Cairo University	1110-0931
Bulletin of Faculty of Physical Therapy - Cairo University	1110-6611
Bulletin of High Institute of Public Health	1110-0036
Bulletin of Pharmaceutical Sciences - Assiut University	1110-0052
Bulletin of the Faculty of Science - University of Alexandria *	0568-9619
Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
Bulletin of the National Research Centre	1110-0591
Bulletin of the Ophthalmological Society of Egypt *	1110-0982
Childhood and Development Quarterly *	1110-8681
Clinical Diabetes	0891-8929
Eastern Mediterranean Region Drugs Digest	1040-2312
Eastern Mediterranean Region Epidemiological Bulletin	1014-2347
EDJ - Egyptian Dental Journal	0070-9484
Egyptian Heart Journal [The]	1110-2608
Egyptian Journal of Anatomy [The] *	1110-2144
Egyptian Journal of Biomedical Engineering *	1012-5558
Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
Egyptian Journal of Bronchology [The]	1687-8426
Egyptian Journal of Chemistry	0449-2285
Egyptian Journal of Community Medicine	1110-1865
Egyptian Journal of Dermatology and Andrology *	1110-7650

Egyptian Journal of Diabetes [The]	N/A
Egyptian Journal of Food Science	1110-0613
Egyptian Journal of Genetics and Cytology *	N/A
Egyptian Journal of Histology [The]	1110-0559
Egyptian Journal of Hospital Medicine [The]	1687-2002
Egyptian Journal of Medical Human Genetics [The]	1110-8630
Egyptian Journal of Medical Laboratory Sciences	1110-5593
Egyptian Journal of Medical Microbiology *	1110-2179
Egyptian Journal of Microbiology	0022-2704
Egyptian Journal of Neonatology [The] *	N/A
Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
Egyptian Journal of Nutrition	N/A
Egyptian Journal of Nutrition and Health	N/A
Egyptian Journal of Occupational Medicine *	1110-1881
Egyptian Journal of Otolaryngology [The]	1012-5574
Egyptian Journal of Paediatrics [The]	1687-1677
Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642
Egyptian Journal of Pharmaceutical Sciences [The]	0301-5068
Egyptian Journal of Physiological Sciences *	0301-8660
Egyptian Journal of Psychiatry [The] *	1110-1105
Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
Egyptian Journal of Surgery [The]	1110-1121
Egyptian Journal of Urology *	1110-5712
Egyptian Journal of Veterinary Science	1110-0222
Egyptian Medical Journal of the National Research Center *	1687-1278
Egyptian Orthodontic Journal *	N/A
Egyptian Orthopaedic Journal [The]	1110-1148

Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
Egyptian Population and Family Planning Review [The]	N/A
Egyptian Rheumatology and Rehabilitation	1110-161X
Egyptian Science Magazine [The]	1687-3815
EJB - Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
EJENTAS - Egyptian Journal of ENT and Allied Sciences	2090-0740
Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
EMHJ - Eastern Mediterranean Health Journal	1020-3397
EMJ - Egyptian Medical Journal [The] *	1110-0095
Gazette of the Egyptian Paediatric Association [The] *	1110-6638
Health Services Journal of the Eastern Mediterranean Region *	1014-9899
JESN - Journal of the Egyptian Society of Nephrology	N/A
Journal of Childhood Studies	2090-0619
Journal of Drug Research of Egypt	0085-2406
Journal of Hepatology, Gastroenterology and Infectious Diseases *	1110-0796
Journal of Legal Medicine and Forensic Sciences[The]	1110-6468
Journal of the Arab Society for Medical Research	1687-4293
Journal of the Egyptian Medical Association [The] *	0013-2411
Journal of the Egyptian National Cancer Institute	1110-0362
Journal of the Egyptian Public Health Association [The]	N/A
Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	N/A
Journal of the Egyptian Society of Obstetrics and Gynecology [The] *	0258-3216
Journal of the Egyptian Society of Parasitology	1110-0583
Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The] $^{\star}$	N/A
Journal of the Egyptian Society of Toxicology	1110-127X
Journal of the Medical Research Institute - Alexandria University *	1110-0133
JPC - Journal of Pediatric Club	N/A

Kasr El Aini Journal of Surgery	N/A
Kidney Forum *	1369-3050
Mansoura Journal of Pharmaceutical Sciences	1110-1318
Mansoura Medical Journal	1110-211X
Medical Journal of Ahmed Maher Teaching Hospital [The] *	N/A
Medical Journal of Cairo University [The]	0045-3803
Medical Journal of Teaching Hospitals and Institutes [The] *	1110-2039
Minoufia Medical Journal	1110-2098
MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology $^{\star}$	1110-5437
National Cancer Institute Journal	0027-8874
Neonatology *	1687-0492
New Egyptian Journal of Medicine [The]	1110-1946
Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
Population Researches and Studies	N/A
Population Sciences *	N/A
Population Studies *	1110-1342
PUJ - Parasitologists United Journal	1687-7942
Scientific Journal of Al-Azhar Medical Faculty [Girls] [The] *	1110-2381
Scientific Medical Journal	1110-5607
South Valley Medical Journal	1110-7529
Suez Canal University Medical Journal	1110-6999
Tanta Medical Journal *	1110-1415
Tanta Medical Sciences Journal	1687-5788
Veterinary Medical Journal	1110-1423
Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
Zagazig Journal of Pharmaceutical Sciences *	1110-5089
Zagazig Medical Association Journal *	1110-2322

Zagazig University Medical Journal *	1110-1431
IRAQ (29)	
Al-Kindy College Medical Journal	1810-9543
Almustansiriya Journal of Pharmaceutical Sciences *	1815-0993
Annals of the College of M0edicine - Mosul *	0027-1446
Basrah Journal of Surgery *	N/A
Bulletin of Endemic Diseases - Baghdad *	0007-4845
DMJ - Dohuk Medical Journal	2071-7326
IMJ - Iraqi Medical Journal	0304-4564
IOJ - Iraqi Orthodontic Journal	1816-0581
IPMJ - Iraqi Postgraduate Medical Journal *	1608-8360
Iraqi Army Medical Journal *	N/A
Iraqi Journal of Biotechnology *	N/A
Iraqi Journal of Community Medicine *	1684-5382
Iraqi Journal of Medical Sciences *	1681-6579
Iraqi Journal of Microbiology *	N/A
Iraqi Journal of Pharmaceutical Sciences *	N/A
Iraqi Journal of Tropical Disease Researches *	1814-0823
Journal of Basic and Medical Sciences *	1608-6015
Journal of Community Medicine *	N/A
Journal of Dohuk University *	1812-7568
Journal of Karbala University *	1813-0410
Journal of the College of Dentistry - Baghdad *	N/A
Journal of the Faculty of Medicine - Baghdad	0041-9419
Kufa Medical Journal *	N/A
Medical Journal of Basrah University [The]	0253-0759
Medical Journal of Tikrit University [The] *	N/A

