

Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



IMEMR Current Contents

June 2017

Vol. 16 No. 2



Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts

IMEMR Current Contents

June 2017

Vol. 16 No. 2

© World Health Organization 2017

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate borderlines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Publications of the World Health Organization can be obtained from Health Publications, Production and Dissemination, World Health Organization, Regional Office for the Eastern Mediterranean, P.O. Box 7608, Nasr City, Cairo 11371, Egypt (tel: + 202 2276 043, fax: +202 22765 424; email: emrgoksp@who.int). Requests for permission to reproduce, in part or in whole, or to translate publications of WHO Regional Office for the Eastern Mediterranean – whether for sale or for noncommercial distribution – should be addressed to *Regional Adviser, Global Arabic Programme*, WHO Regional Office for the Eastern Mediterranean, at the following address: email: emrgoeqp@who.int.

Design, layout and printing by WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt

ISSN: 2071-2510

Table of Contents

IMEMR Current Contents	vii
-------------------------------------	------------

Subject Index	ix
----------------------------	-----------

Abortion, Habitual.....	1
Abortion, Spontaneous.....	1
Accidental Falls.....	2
Acetabulum.....	2
Acetic Acid.....	3
Acidulated Phosphate Fluoride.....	3
Activities of Daily Living.....	4
Acute Coronary Syndrome.....	4
Adaptation, Physiological.....	5
Aedes.....	5
Alveolar Bone Grafting.....	6
Alzheimer Disease.....	7
Anemia, Sickle Cell.....	7
Anesthesia, Dental.....	8
Ankle Injuries.....	8
Anticoagulants.....	9
Antimicrobial Cationic Peptides.....	9
Antioxidants.....	9
Apolipoproteins E.....	10
Arginine.....	10
Asthma.....	11
Attention Deficit Disorder with Hyperactivity.....	11
Bariatric Surgery.....	12
Benzhydryl Compounds.....	12
Blood Transfusion.....	12
Blood Vessels.....	13
Blood-Borne Pathogens.....	13
Bone Marrow Transplantation.....	13
Brain-Computer Interfaces.....	14
Breast Neoplasms.....	14
CA1 Region, Hippocampal.....	15
Cardiac Output.....	15
Caregivers.....	15
Celiac Disease.....	16
Cell Phones.....	17
Cerebellar Ataxia.....	17
Cerebral Palsy.....	17
Cervix Uteri.....	18
Chronic Periodontitis.....	18
Clavicle.....	18
Colitis.....	19
Collateral Circulation.....	19
Composite Resins.....	20

Coronary Artery Disease.....	20
Coronary Vessel Anomalies.....	20
Cryptosporidium parvum.....	21
Culex.....	21
Dental Arch.....	21
Dental Caries.....	22
Dental Implants.....	22
Dental Restoration, Permanent.....	23
Denture, Complete.....	23
Depressive Disorder.....	24
Diabetes Mellitus.....	24
Diabetic Foot.....	25
Dioxanes.....	25
Diptera.....	26
Down Syndrome.....	26
Drug Evaluation, Preclinical.....	27
Duodenal Obstruction.....	27
Echinococcosis.....	27
Educational Measurement.....	28
Electromagnetic Fields.....	28
Elephantiasis, Filarial.....	28
Emergency Medical Services.....	29
Endodontics.....	29
Endometrial Neoplasms.....	30
Endometriosis.....	30
Epilepsy, Temporal Lobe.....	30
Escherichia coli.....	31
Esophageal Achalasia.....	31
Estradiol.....	31
Ethidium.....	32
Eye Injuries, Penetrating.....	32
Fasciola hepatica.....	33
Femoral Neck Fractures.....	33
Fertilization in Vitro.....	33
Foreign Bodies.....	34
Fragile X Syndrome.....	34
Fraser Syndrome.....	35
Frontal Sinusitis.....	35
Fungi.....	35
Gait.....	36
Gallbladder Neoplasms.....	36
Gastric Outlet Obstruction.....	37
Gastritis, Atrophic.....	37
Gastrointestinal Diseases.....	38
Gastrointestinal Neoplasms.....	38
Genital Diseases, Male.....	38
Ghrelin.....	38
Gingival Retraction Techniques.....	39
Glioblastoma.....	39
Global Health.....	40
Gram-Negative Bacteria.....	40

Granulomatosis with Polyangiitis	40
Hallux Valgus	41
Heart Block	41
Heart Failure.....	41
Hemostasis	42
Hepatitis B	42
Hepatitis C, Chronic.....	42
Herniorrhaphy	43
Huntington Disease	44
Hypotrichosis.....	44
Imatinib Mesylate	44
Immunologic Surveillance	45
Infertility.....	45
Infertility, Female	46
Inflammation.....	47
Intestinal Polyposis.....	47
Keratitis	47
Kidney Failure, Chronic.....	48
Lactase	48
Language Disorders	48
Leukemia	49
Leukemia, Myeloid, Acute	49
Lidocaine	50
Life Change Events	50
Liver Cirrhosis	51
Lung Injury.....	51
Lymphohistiocytosis, Hemophagocytic.....	51
Lymphoma.....	52
Malaria, Falciparum.....	52
Mastectomy, Modified Radical	53
Meningioma	53
Meningitis.....	54
Meningoencephalitis.....	54
Methicillin-Resistant Staphylococcus aureus	54
Middle Lobe Syndrome	55
Mitomycin	55
Morphine Dependence	56
Multiple Myeloma.....	56
Multiple Sclerosis	57
Myocardial Infarction.....	57
Nails, Ingrown	58
Neck Pain.....	58
Neoplasms.....	58
Neurilemmoma	59
Neurofeedback.....	59
Nigella sativa	60
Nursing Care	60
Obesity	60
Oncolytic Virotherapy	61
Orthodontic Appliance Design	61
Osteoarthritis, Knee	61

Osteogenesis	62
Osteogenesis Imperfecta.....	62
Osteoporosis	63
Ovarian Neoplasms	63
Panax.....	63
Panniculitis, Peritoneal.....	64
Pantothenate Kinase-Associated Neurodegeneration	64
Parathyroid Glands.....	64
Patellofemoral Pain Syndrome.....	65
Pelvis	65
Periodontal Diseases	66
Peripheral Arterial Disease.....	66
Pharmaceutical Preparations	67
Pharmacy Service, Hospital	67
Plant Extracts.....	67
Plant Oils	68
Polycystic Ovary Syndrome	68
Pre-Eclampsia	69
Premature Birth.....	69
Prostatic Neoplasms.....	70
Psychometrics	71
Quinolines	71
Rectovaginal Fistula.....	71
Recurrent Laryngeal Nerve Injuries.....	72
Reperfusion Injury.....	72
Research Personnel.....	72
Retinal Detachment	73
Retinitis Pigmentosa.....	73
Ring Chromosomes	73
Root Canal Therapy	74
Scalp Dermatoses.....	74
Schistosomiasis mansoni.....	75
Scoliosis	75
Seizures	75
Sepsis.....	76
Serum Albumin.....	76
Sleep Apnea Syndromes.....	77
Spider Bites	77
Spiramycin.....	77
Stomach Neoplasms.....	78
Stomatitis	78
Streptococcus agalactiae.....	79
Stroke	79
Temporomandibular Joint Disorders.....	80
Thyroid Diseases.....	80
Tooth Bleaching Agents.....	81
Tooth Eruption, Ectopic.....	81
Tooth Root	81
Tooth, Nonvital.....	82
Toxoplasma	82
Toxoplasmosis	83

Tracheal Stenosis.....	84
Triple Negative Breast Neoplasms	84
Trypanosoma.....	84
Twins, Dizygotic.....	85
Upper Extremity Deformities, Congenital	85
Upper Gastrointestinal Tract.....	86
Urolithiasis	86
Uterine Cervical Neoplasms	87
Ventricular Dysfunction, Left.....	87
Ventricular Premature Complexes	88
Vitamin D.....	88
Vitamin D Deficiency	89
Volleyball.....	90
Welding.....	91
Xenopsylla	91
Appendix I: Author Index.....	93
Appendix II: List of EMR Journals Indexed in IMEMR (by country).....	121
Appendix III: List of EMR Journals Indexed in IMEMR (by title).....	143

IMEMR Current Contents

Rationale

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

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

Scope and Coverage

The **IMEMR Current Contents** is issued on a quarterly basis including the most recent articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database¹.