New Iraqi Journal of Medicine [The]		1817-5562
Risafa Medical Journal *		N/A
Scientific Nursing Journal		N/A
Zanco Journal for Medical Sciences	*	N/A
ISLAMIC REPUBLIC OF IRAN (136)		
Acta Medica Iranica		0044-6025
Advances in Cognitives Sciences *		1561-4174
Archives of Iranian Medicine		1029-2977
Armaghane-danesh		1728-6506
ARYA Atherosclerosis Journal		1735-3955
Audiology		1735-1936
Bina Journal of Ophthalmology		1026-6399
DARU - Journal of Faculty of Pharm	acy Tehran University of Medical Sciences	1560-8115
DENA - Quarterly Journal of Yasuj F	Faculty of Nursing and Midwifery	1735-8450
DRJ - Dental Research Journal		1735-3327
Endovascular Journal		2008-1812
Faculty of Nursing and Midwifery Qu Medical Sciences and Health Servic	uarterly - Shaheed Beheshti University of ses	1605-8941
Govaresh		1560-7186
HAKIM Research Journal		1561-252X
HAYAT - The Journal of Faculty of N	Jursing and Midwifery	1735-2215
Health Information Management		1735-1847
Hepatitis Monthly		1735-143X
Homa-ye-Salamat		2008-2002
Hormozgan Medical Journal		1735-2223
IBJ - Iranian Biomedical Journal		1028-852X
IEJ - Iranian Endodontic Journal		1735-7497
IJCN - Iranian Journal of Child Neur	ology	1735-4668

LIEM Iranian Journal of Endoaringlagy and Matabalian	1602 1011
IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844
IJHOSCR - International Journal of Hematology-Oncology and Stem Cell Research*	1735-1243
IJI - Iranian Journal of Immunology	1735-1383
IJKD - Iranian Journal of Kidney Diseases	1735-8582
IJME - Iranian Journal of Medical Education	1608-9359
IJMS - Iranian Journal of Medical Sciences	0253-0716
IJO - Iranian Journal of Orthodontics	1735-5087
IJPR - Iranian Journal of Pharmaceutical Research *	1735-0328
IJVR - International Journal of Veterinary Research New	2008-2533
International Journal of Endocrinology and Metabolism	1726-9148
International Journal of Environmental Research	1735-6865
International Journal of Environmental Science and Technology	1735-1472
Iran Journal of Nursing	1025-0581
Iranian Cardiovascular Research Journal	1735-885X
Iranian Journal of Allergy, Asthma and Immunology	1735-1502
Iranian Journal of Arthropod-Borne Diseases	1735-7179
Iranian Journal of Basic Medical Sciences	1608-6015
Iranian Journal of Biotechnology	1728-3043
Iranian Journal of Cancer Prevention	2008-2398
Iranian Journal of Clinical Infectious Diseases	N/A
Iranian Journal of Dermatology	0021-082X
Iranian Journal of Diabetes and Lipid Disorders	1726-7544
Iranian Journal of Environmental Health Science and Engineering	1735-1979
Iranian Journal of Epidemiology	1735-7489
Iranian Journal of Fertility and Sterility	1735-8094
Iranian Journal of Health and Environment	2008-2029
Iranian Journal of Medical Microbiology	1735-8612

Iranian Journal of Nuclear Medicine	1681-2824
Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
Iranian Journal of Obstetric, Gynecology and Infertility [The]	N/A
Iranian Journal of Ophthalmology	1735-4153
Iranian Journal of Otorhinolaryngology	1560-1293
Iranian Journal of Parasitology	1735-7020
Iranian Journal of Pediatrics	1018-4406
Iranian Journal of Psychiatry	1735-4587
Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
Iranian Journal of Psychiatry and Clinical Psychology (ANDEESHEH VA RAFTAR)	1024-0047
Iranian Journal of Public Health	0304-4556
Iranian Journal of Radiation Research	1728-4554
Iranian Journal of Radiology	1735-1065
Iranian Journal of Reproductive Medicine	N/A
Iranian Journal of Veterinary Research	1728-1997
Iranian Rehabilitation Journal	1735-3602
JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150
JMR - Journal of Medical Research *	1728-1962
Journal of Arak University of Medical Sciences - Rahavard Danesh	N/A
Journal of Babol University of Medical Sciences	1561-4107
Journal of Dental Research, Dental Clinics, Dental Prospects	N/A
Journal of Dental Medicine - Tehran University of Medical Sciences	1024-641X
Journal of Dental School - Shahid Beheshti University of Medical Sciences	1735-7683
Journal of Dentistry - Shiraz University of Medical Sciences	1728-3426
Journal of Fundamentals of Mental Health	1028-6918
Journal of Gorgan University of Medical Sciences	1562-4765

**IMEMR** Current Contents

Journal of Guilan University of Medical Sciences	1028-6055
Journal of Health Administration	N/A
Journal of Hygiene and Health	1735-2363
Journal of Iranian Anatomical Sciences New	1728-6158
Journal of Isfahan Dental School	1735-255X
Journal of Isfahan Medical School	1027-7595
Journal of Islamic Dental Association of Iran [The]	1024-6428
Journal of Jahrom University of Medical Sciences (New)	1735-5168
Journal of Kerman University of Medical Sciences	1023-9510
Journal of Mashad Dental School	1560-9286
Journal of Mazandaran University of Medical Sciences	1561-4123
Journal of Medical Council of Islamic Republic of Iran	1562-1073
Journal of Medical Education	N/A
Journal of Medical Science - Islamic Azad University of Mashhad New	1735-7594
Journal of Medicinal Plants	1684-0240
Journal of Ophthalmic and Vision Research	2008-2010
Journal of Qazvin University of Medical Sciences and Health Services [The]	1561-3666
Journal of Rafsanjan University of Medical Sciences	1735-3165
Journal of Rehabilitation	1607-2960
Journal of Research in Behavioural Sciences New	1735-2029
Journal of Research in Health Sciences (JRHS)	1682-2765
Journal of Research in Medical Sciences	1735-5311
Journal of Sabzevar School of Medical Sciences	1606-7487
Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
Journal of Shahrekord University of Medical Sciences	1735-1448
Journal of Tehran University Heart Center [The]	1735-8620
Journal of Veterinary Research	1022-646X