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.

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

Availability of photocopies

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

Availability on the Internet

This issue, as well as all forthcoming issues, will appear in WHO/EMRO web site on the Internet, as part of the complete edition of the Index. Internet address is <http://www.emro.who.int/information-resources/imemr/imemr.html>

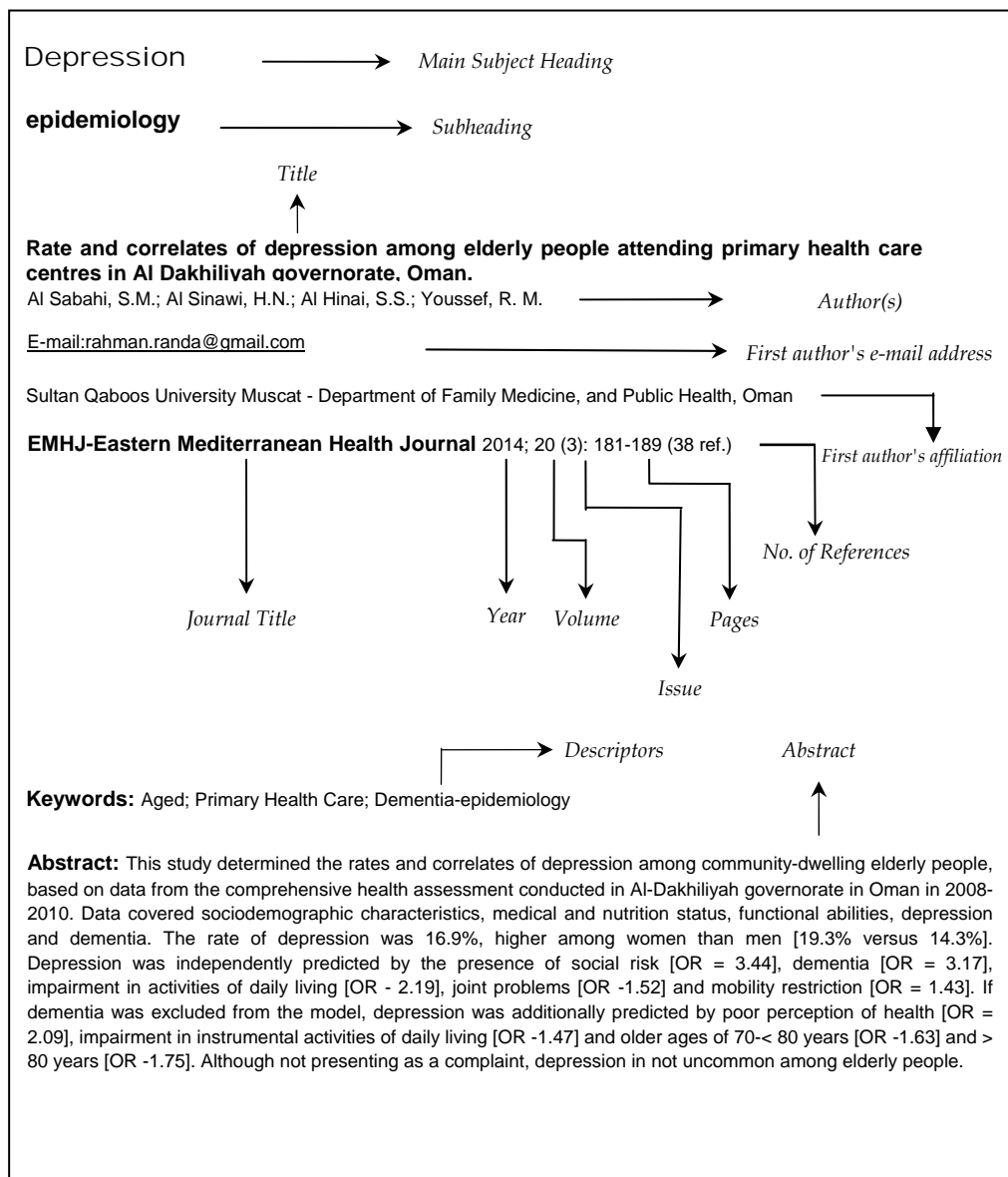


Figure (1): Sample of IMEMR citation

Subject Index

Abortion, Habitual

genetics

H1299R in coagulation Factor V and Glu429A in MTHFR genes in recurrent pregnancy loss in Sari, Mazandaran.

Arabkhazaeli, Nadia; Ghanaat, Kasra; Hashemi Soteh, Mohammad Bagher
Islamic Azad University - Faculty of Science - Department of Genetic

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 329-334

Keywords: Genome-Wide Association Study; Polymorphism, Genetic; Methylenetetrahydrofolate Reductase (NADPH2)-genetics; Factor V-genetics; Case-Control Studies

Abstract: Background: Recurrent pregnancy loss [RPL] is caused by different factors, including genetics and thrombophilia. Beside Factor V Leiden, another nucleotide change in a factor V [FV] gene [A4070G; His1299Arg] has been identified linking to hereditary thrombophilia. Also, two proposed MTHFR polymorphisms, C677T and A1298C [Glu429A] are linked with RPL. Objective: In this study, the effect of two factors, A4070G in FV and A1298C in MTHFR are evaluated in RPL patients from Mazandaran province, Iran. Materials and Methods: Sample population of 100 women with RPL and 100 controls with Mazandarani ethnics from northern Iran were consist. The factor V [A4070G] and MTHFR [A1298C] polymorphisms were genotyped by PCR-RFLP. Results: Molecular study showed 5 women from patients and 9 women from control group were heterozygous AG for A4070G. Frequency of "A" allele in patient and control groups was 97.5% [0.975] and 95.5% [0.955] respectively, and "G" allele frequency was 2.5% [0.025] and 4.5% [0.045] respectively. No significant association [$p < 0.05$] between FV A4070G genotype and RPL with an OR=1.88, CI 95%=0.6-5.82, was observed [$p=0.4$]. Also, for A1298C, all patients and control individuals were AA genotype. "A" allele frequency in patients and control was 100% and "C" allele frequency was zero. There was no significant difference for A1298C between groups. Conclusion: Our finding showed that A4070G and A1298C polymorphisms cannot be considered as a cause of PRL in women from Mazandaran province, northern Iran.

Significant correlation of angiotensin converting enzyme and glycoprotein IIIa genes polymorphisms with unexplained recurrent pregnancy loss in north of Iran.

Fazelnia, Shokoufeh; Farazmandfar, Touraj; Hashemi Soteh, Seyed Mohammad Bagher
Islamic Azad University - Damghan Branch - Department of Biology

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 323-328

Keywords: Peptidyl-Dipeptidase A-genetics; Integrin beta3-genetics; Mutagenesis, Insertional; Sequence Deletion; Genetic Association Studies; Polymorphism, Genetic; Case-Control Studies

Abstract: Background: Spontaneous abortion is considered as the most complex problem during pregnancy. Thrombophilia is resumed as a cause of recurrent pregnancy loss [RPL]. Glycoprotein IIIa [GPIIIa] gene is involved in thrombosis and abortion. Angiotensin converting enzyme [ACE] converts angiotensin I to angiotensin II and is involved in thrombosis. The most common polymorphism in this gene is the insertion/deletion [I/D]. Objective: In this study, we analyzed the association between ACE I/D and GPIIIa c.98C >T polymorphisms in women with unexplained RPL from the north of Iran. Materials and Methods: Sample population consisted of 100 women with unexplained RPL and 100 controls. The ACE I/D and GPIIIa c.98C>T polymorphisms were genotyped by TETRA-ARMS PCR. The association between genotypes frequency and RPL were analyzed using P2P and exact fisher tests. Associated risk with double genotype combinations was also investigated by binary logistic regression. Results: There was significant association between ACE DD genotype and RPL [OR=2.04; 95% CI=0.94-4.44; $p=0.036$]. ACE D Allele was also significantly associated with the RPL [OR=1.59; 95% CI=1.05-2.41; $p=0.013$]. No significant association was observed between GPIIIa c.98C>T polymorphism and RPL. Conclusion: ACE I/D polymorphism may probably be a prognostic factor in female family members of women with the history of recurrent abortion.

Abortion, Spontaneous

The relationship between Chlamydia trachomatis genital infection and spontaneous abortion.

Ahmadi, Amjad; Khodabandehloo, Mazaher; Ramazanzadeh, Rashid; Farhadifar, Fariba; Roshani, Daem; Ghaderi, Ebrahim; Farhangi, Niloofar

Kurdistan University of Medical Sciences - Faculty of Medicine - Department of Microbiology

Journal of Reproduction and Infertility 2016; 17 (2): 110-116

Keywords: Chlamydia trachomatis; Chlamydia Infections; Reproductive Tract Infections; Pregnant Women; Case-Control Studies

Abstract: Background: Chlamydia trachomatis is the etiology of most of sexually transmitted diseases. Colonization of C. trachomatis in the genital tract during early gestation has been associated with preterm birth, and preterm premature rupture of the membranes. The role of C. trachomatis on spontaneous abortion has not yet been proved completely. The aim of this study was to evaluate the frequency of C. trachomatis infection among pregnant women and its association with spontaneous abortion. Methods: This case-control study was

conducted from August 2012 until January 2013. Totally, 218 women were included; 109 women with spontaneous abortion with gestation age between 10-20 weeks [cases], and 109 women with normal pregnancy with gestation age between 20-30 weeks [controls] in Sanandaj, Iran. DNA was extracted from endocervical swabs and a PCR test was conducted for detection of *C. trachomatis* infection in women using specific primers. Independent T-test and Chi-square were used for comparison of quantitative and qualitative variables, respectively, and $p < 0.05$ was considered significant. Results: The total prevalence of *C. trachomatis* infection was 38[17.43%] in endocervical swabs of women. However, the number of cases with *C. trachomatis* infections was 25 out of 109[22.9%] in the case group and 13 out of 109[11.9%] in control group, respectively. Association between chlamydia infection and spontaneous abortion was statistically significant [OR=2.198, CI 95%: 1.058-4.56]. Conclusion: Our study showed that *C. trachomatis* infection was associated with spontaneous abortion. Thus, screening and treatment of pregnant women may prevent this adverse pregnancy outcome.

Accidental Falls

Cross-cultural adaptation, validity and reliability of the Arabic version of the Falls Efficacy Scale-international [FES-I]

Halaweh, Hadeel; Svantesson, Ulla; Rosberg, Susanne; Willen, Carin

E-mail:hadeel.halawah@neuro.gu.se

University of Gothenburg - Institute of Neuroscience and Physiology - Department of Physiotherapy

Medical Principles and Practice 2016; 25 (1): 1-7

Keywords: Cross-Cultural Comparison; Reproducibility of Results; Adaptation, Physiological; Arabs; Aged

Abstract: Objective: The aim of this study was to evaluate the validity and reliability of an Arabic language version [Ar] of the Falls Efficacy Scale-International [FES-I] with respect to its use with Arabic-speaking elderly subjects. Subjects and Methods: For cross-cultural adaptation, the translation of the original English version of the scale was conducted based on the protocol of the Prevention of Falls Network Europe [ProFaNE]. The FES-I [Ar] was administered via face-to-face interviews to 108 community-dwelling elderly Palestinians [61 women and 47 men, aged 60-84 years]. Statistical analyses were used to determine group differences with respect to age, gender and fall history. To assess validity, Spearman's rank correlation coefficient was used to examine the correlation between the total scores of FES-I [Ar] and the Timed Up and Go [TUG] test, gait speed and balance. Test-retest reliability between the two test occasions was assessed in accordance with Svensson's method. Results: The FES-I [Ar] total scores were positively correlated with TUG [$r[s] = 0.641$, $p < 0.001$] and negatively correlated with gait speed [$r[s] = -0.670$, $p < 0.001$] and balance [$r[s] = -0.592$, $p < 0.001$]. All items of the FES-I [Ar] indicated a high percentage agreement [from 88 to 93%], and the relative position ranged from 0.01 to 0.06. Conclusion: In this study, the FES-I [Ar] was shown to be a comprehensible, valid and reliable measure of the concern about falling among community-dwelling elderly subjects. In clinical practice and future research, the FES-I [Ar] instrument could be used to effectively assess concern about falling in Arabic-speaking elderly persons.

Acetabulum

pathology

A thirty year perspective on posterior wall fractures of the acetabulum: Enigma or just another intra-articular injury.

Moed, Berton R.

E-mail:moedbr@slu.edu

Saint Louis University School of Medicine - Department of Orthopaedic Surgery

Journal of Taibah University Medical Sciences 2016; 11 (3): 179-186

Keywords: Fracture Healing; Stress, Mechanical; Surgical Procedures, Operative; Femoral Fractures; Fracture Fixation; Intra-Articular Fractures

Abstract: Investigators dealing with a relatively small number of patients with posterior wall fractures have found unsatisfactory clinical outcomes, estimated to be approximately 30%. Consequently, conventional wisdom has professed that these fractures do poorly relative to other acetabular fracture types and are somehow different. The main questions to be answered in the treatment of these injuries include: [1] how can the need for operative versus non-operative treatment best be determined, [2] can the fixation of comminuted and marginally impacted fracture fragments be improved, [3] what are the risk factors for an adverse outcome after operative fracture fixation, and [4] what are the expected clinical and functional outcomes after operative treatment?. A review of my long-term body of work investigating posterior wall fractures of the acetabulum, published over an extended period of time, was conducted to address these questions. Answers to the proposed questions are as follows: [1] dynamic stress examination under anaesthesia is the only reliable way to determine hip joint stability; [2] fixation of comminuted and marginally impacted fracture fragments can be improved by using a two-level fixation construct, as well as a non-traditional surgical approach for certain fracture patterns; [3] delayed reduction of hip dislocation and comminuted fractures in older patients are associated with poor clinical outcome and the accuracy of surgical reduction is highly predictive of clinical outcome; and [4] good-to-excellent hip function should be expected in a high percentage of these patients. However, residual functional deficits may still remain.

Acetic Acid

pharmacology

Hepatoprotective and antidiabetic effects of apple cider vinegar [A prophetic medicine remedy] on the liver of male rats.

Omar, Nassar Ayoub Abdellatif; Allithy, Amal Nor Edeen Ahmad; El Sayed, Salah Mohamed
E-mail: n.nassar395@gmail.com

Taif University - Faculty of Clinical Pharmacy - Department of Anatomy

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 95-104

Keywords: Malus; Biomarkers-blood; Liver-pathology; Streptozocin; Diabetes Mellitus, Experimental; Rats, Wistar; Religion and Medicine

Abstract: Background: Diabetes mellitus is associated with biochemical and pathological alterations in the liver. The aim of this study was to investigate the effects of apple cider vinegar [ACV] on serum biochemical markers and histopathological changes in the liver of diabetic rats for 30 days. Effects were evaluated using streptozotocin [STZ]-induced diabetic rats as an experimental model. Materials and Methods: Diabetes mellitus was induced by a single dose of STZ [65 mg/kg] given intraperitoneally. Thirty wistar rats were divided into three groups: control group, STZ-treated group and STZ plus ACV treated group [2 ml/kg BW]. Animals were sacrificed 30 days post treatment. Results: Biochemical results indicated that, ACV caused a significant decrease in glucose, TC, LDL-c and a significant increase in HDL-c. Histopathological examination of the liver sections of diabetic rats showed fatty changes in the cytoplasm of the hepatocytes in the form of accumulation of lipid droplets, lymphocytic infiltration. Electron microscopic studies revealed aggregations of polymorphic mitochondria with apparent loss of their cristae and condensed matrices. Besides, the rough endoplasmic reticulum was proliferating and fragmented into smaller stacks. The cytoplasm of the hepatocytes exhibited vacuolations and displayed a large number of lipid droplets of different sizes. On the other hand, the liver sections of diabetic rats treated with ACV showed minimal toxic effects due to streptozotocin. These ultrastructural results revealed that treatment of diabetic rats with ACV led to apparent recovery of the injured hepatocytes. In prophetic medicine, Prophet Muhammad peace is upon him strongly recommended eating vinegar in the Prophetic Hadeeth: "vinegar is the best edible". Conclusion: This study showed that ACV, in early stages of diabetes induction- can decrease the destructive progress of diabetes and cause hepatoprotection against the metabolic damages resulting from streptozotocin- induced diabetes mellitus.