IMEMR Current Contents

Journal of Zahedan University of Medical Sciences	1735-076X
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
Jundishapur Journal of Microbiology (JJM)	N/A
JRMS - Journal of Research in Medical Sciences	1735-1995
KOOMESH - Journal of Semnan University of Medical Sciences	1608-7046
Medical Journal of Mashad University of Medical Sciences	N/A
Medical Journal of Reproduction and Infertility	1726-7536
Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
Medical Journal of the Islamic Republic of Iran *	1016-1430
Medical Sciences Journal of Islamic Azad University	1023-5922
Modares Journal of Medical Sciences	1562-9554
Nursing and Midwifery Research	1753-5001
Ofogh-E-Danesh	1735-1855
Payesh - Health Monitor	1680-7626
Pejouhandeh: Bimonthly Research Journal	1735-1022
Qom University of Medical Sciences	1735-7799
Quarterly Journal of Medical Ethics	N/A
Salmand: Iranian Journal of Aging	1735-806X
Scientific Journal of Iranian Blood [The]	1027-9520
Scientific and Research Journal of Army University of Medical Sciences - J.A.U.M.S	1727-1789
Scientific Journal of Forensic Medicine	1027-1457
Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
Scientific Journal of School of Public Health and Institute of Public Health Research	1735-7586
Scientific Medical Journal - Quarterly Medical Research Journal Ahvaz Jundishapur University of Medical Sciences New	1026-8960

SHAMS - Journal of Medical Sciences	N/A
Social Welfare Quarterly	N/A
Strides in Development of Medical Education	1735-4242
Tanaffos	1735-0344
Tehran University Medical Journal [TUMJ]	1735-7322
Toloo-e-Behdasht	1728-5127
Urology Journal	1735-1308
Yafteh Journal	1563-0773
Yakhteh Medical Journal	1561-4921
JORDAN (9)	
Arab Journal of Psychiatry [The]	1016-8923
Dirasat	1026-3772
Jordan Journal of Pharmaceutical Sciences	1995-7157
Jordan Medical Journal	0446-9283
Journal of the Royal Medical Services	N/A
Medical Journal of Islamic World Academy of Sciences	1016-3360
Pan Arab Medical Journal *	N/A
Population Bulletin of ESCWA *	0258-1914
Smile Dental Journal	2072-473X
KUWAIT (4)	
Bulletin of the Kuwait Institute for Medical Specialization	N/A
KMJ - Kuwait Medical Journal	0023-5776
Medical Arabization	N/A
Medical Principles and Practice	1011-7571
LEBANON (9)	
ACES - Actualites Cliniques et Scientifiques	1683-8068
AJU - Arab Journal of Urology	N/A

Arab Dental Journal *	N/A
JLDA - Journal of the Lebanese Dental Association	1810-9632
Journal of the Arab Neonatology Forum *	1812-1756
Lebanese Science Journal	1561-3410
LMJ - Lebanese Medical Journal	0023-9852
Middle East Journal of Anesthesiology	0544-0440
Middle East Journal of Family Medicine	N/A
LIBYAN ARAB JAMAHIRYA (6) DMJ - Derna Medical Journal Garyounis Medical Journal *	N/A 0254-7198
JMJ - Jamahiriya Medical Journal	N/A
Libyan Journal of Infectious Diseases [The]	N/A
LJM - Libyan Journal of Medicine	1819-6357
Tabib Attifil Alarabi *	N/A
MOROCCO (6) Bulletin Epidemiologique *	0851-8238
Journal du Practicien *	1113-5667
Maroc Medical	0025-4053
Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
Revue Marocaine de Medecine et de Sante	0251-0758
Revue Marocaine des Maladies de L'Enfant *	N/A
OMAN (3)	0074 000
Oman Journal of Ophthalmology	0974-620X
Oman Medical Journal	N/A
SQUMJ - Sultan Qaboos University Medical Journal	2075-051X
PAKISTAN (67) Anaesthesia, Pain and Intensive Care	1607-8322

Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
Annals of Jinnah Postgraduate Medical Centre - Karachi *	N/A
Annals of King Edward Medical College	1684-6680
Bahria Journal of Professional Psychology	1816-0840
Biomedica	N/A
Challenge - Quarterly [The] *	0528-7944
Community Medicine *	0301-7265
Diabetes Digest	1369-7501
GJMS - Gomal Journal of Medical Sciences	1819-7973
Hamdard Medicus	0250-7188
Infectious Disease Journal of Pakistan	1027-0299
International Journal of Pathology	1810-0155
JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589
JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X
JDUHS - Journal of the Dow University of Health Sciences	1995-2198
JLUMHS - Journal of the Liaquat University of Medical Health Sciences	1729-0341
JMS - Journal of Medical Sciences	N/A
JOPDAK - Journal of the Pakistan Dental Association Karachi *	N/A
Journal of Basic and Applied Sciences	N/A
Journal of Medical Sciences	1682-4474
Journal of Nephrology Urology and Transplantation *	N/A
Journal of Surgery [The] *	1681-4517
JPAD - Journal of Pakistan Association of Dermatologists	1560-9014
JPDA - Journal of the Pakistan Dental Association	1680-2292
JPIMS - Journal of Pakistan Institute of Medical Sciences *	1683-6928
JPMA - Journal of Pakistan Medical Association	0030-9982
JPMI - Journal of Postgraduate Medicale Institute	1013-5472

JPPS - Journal of Pakistan Psychiatric Society	1726-8710
JSP - Journal of Surgery Pakistan International	1817-0242
Lahore Journal of Public Health *	N/A
Medical Channel	1681-5491
Medical Forum Monthly	1029-385X
Medical Spectrum [The] *	0254-8534
Medicine Today	1813-9876
Mother and Child *	0379-2617
KMJ - KUST Medical Journal New	2072-7763
PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648
Pakistan Heart Journal	0048-2706
Pakistan Journal of Biochemistry *	0300-8185
Pakistan Journal of Chest Medicine	N/A
Pakistan Journal of Clinical Psychology	1019-438X
Pakistan Journal of Community Medicine [The] *	N/A
Pakistan Journal of Health *	N/A
Pakistan Journal of Medical and Health Services	1996-7195
Pakistan Journal of Medical Sciences	1682-024X
Pakistan Journal of Neurology *	N/A
Pakistan Journal of Obstetrics and Gynaecology	N/A
Pakistan Journal of Ophthalmology	0886-3067
Pakistan Journal of Orthodontics, Pediatric and Community Dentistry *	1608-134X
Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985
Pakistan Journal of Pathology	N/A
Pakistan Journal of Pharmaceutical Sciences	1011-601X
Pakistan Journal of Pharmacology	0255-7088
Pakistan Journal of Physiology	1819-270X