Acidulated Phosphate Fluoride

pharmacology

Concentration of calcium, phosphate and fluoride ions in microbial plaque and saliva after using CPP-ACP paste in 6-9 year-old children.

Poureslami, H.R.; Hoseinifar, Ra.; Hoseinifar, Re.; Sharifi, H.; Poureslami, P.

Kerman University of Medical Sciences - Oral and Dental Diseases Research Center - Department of Pediatric Dentistry

JDB-Journal of Dental Biomaterials 2016; 3 (2): 214-219

Keywords: Caseins-pharmacology; Cariostatic Agents-pharmacology; Phosphates; Calcium; Fluorides; Saliva; Dental Plaque

Abstract: Statement of Problem: Dental caries is one of the most common chronic diseases in children. The balance between demineralization and remineralization of the decayed teeth depends on the calcium and phosphate content of the tooth surface. Therefore, if a product such as casein phospho peptides - amorphous calcium phosphate [CPP-ACP] which can significantly increase the availability of calcium and phosphate in the plaque and saliva should have an anti-caries protective effect. Objectives: The purpose of this study was to evaluate the concentration of calcium, phosphate and fluoride in the plaque and saliva of children before and after applying the CPP-ACP paste. Materials and Methods: A total of 25 children aged between 6-9 years were selected for this clinical trial study. At first, 1 ml of unstimulated saliva was collected and then 1 mg of the plaque sample was collected from the buccal surfaces of the two first primary molars on the upper jaw. In the next step, CPP-ACP paste [GC Corp, Japan] was applied on the tooth surfaces and then the plaque and saliva sampling was performed after 60 minutes. The amount of calcium ions was measured by Ion meter instrument [Metrohm Co, Swiss] and the amounts of phosphate and fluoride ions were measured by Ion Chromatography instrument [Metrohm Co, Swiss]. Data were analyzed using paired t-test at a $p < 0.05$ level of significance. Results: There were statistically significant differences in the calcium and phosphate concentration of the saliva and plaque before and after applying the CPP-ACP paste. There were also statistically significant differences in the fluoride levels of the plaque before and after applying the CPP-ACP paste. However, there were no statistically significant differences in the fluoride levels of the saliva before and after applying the CPP-ACP paste. Conclusions: In this study, the use of the CPP-ACP paste significantly increased the fluoride levels of the plaque and the calcium and phosphate levels of both saliva and plaque. Hence, CPP-ACP paste can facilitate the remineralization of tooth surfaces and is useful for protecting the primary teeth.

Activities of Daily Living

Factors affecting student participation in extra-curricular activities:a comparison between two Middle Eastern dental schools.

Al Ansari, Asim; Al Harbi, Fahad; Abdelaziz, Wafaa; Abdelsalam, Maha; El Tantawi, Maha M.; El Refae, Ismail
University of Dammam - College of Dentistry - Department of Preventive Dental Sciences

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 36-43

Keywords: Surveys and Questionnaires; Cross-Sectional Studies; Delivery of Health Care; Schools, Dental; Students, Dental; Sports

Abstract: Objective: This study was conducted to assess the level of participation of dental undergraduate students in extracurricular activities [ECAs] and the factors affecting this participation. Methods: The study included dental students enrolled in undergraduate programs at the Faculty of Dentistry, Alexandria University, Egypt, and the College of Dentistry, University of Dammam, Saudi Arabia. A questionnaire was developed to collect background information about students, their participation in ECAs, and time allocated for these activities. Students were asked about their perceptions of the relationship between ECAs and academic studies, and their reasons for participating in and satisfaction with ECAs. Results: The study included 199 students from Alexandria and 146 students from Dammam, with response rates of 99.5% and 73%, respectively. The percentages of those reporting ECA participation were 27.1% and 43.8%, respectively, mostly in community service, sports, and social activities. About 60% of students did not think that ECAs affected their studies, although the perceived difficulty of balancing ECAs and academics was associated with lower odds of participation [odds ratio = 0.51]. Most students participated in ECAs to socialize and make friends, and the majority was dissatisfied with school-organized ECAs [52% and 59%, respectively]. Gender and/or perceived relation between ECAs and academic studies affected actual participation in ECAs in one school but not the other. Conclusions: ECA participation among these students was low. Gender and perception of ECAs in relation to academic studies affected ECA participation differently in the two schools. Better planning and management of ECAs that incorporate students' preferences and reasons for participation is needed. Gender issues and the relationship between ECAs and academic performance should be addressed in relation to school and social characteristics.

Acute Coronary Syndrome

surgery

The impact of transradial versus transfemoral approach for percutaneous coronary intervention on the outcome of patients presenting with acute coronary syndrome.

Nassar, Ahmed Ibrahim; El Mahmoudy, Ahmed Mohamed; El Missiry, Ahmed Mohamed; El Etriby, Shehab Adel
Ain Shams University - Faculty of Medicine - Department of Cardiology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 57-64

Keywords: Percutaneous Coronary Intervention-methods; Radial Artery; Femoral Artery; Prospective Studies

Abstract: Background: The transfemoral approach [TFA] has been until presently the main-stay for arterial access PCI in the setting of acute STEMI, while the transradial approach [TRA] is gaining ground in elective as well as primary procedures. Objectives: to assess the impact of transradial versus transfemoral approach for PCI on the outcome of patients presenting with acute coronary syndrome. Patients and Methods: prospective study was conducted on 100 patients presenting to Ain Shams University Hospitals Coronary Care Unit [CCU] with recent onset acute coronary syndrome [whether unstable angina [UA] /non-ST-segment-elevation MI [NSTEMI] or ST-segment-elevation MI [STEMI]] undergoing revascularization via percutaneous coronary intervention [PCI]. Patients were randomized into 2 equal groups, for the first group PCI was performed via TFA while for the second group via TRA. Results: Our study found that, with TRA we get less bleeding, less local vascular complications [8 [16%] vs 2 [4%], p=0.045] and less amount of dye used [169.60 +/- 21.28 versus 187.00 +/- 37.65 ml, p=0.006] without significant increase in fluoroscopy time [10.86 +/-4.88 versus 9.76 +/-4.74 mins, p=0.256] or radiation exposure. Although there was no significant difference in mortality and morbidity, TRA offers the patient a more simple procedure with less hospital stay [3.4 +/-0.948 versus 3.86 +/-0.808 days, p<0.01]. Conclusion: Radial artery access is a safe and effective approach for management of ACS. If performed by experienced operators, TRA should be the standard access in managing ACS specifically in STEMI.

Adaptation, Physiological

drug effects

Inducible protective processes in animal systems XV: Hyperthermia enhances the Ethyl methanesulfonate induced adaptive response in meiotic cells of grasshopper *Poecilocus pictus*.

Venu, R.; Gurushankara, H.P.; Khalandar, B.B.D.; Vasudev, V.