	Pakistan Journal of Psychology	0030-9869
	Pakistan Journal of Scientific and Industrial Research *	0030-9885
	Pakistan Medical Journal *	0031-000X
	Pakistan Ophthalmology *	0259-3661
	Pakistan Oral and Dental Journal	1012-8700
	Pakistan Paediatric Journal	0304-4904
	PJC - Pakistan Journal of Cardiology	1016-1244
	PJMR - Pakistan Journal of Medical Research	0030-9842
	PJS - Pakistan Journal of Surgery	0258-8552
	Proceedings	N/A
	Professional Medical Journal - Quarterly [The]	1024-8919
	STINE (3)	
	Al-Quds Medical Journal *	N/A
	Annals of Alquds Medicine	1815-2643
	PMJ - Palestinian Medical Journal	N/A
QATA	AR (4)	
	Gulf Journal of Dermatology and Venereology [The] *	N/A
	Heart Views	1995-705X
	JEMTAC - Journal of Emergency Medicine, Trauma & Acute Care	1995-4522
	Qatar Medical Journal	0253-8253
SAU	DI ARABIA (27)	
	Annals of Saudi Medicine	0256-4947
	Annals of Thoracic Medicine	1817-1737
	Hematology, Oncology and stem Cell Therapy	1658-3876
	International Journal of Diabetes Mellitus New	1877-5934
	International Journal of Health Sciences New	N/A
	Joint Centre for Research in Prosthetics and Orthotics [The] *	N/A

Journal of Family and Community Medicine	1319-1683
Journal of Infection and Public Health	1876-0341
Journal of Taibah University Medical Sciences	1658-3612
Journal of King Abdulaziz University - Medical Sciences *	1319-1004
Journal of the Saudi Heart Association	1319-9218
MEAJO - Middle East African Journal of Ophthalmolgy	0974-9233
Neurosciences	N/A
Pan Arab Journal of Neurosurgery	1319-6995
Rehabilitation International *	N/A
Research Centre Bulletin *	1019-5335
Saudi Epidemiology Bulletin	1319-3965
Saudi Heart Journal *	1018-077X
Saudi Journal of Disability and Rehabilitation *	1319-6499
Saudi Journal of Gastroenterology [The]	1319-3767
SJO - Saudi Journal of Ophthalmology	1319-4534
Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The] $^{\star}$	1319-8491
Saudi Journal of Sports Medicine [The] *	1319-6308
Saudi Medical Journal	0379-5284
SDJ - Saudi Dental Journal [The]	1013-9052
SGH Medical Journal	1658-2489
SPJ - Saudi Pharmaceutical Journal	1319-0164
SUDAN (9)	
Gezira Journal of Health Sciences	N/A
JMJ - Juba Medical Journal *	N/A
Khartoum Pharmacy Journal *	N/A
Omdurman Journal of Pharmaceutical Sciences	N/A
Sudan Journal of Medical Sciences	N/A

Sudan Medical Journal *	0491-4481
Sudan Medical Monitor	1858-5000
Sudanese Journal of Dermatology	N/A
SJPH - Sudanese Journal of Public Health	N/A
SYRIAN ARAB REPUBLIC (10)	
Al-Majallah Al-Tibbiya Al-Arabiayh *	N/A
Arab Journal of Pharmaceutical Sciences	1683-0369
Arabic Journal of Forensic Medicine and Criminal Science	N/A
Damascus University Journal for Health Sciences	N/A
JABHS - Journal of the Arab Board of Health Specializations (New)	1561-0217
JISHIM - Journal of the International Society for the History of Islamic Medicine	1303-667X
Journal of Clinical Laboratory [The]	N/A
Journal of the Arab Board of Medical Specializations	1561-0217
Journal of the Arab Dentist *	N/A
Research Journal of Aleppo University - Medical Sciences Series	N/A
TUNISIA (9)	
Archives de l'Institut Pasteur de Tunis	0020-2509
Cahier Medicaux de Tunisie *	0300-5291
IDEES - Revue de Perfectionnement Medical et Paramedical *	N/A
Maghreb Medical	0330-258X
Revue Maghrebine de Pediatrie [La]	0330-7611
Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La]	N/A
Revue Tunisienne d'Infectiologie	N/A
SST - Sante et Securite au Travail	N/A
Tunisie Medicale [La]	0041-4131

## **UNITED ARAB EMIRATES (3)**

EMJ - Emirates Medical Journal	0250-6882
International Journal of Diabetes and Metabolism	1606-7754
IRCMJ - Iranian Red Crescent Medical Journal	1561-4395
YEMEN (7)	
Journal of Tropical Nephro-Urology	N/A
Sana'a University Medical Sciences *	N/A
University of Aden Journal of Natural and Applied Sciences	1606-8947
Yemeni Journal for Medical Sciences [The] *	N/A
YHMRJ - Yemeni Health and Medical Research Journal	N/A
YJMHR-Yemeni Journal of Medical and Health Research *	N/A
YMJ - Yemen Medical Journal *	N/A

## \* No issues received since 2005

Last update March 2010

Appendix III

## List of EMR Journals Indexed in IMEMR

(by title)

No.	Journal Title	ISSN
1	AAMJ - Al-Azhar Assiut Medical Journal *	1687-1693
2	ACES - Actualites Cliniques et Scientifiques	1683-8068
3	Acta Medica Iranica	0044-6025
4	Advances in Cognitives Sciences *	1561-4174
5	African Journal of Urology	1110-5704
6	Afro - Arab Liver Journal	1687-224X
7	Ain-Shams Journal of Forensic Medicine and Clinical Toxicology*	1687-1030
8	Ain-Shams Medical Journal	0002-2144
9	AJAIC - Alexandria Journal of Anaesthesia and Insentive Care	N/A
10	AJU - Arab Journal of Urology	N/A
11	Al Azhar Medical Journal	1110-0400
12	Al-Azhar Journal of Dental Science *	N/A
13	Alexandria Dental Journal *	1110-015X
14	Alexandria Journal of Food Science and Technology	N/A
15	Alexandria Journal of Hepatogastroenterology	2090-1879
16	Alexandria Journal of Pediatrics	N/A
17	Alexandria Journal of Pharmaceutical Sciences *	1110-1792
18	Alexandria Journal of Veterinary Science	1110-2047
19	Alexandria Medical Journal [The] *	0516-5849
20	Al-Kindy College Medical Journal	1810-9543
21	Al-Majallah Al-Tibbiya Al-Arabiayh *	N/A
22	Almustansiriya Journal of Pharmaceutical Sciences *	1815-0993
23	Al-Quds Medical Journal *	N/A
24	Anaesthesia, Pain and Intensive Care	1607-8322
25	Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
26	Annals of Alquds Medicine	1815-2643

No.	Journal Title	ISSN
27	Annals of Jinnah Postgraduate Medical Centre - Karachi *	N/A
28	Annals of King Edward Medical College	1684-6680
29	Annals of Pediatric Surgery	1687-4137
30	Annals of Saudi Medicine	0256-4947
31	Annals of the College of Medicine - Mosul *	0027-1446
32	Annals of Thoracic Medicine	1817-1737
33	Applied Endocrinology in Egypt	1110-1776
34	Arab Dental Journal *	N/A
35	Arab Journal for Food and Nutrition	1608-8352
36	Arab Journal of Biotechnology	1110-6875
37	Arab Journal of Gastroenterology New	1687-1979
38	Arab Journal of Laboratory Medicine [The]	1110-1822
39	Arab Journal of Pharmaceutical Sciences	1683-0369
40	Arab Journal of Psychiatry [The]	1016-8923
41	Arabic Journal of Forensic Medicine and Criminal Science	N/A
42	Archives de l'Institut Pasteur de Tunis	0020-2509
43	Archives of Iranian Medicine	1029-2977
44	Armaghane-danesh	1728-6506
45	ARYA Atherosclerosis Journal	1735-3955
46	ASJOG - Ain Shams Journal of Obstetrics and Gynecology *	1687-2193
47	ASNJ - Alexandria Scientific Nursing Journal	N/A
48	Assiut Medical Journal	1110-0494
49	Assiut University Bulletin for Environmental Researches	1110-6107
50	Audiology	1735-1936
51	Bahrain Medical Bulletin	1012-8298
52	Bahria Journal of Professional Psychology	1816-0840

No.	Journal Title	ISSN
53	Basrah Journal of Surgery *	N/A
54	Benha Medical Journal	1110-208X
55	Bina Journal of Ophthalmology	1026-6399
56	Biomedica	N/A
57	Bulletin Epidemiologique *	0851-8238
58	Bulletin of Alexandria Faculty of Medicine	1110-0834
59	Bulletin of Alexandria Thoracic Association *	N/A
60	Bulletin of Endemic Diseases - Baghdad *	0007-4845
61	Bulletin of Faculty of Pharmacy - Cairo University	1110-0931
62	Bulletin of Faculty of Physical Therapy - Cairo University	1110-6611
63	Bulletin of High Institute of Public Health	1110-0036
64	Bulletin of Pharmaceutical Sciences - Assiut University	1110-0052
65	Bulletin of the Faculty of Science - University of Alexandria *	0568-9619
66	Bulletin of the Kuwait Institute for Medical Specialization	N/A
67	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
68	Bulletin of the National Research Centre	1110-0591
69	Bulletin of the Ophthalmological Society of Egypt *	1110-0982
70	Cahier Medicaux de Tunisie *	0300-5291
71	Challenge - Quarterly [The] *	0528-7944
72	Childhood and Development Quarterly *	1110-8681
73	Clinical Diabetes	0891-8929
74	Community Medicine *	0301-7265
75	Damascus University Journal for Health Sciences	N/A
76	DARU - Journal of Faculty of Pharmacy Tehran University of Medical Sciences	1560-8115
77	DENA - Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450

No.	Journal Title	ISSN
78	Diabetes Digest	1369-7501
79	Dirasat	1026-3772
80	DMJ - Derna Medical Journal	N/A
81	DMJ - Dohuk Medical Journal	2071-7326
82	DRJ - Dental Research Journal	1735-3327
83	Eastern Mediterranean Region Drugs Digest	1040-2312
84	Eastern Mediterranean Region Epidemiological Bulletin	1014-2347
85	EDJ - Egyptian Dental Journal	0070-9484
86	Egyptian Heart Journal [The]	1110-2608
87	Egyptian Journal of Anatomy [The] *	1110-2144
88	Egyptian Journal of Biomedical Engineering *	1012-5558
89	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
90	Egyptian Journal of Bronchology [The]	1687-8426
91	Egyptian Journal of Chemistry	0449-2285
92	Egyptian Journal of Community Medicine	1110-1865
93	Egyptian Journal of Dermatology and Andrology *	1110-7650
94	Egyptian Journal of Diabetes [The]	N/A
95	Egyptian Journal of Food Science	1110-0613
96	Egyptian Journal of Genetics and Cytology *	N/A
97	Egyptian Journal of Histology [The]	1110-0559
98	Egyptian Journal of Hospital Medicine [The]	1687-2002
99	Egyptian Journal of Medical Human Genetics [The]	1110-8630
100	Egyptian Journal of Medical Laboratory Sciences	1110-5593
101	Egyptian Journal of Medical Microbiology *	1110-2179
102	Egyptian Journal of Microbiology	0022-2704
103	Egyptian Journal of Neonatology [The] *	N/A

No.	Journal Title	ISSN
104	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
105	Egyptian Journal of Nutrition	N/A
106	Egyptian Journal of Nutrition and Health	N/A
107	Egyptian Journal of Occupational Medicine *	1110-1881
108	Egyptian Journal of Otolaryngology [The]	1012-5574
109	Egyptian Journal of Paediatrics [The]	1687-1677
110	Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642
111	Egyptian Journal of Pharmaceutical Sciences [The]	0301-5068
112	Egyptian Journal of Physiological Sciences *	0301-8660
113	Egyptian Journal of Psychiatry [The] *	1110-1105
114	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
115	Egyptian Journal of Surgery [The]	1110-1121
116	Egyptian Journal of Urology *	1110-5712
117	Egyptian Journal of Veterinary Science	1110-0222
118	Egyptian Medical Journal of the National Research Center *	1687-1278
119	Egyptian Orthodontic Journal *	N/A
120	Egyptian Orthopaedic Journal [The]	1110-1148
121	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
122	Egyptian Population and Family Planning Review [The]	N/A
123	Egyptian Rheumatology and Rehabilitation	1110-161X
124	Egyptian Science Magazine [The]	1687-3815
125	EJB - Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
126	EJENTAS - Egyptian Journal of ENT and Allied Sciences	2090-0740
127	Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
128	EMHJ - Eastern Mediterranean Health Journal	1020-3397
129	EMJ - Emirates Medical Journal	0250-6882

No.	Journal Title	ISSN
130	EMJ - Egyptian Medical Journal [The] *	1110-0095
131	Endovascular Journal	2008-1812
132	Faculty of Nursing and Midwifery Quarterly - Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
133	Garyounis Medical Journal *	0254-7198
134	Gazette of the Egyptian Paediatric Association [The] *	1110-6638
135	Gezira Journal of Health Sciences	N/A
136	GJMS - Gomal Journal of Medical Sciences	1819-7973
137	Govaresh	1560-7186
138	Gulf Journal of Dermatology and Venereology [The] *	N/A
139	HAKIM Research Journal	1561-252X
140	Hamdard Medicus	0250-7188
141	HAYAT - The Journal of Faculty of Nursing and Midwifery	1735-2215
142	Health Information Management	1735-1847
143	Health Services Journal of the Eastern Mediterranean Region *	1014-9899
144	Heart Views	1995-705X
145	Hematology, Oncology and stem Cell Therapy	1658-3876
146	Hepatitis Monthly	1735-143X
147	Homa-ye-Salamat	2008-2002
148	Hormozgan Medical Journal	1735-2223
149	IBJ - Iranian Biomedical Journal	1028-852X
150	IDEES - Revue de Perfectionnement Medical et Paramedical *	N/A
151	IEJ - Iranian Endodontic Journal	1735-7497
152	IJCN - Iranian Journal of Child Neurology	1735-4668
153	IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844
154	IJHOSCR - International Journal of Hematology-Oncology and Stem Cell Research*	1735-1243