Kuvempu University - Department of P.G. Studies and Research in Applied Zoology

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 173-184

Keywords: Adaptive Immunity-drug effects; Ethyl Methanesulfonate-pharmacology; Fever; Meiosis-drug effects; Grasshoppers; Testis

Abstract: Purpose: To understand the role of hyperthermia in adaptive response, Ethyl methanesulfonate [EMS] an anticarcinogenic agent, adapted meiotic cells of *Poecilocus pictus* was used. Materials and Methods: Based on the pilot toxicity study, the effective higher temperatures of 40[degree sign]C and 45[degree sign]C for 15 or 30 min were chosen. *P. pictus* were treated with conditioning [L] or challenging [H] doses of EMS and 2 h time lag [TL] between these doses [L-2 h-H] was employed. Different treatment schedules were used to analyze the influence of hyperthermia on EMS induced adaptive response namely [i] pre treatment; [ii] inter treatment; [iii] post treatment and [iv] cross adaptation. After each treatment schedule, animals were sacrificed at 12, 24, 36 and 48 h recovery times, testes were processed for meiotic chromosome preparations and anomalies were analyzed. Results: The frequencies of anomalies induced by both conditioning and challenging doses of EMS were significantly higher [$p < 0.05$] compared to those of the control and hyperthermia groups. The combined treatments resulted in 44-50% reduction compared to additive effect of EMS. The pre, inter, post and cross adaptation treatments with hyperthermia significantly reduced the frequencies of chromosomal anomalies compared to the challenge and combined treatments with EMS at all recovery times [$p < 0.05$] tested. Conclusion: There is a protection against EMS induced anomalies by hyperthermia in *in vivo P. pictus*. As far as our knowledge is concerned, this is the first report to demonstrate that hyperthermia enhances the EMS induced adaptive response in *in vivo* meiotic cells.

Inducible protective processes in animal systems XIV: Cytogenetic adaptive response induced by EMS or MMS in bone marrow cells of diabetic Mouse.

Dada Khalandar, B.B.; Vasudev, V.

University of Mysore, P.G. Center, Hemanganthri, Hassan - Department of Studies in Bioscience

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 201-208

Keywords: Methyl Methanesulfonate; Ethyl Methanesulfonate; Diabetes Mellitus, Experimental; Bone Marrow Cells-drug effects; Chromosome Aberrations; Dose-Response Relationship, Immunologic; Mice

Abstract: Background: Adaptive response has been well studied by employing physical and chemical agents in normal test systems, whereas in diseased conditions very little data are available. Aim of the study: To know the presence or absence of adaptive response in diseased condition, alkylating agents such as EMS or MMS have been employed in diabetic mouse. Material and Methods: To induce diabetes, mice were injected with 180 mg/kg body weight of Stz. Diabetic mice were treated with conditioning [100 mg/kg body weight of EMS or 40 mg/kg body weight of MMS], challenging [300 mg/kg body weight of EMS or 160 mg/kg body weight of MMS] and combined doses of EMS or MMS with 8 h time lag. Parallely controls were maintained. Mice were sacrificed at 24 or 48 or 72 h RTs. Bone marrow was extracted and slides were prepared by a routine air dry technique by Evans et al. [1964] to analyze the chromosomal aberrations. Results: The results show that both the alkylating agents induced exclusively chromatid type of aberrations in both diabetic and non diabetic mice, but it is to be underlined that MMS is a more potent inducer of aberrations than EMS. Eventhough, combined treatment of EMS or MMS induced significantly less chromosomal breaks compared to challenging treatment [$p < 0.05$] in diabetic mice, EMS induced 40% reduction of breaks, compared to 51.74% by MMS at 24 h RT. This is true to other tested RTsConclusion:[1] Methylating agents are a more effective inducer of adaptive response than ethylating agents in diabetic mouse. [2] Further, it is interesting to note that the percentage reduction of chromosomal breaks in diabetics is comparatively much less than in non diabetic mouse, inferring that there is variation in adaptive response between diseased and non diseased condition.

Aedes

drug effects

Studies on *Aedes Aegypti* resistance to some insecticides in the Jazan district, Saudi Arabia.

Al Sheikh, Adel A.; Mohammed, W.S.; Noureldin, E. M.; Daffalla, O. M.; Shrwani, Y. A.; Hobani, K.J.; Al Sheikh, F. A.; Al Zahrani, M. H.; Binsaeed, A. A.

[E-mail:adelalsheikh@gmail.com](mailto:adelalsheikh@gmail.com)

National Center for Vector-Borne Diseases

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 209-216

Keywords: Insecticides-pharmacology; Insecticide Resistance; Animal Distribution

Abstract: The present study provided information on the susceptibility status of the adult and larvae of *Aedes aegypti* mosquitoes in Jazan region of Saudi Arabia. Bioassay tests were performed on adults and larvae by using WHO recommended concentrations and test kits. Adults of *Ae. aegypti* mosquitoes were exposed to test papers impregnated with Lambda-cyhalothrin [0.05%], Cyfluthrin [0.15%], Deltamethrin [0.05%], Permethrin [0.75%], Fenitrothion [1%], Bendiocarb [0.1%] and DDT [4%] insecticides. *Ae. aegypti* mosquitoes were found to be susceptible only to Cyfluthrin; [mortality rate was 100%], whereas variable resistances were observed from the rest of the other insecticides tested [mortality rates ranged between 93.6 and 17%]. Larvae were subjected to different concentrations of Diflubenzuron, Methoprene [IGRs] and Temephos [Organophosphate]. Adult emergence inhibition [IE50 and IE95] values for the IGRs and the [LC[50] and LC[95]] for Temephos were determined by log-probit regression analysis. *Ae. aegypti* larvae were resistant to Temephos [LC[50] 61.8 - LC[95] 35600.1 mg/l] and showed high susceptibility to Methoprene than Diflubenzuron [IE[50] 0.49 - IE[95] 10.9 mg/l] and [IE[50] 0.86 and IE[95] 93.8 mg/l], respectively. Larvae were more susceptible to Methoprene than Diflubenzuron by 1.8 folds.

Alveolar Bone Grafting

Is alveolar cleft reconstruction still controversial? [review of literature]

Seifeldin, Sameh A.

E-mail: samehseif@doctor.com

King Saud University - College of Dentistry - Maxillofacial Department

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 3-11

Keywords: Cleft Lip; Review Literature as Topic; Cleft Palate

Abstract: Cleft lip and palate [CL/P] is a frequent congenital malformation that manifests in several varieties including unilateral or bilateral and complete or incomplete. Alveolar cleft reconstruction remains controversial with regard to timing, graft materials, surgical techniques, and methods of evaluation. Many studies have been conducted addressing these points to develop an acceptable universal protocol for managing CL/P. The primary goal of alveolar cleft reconstruction in CL/P patients is to provide a bony bridge at the cleft site that allows maxillary arch continuity, oronasal fistula repair, eruption of the permanent dentition into the newly formed bone, enhances nasal symmetry through providing alar base support, orthodontic movement and placement of osseointegrated implants when indicated. Other goals include improving speech, improvement of periodontal conditions, establishing better oral hygiene, and limiting growth disturbances. In order to rehabilitate oral function in CL/P patients alveolar bone grafting is necessary. Secondary bone grafting is the most widely accepted method for treating alveolar clefts. Autogenous bone graft is the primary source for reconstructing alveolar cleft defects and is currently the preferred grafting material.

methods

Clinical evaluation of the use of tibial bone grafting in dentoalveolar reconstructive surgery.

Atil, Fethi; Kocyigit, Ismail Doruk; Suer, Berkay Tolga; Alp, Yunus Emre; Yazan, Murude; Tekin, Umur; Tuz, Hakan H.

University of Kirikkale - Faculty of Dentistry - Department of Oral and Maxillofacial Surgery

Medical Principles and Practice 2016; 25 (1): 72-78

Keywords: Alveolar Process-surgery; Tibia; Autografts; Transplantation, Autologous; Bone Transplantation; Reconstructive Surgical Procedures; Retrospective Studies

Abstract: Objective: The aim of this study was to evaluate the efficacy of tibial autogenous bone grafting in the treatment of patients with alveolar bone defects. Materials and Methods: The study subjects consisted of 12 patients [10 male, 2 female, age: 19-51 years] who underwent reconstructive autogenous bone-grafting procedures. The medial approach to the tibial bone was used to harvest autogenous cancellous bone grafts in all the patients. Clinical parameters [complications at the donor and recipient sites, resorption and volume of the grafts] were evaluated retrospectively. Results: The mean age of the patients was 36.25 +/- 0.9 years. Of the 12 patients, 5 [41.7%] received bone grafts for sinus augmentation, 3 [25%] for cyst cavity reconstruction and 4 [33.3%] for alveolar cleft reconstruction procedures. The average follow-up period was 28.4 months [range: 21-40 months]. An average of 5.2 cm[3] of cancellous bone was harvested for grafting procedures. All the grafting procedures were successful, and there were no surgical complications during the harvesting protocol. In all cases, pain and gait disturbance lasted less than 2 weeks. Conclusion: The results of this study suggest that the use of tibial autogenous bone graft harvested using a medial approach was a safe, simple and effective method for grafting various alveolar bone defects where high amounts of cancellous bone grafts were needed with low morbidity.