No.	Journal Title	ISSN
155	IJI - Iranian Journal of Immunology	1735-1383
156	IJKD - Iranian Journal of Kidney Diseases	1735-8582
157	IJME - Iranian Journal of Medical Education	1608-9359
158	IJMS - Iranian Journal of Medical Sciences	0253-0716
159	IJO - Iranian Journal of Orthodontics	1735-5087
160	IJPR - Iranian Journal of Pharmaceutical Research *	1735-0328
161	IJVR - International Journal of Veterinary Research New	2008-2533
162	IMJ - Iraqi Medical Journal	0304-4564
163	Infectious Disease Journal of Pakistan	1027-0299
164	International Journal of Diabetes and Metabolism	1606-7754
165	International Journal of Diabetes Mellitus New	1877-5934
166	International Journal of Endocrinology and Metabolism	1726-9148
167	International Journal of Environmental Research	1735-6865
168	International Journal of Environmental Science and Technology	1735-1472
169	International Journal of Health Sciences New	N/A
170	International Journal of Pathology	1810-0155
171	IOJ - Iraqi Orthodontic Journal	1816-0581
172	IPMJ - Iraqi Postgraduate Medical Journal *	1608-8360
173	Iran Journal of Nursing	1025-0581
174	Iranian Cardiovascular Research Journal	1735-885X
175	Iranian Journal of Allergy, Asthma and Immunology	1735-1502
176	Iranian Journal of Arthropod-Borne Diseases	1735-7179
177	Iranian Journal of Basic Medical Sciences	1608-6015
178	Iranian Journal of Biotechnology	1728-3043
179	Iranian Journal of Cancer Prevention	2008-2398
180	Iranian Journal of Clinical Infectious Diseases	N/A

No.	Journal Title	ISSN
181	Iranian Journal of Dermatology	0021-082X
182	Iranian Journal of Diabetes and Lipid Disorders	1726-7544
183	Iranian Journal of Environmental Health Science and Engineering	1735-1979
184	Iranian Journal of Epidemiology	1735-7489
185	Iranian Journal of Fertility and Sterility	1735-8094
186	Iranian Journal of Health and Environment	2008-2029
187	Iranian Journal of Medical Microbiology	1735-8612
188	Iranian Journal of Nuclear Medicine	1681-2824
189	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
190	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
191	Iranian Journal of Obstetric, Gynecology and Infertility [The]	N/A
192	Iranian Journal of Ophthalmology	1735-4153
193	Iranian Journal of Otorhinolaryngology	1560-1293
194	Iranian Journal of Parasitology	1735-7020
195	Iranian Journal of Pediatrics	1018-4406
196	Iranian Journal of Psychiatry	1735-4587
197	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
198	Iranian Journal of Psychiatry and Clinical Psychology (ANDEESHEH VA RAFTAR)	1024-0047
199	Iranian Journal of Public Health	0304-4556
200	Iranian Journal of Radiation Research	1728-4554
201	Iranian Journal of Radiology	1735-1065
202	Iranian Journal of Reproductive Medicine	N/A
203	Iranian Journal of Veterinary Research	1728-1997
204	Iranian Rehabilitation Journal	1735-3602
205	Iraqi Army Medical Journal *	N/A

No.	Journal Title	ISSN
206	Iraqi Journal of Biotechnology *	N/A
207	Iraqi Journal of Community Medicine *	1684-5382
208	Iraqi Journal of Medical Sciences *	1681-6579
209	Iraqi Journal of Microbiology *	N/A
210	Iraqi Journal of Pharmaceutical Sciences *	N/A
211	Iraqi Journal of Tropical Disease Researches *	1814-0823
212	IRCMJ - Iranian Red Crescent Medical Journal	1561-4395
213	JABHS - Journal of the Arab Board of Health Specializations (New)	1561-0217
214	JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589
215	JBMS - Journal of the Bahrain Medical Society	1015-6321
216	JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X
217	JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150
218	JDUHS - Journal of the Dow University of Health Sciences	1995-2198
219	JESN - Journal of the Egyptian Society of Nephrology	N/A
220	JISHIM - Journal of the International Society for the History of Islamic Medicine	1303-667X
221	JLDA - Journal of the Lebanese Dental Association	1810-9632
222	JLUMHS - Journal of the Liaquat University of Medical Health Sciences	1729-0341
223	JMJ - Jamahiriya Medical Journal	N/A
225	JMJ - Juba Medical Journal *	N/A
224	JMR - Journal of Medical Research *	1728-1962
226	JMS - Journal of Medical Sciences	N/A
227	Joint Centre for Research in Prosthetics and Orthotics [The] *	N/A
228	JOPDAK - Journal of the Pakistan Dental Association Karachi *	N/A
229	Jordan Journal of Pharmaceutical Sciences	1995-7157
230	Jordan Medical Journal	0446-9283

No.	Journal Title	ISSN
231	Journal du Practicien *	1113-5667
232	Journal of Arak University of Medical Sciences - Rahavard Danesh	N/A
233	Journal of Babol University of Medical Sciences	1561-4107
234	Journal of Basic and Applied Sciences	N/A
235	Journal of Basic and Medical Sciences *	1608-6015
236	Journal of Childhood Studies	2090-0619
237	Journal of Clinical Laboratory [The]	N/A
238	Journal of Community Medicine *	N/A
239	Journal of Dental Research, Dental Clinics, Dental Prospects	N/A
240	Journal of Dental Medicine - Tehran University of Medical Sciences	1024-641X
241	Journal of Dental School - Shahid Beheshti University of Medical Sciences	1735-7683
242	Journal of Dentistry - Shiraz University of Medical Sciences	1728-3426
243	Journal of Dohuk University *	1812-7568
244	Journal of Drug Research of Egypt	0085-2406
245	Journal of Family and Community Medicine	1319-1683
246	Journal of Fundamentals of Mental Health	1028-6918
247	Journal of Gorgan University of Medical Sciences	1562-4765
248	Journal of Guilan University of Medical Sciences New	1028-6055
249	Journal of Health Administration	N/A
250	Journal of Hepatology, Gastroenterology and Infectious Diseases $^{\star}$	1110-0796
251	Journal of Hygiene and Health	1735-2363
252	Journal of Infection and Public Health	1876-0341
253	Journal of Iranian Anatomical Sciences New	1728-6158
254	Journal of Isfahan Dental School	1735-255X
255	Journal of Isfahan Medical School	1027-7595
256	Journal of Islamic Dental Association of Iran [The]	1024-6428