Alzheimer Disease

Effect of Gallic acid on dementia type of Alzheimer disease in rats: electrophysiological and histological studies.

Hajipour, Somayeh; Sarkaki, Alireza; Farbood, Yaghoob; Eidi, Akram; Mortazavi, Pejman; Valizadeh, Zohreh
Ahvaz Jundishapur University of Medical Sciences - Physiology Research Center - Department of Physiology

Basic and Clinical Neuroscience 2016; 7 (2): 97-106

Keywords: Dementia; Gallic Acid-pharmacology; Amyloid beta-Peptides; Rats, Wistar; Long-Term Potentiation; Electrophysiology

Abstract: Introduction: To study the effect of gallic acid [GA] on hippocampal long-term potentiation [LTP] and histological changes in animal model of Alzheimer disease [AD] induced by beta-amyloid [Abeta]. Methods: Sixty-four adult male Wistar rats [300 +/- 20 g] were divided into 8 groups: 1] Control [Cont]; 2] AD; 3] Sham; 4-7] AD+GA [50, 100, and 200 mg/kg for 10 days, orally] or vehicle, 8] Cont+GA100, Abeta [1microg/microL in each site] was infused into hippocampus bilaterally. Changes of amplitude and slope of LTP induced in hippocampal dentate gyrus [DG] were evaluated by high frequency stimulation [HFS] of perforant path [PP]. Results: Data showed that LTP amplitude and area under curve significantly impaired in AD rats [P<0.001], while significantly improved in AD rats treated with GA [P<0.05, P<0.01]. Conclusion: Current findings suggest that GA reduces neural damage and brain amyloid neuropathology and improves cognitive function via free radicals scavenging and inhibiting oligomerization of Abeta but with no effect on healthy rats.

Anemia, Sickle Cell

mortality

Pregnancy outcome of sickle cell disease women.

Al Jufairi, Zainab A.; Al Aradi, Fatema Ali; Sandhu, Amarjit K.

[E-mail:zaljufairi@gmail.com](mailto:zaljufairi@gmail.com)

Salmaniya Medical Complex - Obstetrics and Gynecology Department

Bahrain Medical Bulletin 2016; 38 (1): 18-21

Keywords: Anemia, Sickle Cell-complications; Pregnancy Outcome; Pregnant Women; Sepsis; Disseminated Intravascular Coagulation; Fetus

Abstract: Objective: To evaluate the maternal and fetal outcome in pregnant women with sickle cell disease [SCD] compared with healthy women. Setting: Department of Gynecology and Obstetrics, Salmaniya Medical Complex, Bahrain. Design: Retrospective Case-Control Study. Method: Patients with SCD who delivered from 1 January 2011 to 31 December 2012 were reviewed. The matched controls had neither SCD nor sickle cell trait. Result: Patients with sickle cell disease required significantly more admissions during their pregnancy, 135 [78.4%] compared to the control, 74 [37.4%]. One hundred thirteen [65.6%] SCD patients were admitted with vaso-occlusive crises and 18 [10.4%] with hemolytic crises. SCD patients had a significant decrease in parity, gestational age and birth weight compared with the control group. SCD patients had a significant rise in the incidence of urinary tract infection, but there was no difference between both groups in the incidence of hypertensive disorders, mode of delivery and perinatal outcome. Four [2.3%] patients with SCD died; two [1.2%] patients died due to pulmonary embolism, one [0.6%] due to acute chest syndrome and one due sepsis and disseminated intravascular coagulopathy. Conclusion: Sickle cell disease is hazardous both to the mother and the fetus and is associated with high maternal morbidity and mortality.

surgery

Laparoscopic splenectomy in children with sickle cell disease.

Alhindi, Saeed; Ali, Fatema

[E-mail:sjalhindi@gmail.com](mailto:sjalhindi@gmail.com)

Medical University of Bahrain - Royal College of Surgeons in Ireland

Bahrain Medical Bulletin 2016; 38 (1): 26-29

Keywords: Hypersplenism; Splenectomy; Laparoscopy; Anemia, Sickle Cell-complications; Child

Abstract: Background: Many children with Sickle Cell Disease [SCD] might experience severe sickle cell crises due to splenic complications. These include hypersplenism, acute splenic sequestration, splenic abscess and massive splenic infarction. Splenectomy is indicated to decrease the rate of recurrence of complications and the associated morbidity and mortality. The laparoscopic approach has proved to be associated with a better outcome. Many laparoscopic techniques were implemented for the removal of the spleen, especially when it is enlarged and fragile. Objective: To evaluate laparoscopic assisted splenectomy technique and outcome in 51 children with SCD. Design: A Retrospective Review Setting: Department of Pediatric Surgery, Salmaniya

Medical Complex, Bahrain. Method: Fifty-one children who had laparoscopic assisted splenectomy with a small inguinal incision from January 2002 to December 2014 were reviewed. Result: Fifty-one children had laparoscopic assisted splenectomy for either hypersplenism 42 [82.4%] or acute splenic sequestration 9 [17.6%]; 32 [63%] males and 19 [37%] females. The age range was 6 to 14 years, a mean age of 9.8. Only one [1.9%] case required conversion to open procedure due to excessive bleeding. Only 7 [13.7%] were admitted in the ICU following the procedure. The mean length of hospital stay was four days; the measured decrease in the HBS was 38%, preoperative fever was seen in 16 [31%], and there was no mortality. Conclusion: Laparoscopic splenectomy with a left inguinal incision is a safe and effective approach in children with SCD.

Anesthesia, Dental

methods

Comparison of anaesthetic efficacy of 4% articaine primary buccal infiltration versus 2% lidocaine inferior alveolar nerve block in symptomatic mandibular first molar teeth.

Zain, Muhammad; Khattak, Shakeel Ur Rehman; Sikandar, Huma; Shah, Shafqat Ali; Fayyaz Gandhara University - Sardar Begum Dental College - Department of Operative Dentistry

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 4-8

Keywords: Articaine; Anesthesia, Local; Lidocaine; Mandibular Nerve; Nerve Block; Molar; Mandible

Abstract: Objective: To evaluate success of pulpal anaesthesia of mandibular 1st molar by using 4% articaine in buccal infiltration versus 2% lidocaine in inferior alveolar nerve block. Study Design: Randomized control trial. Place and Duration of Study: Department of Operative Dentistry, Sardar Begum Dental College, Gandhara University, Peshawar, from March to August 2014. Methodology: One hundred and fifty-six emergency patients, who had 1st molar diagnosed with irreversible pulpitis, participated in the study. Subjects were divided into two groups by random allocation. One group received 4% articaine buccal infiltration and the other group received inferior alveolar nerve block of 2% lidocaine. Subjects' self-reported pain response was recorded on Heft Parker Visual Analogue Scale after local anaesthetic administration during access cavity preparation and pulp extirpation. Results: Mean age of subjects was 31.46 +/- 10.994 years. The success rate of 4% buccal infiltration was 76.9%; whereas the success rate of 2% lidocaine inferior alveolar nerve block was 62.8%. There was no statistically significant difference between the two groups. Conclusion: 4% articaine buccal infiltration can be considered a viable alternative to 2% lidocaine inferior alveolar nerve block in securing successful pulpal anaesthesia for endodontic therapy.

Ankle Injuries

[Evidence of reliability for Persian version of the "Cumberland Ankle Instability Tool [CAIT]" in Iranian athletes with lateral ankle sprain].

Haji Maghsoudi, Mitra; Naseri, Nasrin; Nouri Zadeh, Shohreh; Jalali, Shohreh

Tehran University of Medical Sciences - School of Rehabilitation - Department of Physiotherapy

Journal of Rehabilitation 2016; 16 (4): 304-311

Keywords: Joint Instability; Surveys and Questionnaires; Reproducibility of Results; Athletes

Abstract: Objective: The purpose of the present study was to evaluate the reliability of Persian version of the "Cumberland Ankle Instability Tool [CAIT]" in Iranian athletes with lateral ankle sprain. Materials and Methods: The present study is a methodological and non-experimental study. After forward and backward translation of CAIT, 46 athletes were selected with convenient nonprobability sampling from Physical Education Faculty of Tehran university and Taekwondo Club. Questionnaire was given to participants who experienced at least one lateral ankle sprain based on doctor's diagnosis. In the second phase [one week later] the questionnaire was distributed among the participants again to test the reliability of the measured between the two tests. After collecting the data, the test-retest reliability of Persian version of the questionnaire was evaluated by calculating the intraclass correlation coefficient, standard error of measurement, smallest detectable change and Cronbach's alpha coefficients were calculated to assess the internal consistency of the questionnaire's items. Results: Cronbach's alpha was 0.64, which is close to acceptable level of internal consistency [0.7-0.95]. Factor analysis showed that questionnaires' items can be classified in 4 categories with maximum of 72% variance cover. The test-retest correlation coefficient ICC for the total score of CAIT was 0.95 [P>0.001], indicating excellent reproducibility of the Persian version of the questionnaire. The standard error of measurement [SEM] was 1 and the smallest acceptable change [SDC] was 2.76 with 95% confidence. Conclusion: The results show that the Persian version of the CAIT can be used in athletes with functional ankle instability as a reliable tool to detect instability and assess changes caused by therapeutic interventions.

Anticoagulants

history

Novel oral anticoagulants and the 73rd anniversary of historical warfarin.

Shehab, Abdulla; Elnour, Asim Ahmed; Bhagavathula, Akshaya Srikanth; Erkekoglu, Pinar; Hamad, Farah; Al Nuaimi, Saif; Al Shamsi, Ali; Mukhtar, Iman; Abdel Razek, Abdel Razek M. Ali; AbdElrazek, Ali; Al Suwaidi, Aeshal; Abu Mandil, Mahmoud; Baraka, Mohamed; Sadik, Adel; Saraan, Khalid; Al Kalbani, Naama M.S.; Mahmood, Alaa AbdulAziz; Barqawi, Yazan; Al Hajjar, Mohammed; Shehab, Omer Abdulla; Al Amoodi, Abdulla; Asim, Sahar; Abdulla, Rauda; Giraud, Cristina Sanches; Ahmed, El Mutasim; Shaaban, Zohdi Abu; Eltayeb, AhmedEltayeb Yousif Ahmed

[E-mail:a.shehab@uaeu.ac.ae](mailto:a.shehab@uaeu.ac.ae)

UAE University - College of Medicine and Health Sciences [CMHS] - Internal Medicine Department

Journal of the Saudi Heart Association 2016; 28 (1): 31-45

Keywords: Anticoagulants-administration and dosage; Administration, Oral; Warfarin

Antimicrobial Cationic Peptides

Antimicrobial peptides [AMPs]

Sadredinamin, Mehrzad; Mehrnejad, Faramarz; Hosseini, Peyman; Doustdar, Farahnoosh
Shahid Beheshti University of Medical Sciences - Infectious Diseases and Tropical Medicine Research Center - Department of Microbiology

Novelty in Biomedicine 2016; 4 (2): 70-76

Keywords: Anti-Bacterial Agents; Infection

Abstract: Antimicrobial peptides [AMPs] are extensive group of molecules that produced by variety tissues of invertebrate, plants, and animal species which play an important role in their immunity response. AMPs have different classifications such as; biosynthetic machines, biological sources, biological functions, molecular properties, covalent bonding patterns, three dimensional structures, and molecular targets. These molecules have multidimensional properties including antimicrobial activity, antiviral activity, antifungal activity, anti-parasite activity, biofilm control, antitumor activity, mitogens activity and linking innate to adaptive immunity that making them promising agents for therapeutic drugs. In spite of this advantage of AMPs, their clinical developments have some limitation for commercial development. But some of AMPs are under clinical trials for the therapeutic purpose such as diabetic foot ulcers, different bacterial infections and tissue damage. In this review, we emphasized on the source, structure, multidimensional properties, limitation and therapeutic applications of various antimicrobial peptides.

Antioxidants

Polyphenolic antioxidants and neuronal regeneration.

Ataie, Amin; Shadifar, Mohammad; Atee, Ramin
Babol University of Medical Sciences - Cellular and Molecular Research Center

Basic and Clinical Neuroscience 2016; 7 (2): 81-90

Keywords: Curcumin; Oxidative Stress; Neurodegenerative Diseases; Stilbenes; Polyphenols

Abstract: Many studies indicate that oxidative stress is involved in the pathophysiology of neurodegenerative diseases. Oxidative stress can induce neuronal damages, modulate intracellular signaling and ultimately leads to neuronal death by apoptosis or necrosis. To review antioxidants preventive effects on oxidative stress and neurodegenerative diseases we accumulated data from international medical journals and academic informations' sites. According to many studies, antioxidants could reduce toxic neuronal damages and many studies confirmed the efficacy of polyphenol antioxidants in fruits and vegetables to reduce neuronal death and to diminish oxidative stress. This systematic review showed the antioxidant activities of phytochemicals which play as natural neuroprotectives with low adverse effects against some neurodegenerative diseases as Parkinson or Alzheimer diseases.

Apolipoproteins E

genetics

The association between [8390GA] single nucleotide polymorphism in APOE gene with Alzheimer's and Parkinson disease.

Lashkari, FaranakMohammadpour; Meybodi, Anahita Mohseni; Mansouri, Zahra; Kalantari, Hamid; Farahmand, Kamelia; Vaziri, Hamidreza

University of Guilan - Faculty of Sciences - Department of Biology

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 185-189

Keywords: Alzheimer Disease-genetics; Parkinson Disease-genetics; Polymorphism, Single Nucleotide; Case-Control Studies; Genetic Association Studies

Abstract: Genetic susceptibility, is considered to be involved in neurodegenerative diseases such as Alzheimer's disease [AD] and Parkinson's disease [PD]. Despite the fact that many susceptibility genes for AD and PD have been considered, the most probable genetic risk factor which has been taken into consideration is Apolipoprotein E genotype located on chromosome 19q, APOE is the gene widely considered to be a susceptibility gene for neurodegenerative diseases. This study is to investigate the association of APOE polymorphism with AD and PD. In this case control study we examined association of an APOE gene polymorphism [rs121918398] with AD and PD in Iranian population. The study included 100 AD patients, 100 PD patients and 150 healthy volunteers. An informed consent was obtained from all participants. Genomic DNA was extracted from peripheral blood leukocyte. Genotypes were determined by PCR and restriction fragment length polymorphism [RFLP] by Hha1 restriction enzyme. Sequencing of PCR products was carried out by Fazabiotech Company according to Sanger method using ABI 3730XL Capillary Sequencer. Statistical analysis was performed using the MedCalc program. The prevalence of genotype frequencies of the APOE A/A, A/G, G/G were 16%, 34% and 50% in AD subjects, 14%, 32%, 54% in PD patients and in healthy volunteers were 15%, 39% and 96% respectively. Statistical analysis showed no significant difference between genotype frequencies of AD and those of control subjects [$P < 0.05$]. Moreover, according to statistical analysis, the genotype frequencies of APOE in PD subjects and control group did not significantly differ. This is the very first time that the association of this polymorphism [rs121918398] with AD is being reported nevertheless, there is no evidence that APOE variant is associated with PD. Accordingly, genotype alteration of A8390>G can't be related to AD. So, this polymorphism plays no pathogenic role in the PD and AD patients in Iranian population.

Arginine

pharmacology

The effects of l-arginine on the hippocampus of male rat fetuses under maternal stress.