No.	Journal Title	ISSN
257	Journal of Jahrom University of Medical Sciences	1735-5168
258	Journal of Karbala University *	1813-0410
259	Journal of Kerman University of Medical Sciences	1023-9510
260	Journal of King Abdulaziz University - Medical Sciences *	1319-1004
261	Journal of Legal Medicine and Forensic Sciences[The]	1110-6468
262	Journal of Mashad Dental School	1560-9286
263	Journal of Mazandaran University of Medical Sciences	1561-4123
264	Journal of Medical Council of Islamic Republic of Iran	1562-1073
265	Journal of Medical Education	N/A
266	Journal of Medical Sciences	1682-4474
267	Journal of Medical Science - Islamic Azad University of Mashhad New	1735-7594
268	Journal of Medicinal Plants	1684-0240
269	Journal of Nephrology Urology and Transplantation *	N/A
270	Journal of Ophthalmic and Vision Research	2008-2010
271	Journal of Rafsanjan University of Medical Sciences	1735-3165
272	Journal of Rehabilitation	1607-2960
273	Journal of Research in Behavioural Sciences New	1735-2029
274	Journal of Research in Health Sciences (JRHS)	1682-2765
275	Journal of Research in Medical Sciences	1735-5311
276	Journal of Qazvin University of Medical Sciences and Health Services [The]	1561-3666
277	Journal of Sabzevar School of Medical Sciences	1606-7487
278	Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
279	Journal of Shahrekord University of Medical Sciences	1735-1448
280	Journal of Surgery [The] *	1681-4517
281	Journal of Taibah University Medical Sciences	1658-3612

No.	Journal Title	ISSN
282	Journal of Tehran University Heart Center [The]	1735-8620
283	Journal of the Arab Board of Medical Specializations	1561-0217
284	Journal of the Arab Dentist *	N/A
285	Journal of the Arab Neonatology Forum *	1812-1756
286	Journal of the Arab Society for Medical Research	1687-4293
287	Journal of the College of Dentistry - Baghdad *	N/A
288	Journal of the Egyptian Medical Association [The] *	0013-2411
289	Journal of the Egyptian National Cancer Institute	1110-0362
290	Journal of the Egyptian Public Health Association [The]	N/A
291	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	N/A
292	Journal of the Egyptian Society of Obstetrics and Gynecology [The] *	0258-3216
293	Journal of the Egyptian Society of Parasitology	1110-0583
294	Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The] $^{\star}$	N/A
295	Journal of the Egyptian Society of Toxicology	1110-127X
296	Journal of the Faculty of Medicine - Baghdad	0041-9419
297	Journal of the Medical Research Institute - Alexandria University $^{\star}$	1110-0133
298	Journal of the Royal Medical Services	N/A
299	Journal of the Saudi Heart Association	1319-9218
300	Journal of Tropical Nephro-Urology	N/A
301	Journal of Veterinary Research	1022-646X
302	Journal of Zahedan University of Medical Sciences	1735-076X
303	Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
304	Jundishapur Journal of Microbiology (JJM)	N/A
305	JPAD - Journal of Pakistan Association of Dermatologists	1560-9014
306	JPC - Journal of Pediatric Club	N/A

No.	Journal Title	ISSN
307	JPDA - Journal of the Pakistan Dental Association	1680-2292
308	JPIMS - Journal of Pakistan Institute of Medical Sciences *	1683-6928
309	JPMA - Journal of Pakistan Medical Association	0030-9982
310	JPMI - Journal of Postgraduate Medicale Institute	1013-5472
311	JPPS - Journal of Pakistan Psychiatric Society	1726-8710
312	JRMS - Journal of Research in Medical Sciences	1735-1995
313	JSP - Journal of Surgery Pakistan International	1817-0242
314	Kasr El Aini Journal of Surgery	N/A
315	Khartoum Pharmacy Journal *	N/A
316	Kidney Forum *	1369-3050
317	KMJ - KUST Medical Journal New	2072-7763
318	KMJ - Kuwait Medical Journal	0023-5776
319	KOOMESH - Journal of Semnan University of Medical Sciences	1608-7046
320	Kufa Medical Journal *	N/A
321	Lahore Journal of Public Health *	N/A
322	Lebanese Science Journal	1561-3410
323	Libyan Journal of Infectious Diseases [The]	N/A
324	LJM - Libyan Journal of Medicine	1819-6357
325	LMJ - Lebanese Medical Journal	0023-9852
326	Maghreb Medical	0330-258X
327	Mansoura Journal of Pharmaceutical Sciences	1110-1318
328	Mansoura Medical Journal	1110-211X
329	Maroc Medical	0025-4053
330	Medical Arabization	N/A
331	Medical Channel	1681-5491
332	Medical Forum Monthly	1029-385X

No.	Journal Title	ISSN
333	Medical Journal of Ahmed Maher Teaching Hospital [The] *	N/A
334	Medical Journal of Basrah University [The]	0253-0759
335	Medical Journal of Cairo University [The]	0045-3803
336	Medical Journal of Islamic World Academy of Sciences	1016-3360
337	Medical Journal of Mashad University of Medical Sciences	N/A
338	Medical Journal of Reproduction and Infertility	1726-7536
339	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
340	Medical Journal of Teaching Hospitals and Institutes [The] *	1110-2039
341	Medical Journal of the Islamic Republic of Iran *	1016-1430
342	Medical Journal of Tikrit University [The] *	N/A
343	Medical Principles and Practice	1011-7571
344	Medical Sciences Journal of Islamic Azad University	1023-5922
345	Medical Spectrum [The] *	0254-8534
346	Medicine Today	1813-9876
347	MEAJO - Middle East African Journal of Ophthalmolgy	0974-9233
348	Middle East Journal of Anesthesiology	0544-0440
349	JEMTAC - Journal of Emergency Medicine, Trauma & Acute Care	1995-4522
350	Middle East Journal of Family Medicine	N/A
351	Minoufiya Medical Journal	1110-2098
352	MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology *	1110-5437
353	Modares Journal of Medical Sciences	1562-9554
354	Mother and Child *	0379-2617
355	National Cancer Institute Journal	0027-8874
356	Neonatology *	1687-0492
357	Neurosciences	N/A
358	New Egyptian Journal of Medicine [The]	1110-1946

No.	Journal Title	ISSN
359	Journal of Medicine [The]	1817-5562
360	Nursing and Midwifery Research	1753-5001
361	Ofogh-E-Danesh	1735-1855
362	Oman Journal of Ophthalmology	0974-620X
363	Oman Medical Journal	N/A
364	Omdurman Journal of Pharmaceutical Sciences	N/A
365	PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648
366	Pakistan Heart Journal	0048-2706
367	Pakistan Journal of Biochemistry *	0300-8185
368	Pakistan Journal of Chest Medicine	N/A
369	Pakistan Journal of Clinical Psychology	1019-438X
370	Pakistan Journal of Community Medicine [The] *	N/A
371	Pakistan Journal of Health *	N/A
372	Pakistan Journal of Medical and Health Services	1996-7195
373	Pakistan Journal of Medical Sciences	1682-024X
374	Pakistan Journal of Neurology *	N/A
375	Pakistan Journal of Obstetrics and Gynaecology	N/A
376	Pakistan Journal of Ophthalmology	0886-3067
377	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry $^{\star}$	1608-134X
378	Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985
379	Pakistan Journal of Pathology	N/A
380	Pakistan Journal of Pharmaceutical Sciences	1011-601X
381	Pakistan Journal of Pharmacology	0255-7088
382	Pakistan Journal of Physiology	1819-270X
383	Pakistan Journal of Psychology	0030-9869
384	Pakistan Journal of Scientific and Industrial Research *	0030-9885

No.	Journal Title	ISSN
385	Pakistan Medical Journal *	0031-000X
386	Pakistan Ophthalmology *	0259-3661
387	Pakistan Oral and Dental Journal	1012-8700
388	Pakistan Paediatric Journal	0304-4904
389	Pan Arab Journal of Neurosurgery	1319-6995
390	Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
391	Pan Arab Medical Journal *	N/A
392	Payesh - Health Monitor	1680-7626
393	Pejouhandeh: Bimonthly Research Journal	1735-1022
394	PJC - Pakistan Journal of Cardiology	1016-1244
395	PJMR - Pakistan Journal of Medical Research	0030-9842
396	PJS - Pakistan Journal of Surgery	0258-8552
397	PMJ - Palestinian Medical Journal	N/A
398	Population Bulletin of ESCWA *	0258-1914
399	Population Researches and Studies	N/A
400	Population Sciences *	N/A
401	Population Studies *	1110-1342
402	Proceedings	N/A
403	Professional Medical Journal - Quarterly [The]	1024-8919
404	PUJ - Parasitologists United Journal	1687-7942
405	Qatar Medical Journal	0253-8253
406	Qom University of Medical Sciences	1735-7799
407	Quarterly Journal of Medical Ethics	N/A
408	Rehabilitation International *	N/A
409	Research Centre Bulletin *	1019-5335
410	Research Journal of Aleppo University - Medical Sciences Series	N/A

No.	Journal Title	ISSN
411	Revue Maghrebine de Pediatrie [La]	0330-7611
412	Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La]	N/A
413	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
414	Revue Marocaine de Medecine et de Sante	0251-0758
415	Revue Marocaine des Maladies de L'Enfant *	N/A
416	Revue Tunisienne d'Infectiologie	N/A
417	Risafa Medical Journal *	N/A
418	RMJ - Rawal Medical Journal	0303-5212
419	Salmand: Iranian Journal of Aging	1735-806X
420	Sana'a University Medical Sciences *	N/A
421	Saudi Epidemiology Bulletin	1319-3965
422	Saudi Heart Journal *	1018-077X
423	Saudi Journal of Disability and Rehabilitation *	1319-6499
424	Saudi Journal of Gastroenterology [The]	1319-3767
425	SJO - Saudi Journal of Ophthalmology	1319-4534
426	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The] $^{\star}$	1319-8491
427	Saudi Journal of Sports Medicine [The] *	1319-6308
428	Saudi Medical Journal	0379-5284
429	Scientific and Research Journal of Army University of Medical Sciences - J.A.U.M.S	1727-1789
430	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The] *	1110-2381
431	Scientific Journal of Forensic Medicine	1027-1457
432	Scientific Journal of Iranian Blood [The]	1027-9520
433	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
434	Scientific Journal of School of Public Health and Institute of Public Health Research	1735-7586
435	Scientific Medical Journal	1110-5607

No.	Journal Title	ISSN
436	Scientific Medical Journal - Quarterly Medical Research Journal Ahvaz Jundishapur University of Medical Sciences	1026-8960
437	Scientific Nursing Journal	N/A
438	SDJ - Saudi Dental Journal [The]	1013-9052
439	SGH Medical Journal	1658-2489
440	SHAMS - Journal of Medical Sciences	N/A
441	Smile Dental Journal	2072-473X
442	Social Welfare Quarterly	N/A
443	South Valley Medical Journal	1110-7529
444	SPJ - Saudi Pharmaceutical Journal	1319-0164
445	SQUMJ - Sultan Qaboos University Medical Journal	2075-051X
446	SST - Sante et Securite au Travail	N/A
447	Strides in Development of Medical Education	1735-4242
448	Sudan Journal of Medical Sciences	N/A
449	Sudan Medical Journal *	0491-4481
450	Sudan Medical Monitor	1858-5000
451	Sudanese Journal of Dermatology	N/A
452	SJPH - Sudanese Journal of Public Health	N/A
453	Suez Canal University Medical Journal	1110-6999
454	Tabib Attifil Alarabi *	N/A
455	Tanaffos	1735-0344
456	Tanta Medical Journal *	1110-1415
457	Tanta Medical Sciences Journal	1687-5788
458	Tehran University Medical Journal [TUMJ]	1735-7322
459	Toloo-e-Behdasht	1728-5127
460	Tunisie Medicale [La]	0041-4131

No.	Journal Title	ISSN
461	University of Aden Journal of Natural and Applied Sciences	1606-8947
462	Urology Journal	1735-1308
463	Veterinary Medical Journal	1110-1423
464	Yafteh Journal	1563-0773
465	Yakhteh Medical Journal	1561-4921
466	Yemeni Journal for Medical Sciences [The] *	N/A
467	YHMRJ - Yemeni Health and Medical Research Journal	N/A
468	YJMHR-Yemeni Journal of Medical and Health Research *	N/A
469	YMJ - Yemen Medical Journal *	N/A
470	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
471	Zagazig Journal of Pharmaceutical Sciences *	1110-5089
472	Zagazig Medical Association Journal *	1110-2322
473	Zagazig University Medical Journal *	1110-1431
474	Zanco Journal for Medical Sciences *	N/A

## \* No issues received since 2005

Last update March 2010