Mahmoudi, Reza; Enant, Elham; Delaviz, Hamdollah; Rad, Parastou; Roozbehi, Amrollah; Barmak, Mehrzad Jafari; Aziz, Arsalan

Yasuj University of Medical Sciences - Cellular and Molecular Research Center - Department of Anatomy

Basic and Clinical Neuroscience 2016; 7 (1): 5-12

Keywords: Hippocampus; Fetus; Pregnancy; Rats, Wistar; Stress, Psychological

Abstract: Introduction: Prenatal stress has deleterious effects on the development of the brain and is associated with behavioral and psychosocial problems in childhood and adulthood. This study aimed to determine the protective effect of L-arginine on fetal brain under maternal stress. Methods: Twenty pregnant Wistar rats [weighting 200-230 g] were randomly divided into 4 groups [n=5 for each group]. The first nonstress and stress groups received 2 mL of normal saline and the other nonstress and stress two groups received L-arginine [200 mg/kg, IP] from their 5[th] to 20[th] days of pregnancy. The pregnant rats were killed on 20[th] day and the brain fetuses removed and prefrontal cortical thickness, total neurons in the prefrontal cortex and in the areas of CA1, CA2, and CA3 of the hippocampus were measured and counted. Nitrite levels in the brain were measured as an indicator for nitric oxide [NO] level. Results: There was a significant decrease of mean number of pyramidal cells in the CA1 in prenatal stress group compared to nonstress and nonstress plus arginine groups. The NO level in brain tissue increased significantly in the stress plus arginine [3.8 +/- 0.4 nmol/mg] and in nonstress rats [2.9 +/- 0.3 nmol/mg] compared to the stress group [1.8 +/- 0.1 nmol/mg]. Prefrontal cortical thickness decreased significantly in stress rats [1.2 +/- 0.09 mm] compared to the nonstress plus arginine [1.7 +/- 0.15 mm] and nonstress [1.6 +/- 0.13 mm] groups. Discussion: Results indicated that prenatal stress could lead to neurodegeneration of hippocampus and prefrontal cortex of rat fetuses. L-arginine as a precursor of NO synthesis had neuroprotective effect during prenatal stress and could be used an effective treatment for stress.

Asthma

genetics

Sirtuin 1 gene rs2273773 C T single nucleotide polymorphism and protein oxidation markers in asthmatic patients.

Mahmoud, Aida Abdeen; Ali, Abdellah Hamed Khalil; Nour Eldin, Essam
Sohag University - Faculty of Medicine - Department of Medical Biochemistry

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 191-196

Keywords: Polymorphism, Single Nucleotide; Biomarkers; Advanced Oxidation Protein Products; Sirtuin 1- genetics

Abstract: Background: Sirtuin-1 [SIRT-1], a protein has been found to protect the cells against oxidative stress due to its deacetylase activity. In this investigation, we aimed to study SIRT-1 gene rs2273773 C >T single nucleotide polymorphism and markers of serum protein oxidation [protein carbonyl and sulfhydryl groups] in asthmatic patients. Subjects and Methods: 120 asthmatic patients and 120 healthy controls were genotyped for SIRT- 1 gene rs2273773 C > T SNP using polymerase chain reaction - confronting two pair primer method [PCR-CTPP]. Serum protein carbonyl and sulfhydryl groups were measured using colorimetric methods. Results: SIRT-1 gene rs2273773 C> T SNP genotyping revealed that the TT genotype was significantly higher in the patients compared to the controls [P < 0.05], while there were no significant differences regarding the genotypes TC and CC between the patients and the controls [P> 0.05]. T allele was significantly higher in the patients compared to the controls [P =0.017]. The distribution of the genotypes didn't differ among the atopic and the non-atopic asthmatic patients, also no difference was found in the genotype distribution according to the severity of asthma [P >0.05]. Serum protein carbonyl group concentration was significantly higher in the patients compared to the controls [P < 0. 001], while serum protein sulfhydryl group content decreased significantly in the patients compared to the controls [P < 0.0001]. No differences in markers of protein oxidation according to SIRT- 1 gene rs2273773 C > T genotype were found. Conclusion: SIRT-1 gene rs2273773 C> T SNP was associated with asthma but not with protein oxidation markers in Egyptian population.

prevention and control

Assessment of asthma control in a sample of asthmatic patients in Taif city, Saudi Arabia.

El Margoushy, Nesriene; Alkhalid, Sahar Musarri; Al Khaldi, Nawal Zewaid; El Nashar, Nihad
Taif University - Faculty of Medicine - Department of Medicine

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 1-8

Keywords: Severity of Illness Index; Surveys and Questionnaires; Reproducibility of Results; Anti-Asthmatic Agents

Abstract: Background: Asthma Control Test [ACT] Questionnaire is developed to meet the guidelines internationally accepted for asthma management by measuring adequacy and any alteration in control of asthma, occurring spontaneously or after starting asthma management. Objectives: to assess control of asthma in a sample of patients diagnosed as asthmatics in Taif City based on Asthma Control Test [ACT]. Methods: Fifty asthmatic patients, from those attending the out patients clinic in King Abdul Aziz Specialized hospital and chest hospital in Taif city, were included in this study in the period from July to December, 2013. Patients were subjected to: full clinical history and examination for clinical classification of the disease and to recognize controlled from uncontrolled patients; review for the treatment plan for each patient; [ACT] questionnaire was used to identify patients with poorly controlled asthma. Results: clinical classification of asthma showed that 20% of patients had intermittent asthma, 24% had mild persistent asthma, 32% had moderately persistent asthma and 24% of patients got severe persistent asthma. According to ACT only 24% of patients were controlled, while the rest of patients 76% were considered uncontrolled. Conclusion: ACT was found to be a reliable tool for assessment of uncontrolled asthmatic patients when implemented in Taif city. Recommendations: conduct more studies in different geographical areas to assess effectiveness of the AST questionnaire in different situations and different asthmatic patients.

Attention Deficit Disorder with Hyperactivity

The effect of neurofeedback therapy on reducing symptoms associated with attention deficit hyperactivity disorder: a case series study.

Deilami, Mostafa; Jahandideh, Asghar; Kazemnejad, Yousef; Fakour, Yousef; Alipoor, Shiva; Rabiee, Fatemeh; Pourmesaie, GhazalSaadat; Heidari, Rosemarie Noot; Mosavi, SeyedAliasghar
Ministry of Health and Medical Education - Deputy of Research and Technology

Basic and Clinical Neuroscience 2016; 7 (2): 167-171

Keywords: Neurofeedback

Abstract: Introduction: This study aimed to evaluate the effectiveness of neurofeedback on attention deficit hyperactivity disorder. Methods: This is a quasi-experimental study without a control group. The study population included all children aged 5 to 12 years old affected with attention deficit hyperactivity disorders in Tehran, Iran who were referred to psychiatric clinics and given the diagnosis. The sample included 12 children with attention deficit hyperactivity disorder who were selected based on their availability [non-random sampling]. They received 30 sessions of neurofeedback treatment, 2 times per week. Before and after neurofeedback training, the children were evaluated and compared with the use of cognitive assessment system test. Data were analyzed using dependent T-test. Results: The total mean score for pretest was 88.81 while the total mean score for the post test was 82.23. The mean in pretest for attention hyperactivity disorder was higher than the mean in the post test. Moreover, The difference of pretest and post test scores of children affected with learning disorder associated with ADHD was calculated that showed significant [$P=0.003$]. Conclusion: Neurofeedback is effective in the improvement of attention deficit hyperactivity disorder.

Bariatric Surgery

methods

Letter to the editor.

Alghareeb, Ahmed Mohamed; Abualseel, Abdulmenem
King Hamad University Hospital

Bahrain Medical Bulletin 2016; 38 (1): 68-68

Keywords: Laparoscopy-methods; Mental Disorders; Psychiatry; Sleep Apnea, Obstructive

Benzhydryl Compounds

pharmacology

Histopathological and immunohistochemical changes induced by Bisphenol A in reproductive tissues of female rat.

Alazzouni, A. S.; Hassan, B. N.; Al Jalaud, N. A.
Helwan University - Faculty of Science - Department of Zoology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 28-36

Keywords: Phenols-pharmacology; Rats, Sprague-Dawley; Estrogen Receptor Modulators; Genitalia, Female-drug effects; Adrenal Glands-drug effects; Pituitary Gland-drug effects

Abstract: Background: Bisphenol A [BPA] is an environmental chemical that has been widely used in the manufacture of polycarbonate plastics and epoxy resins for many years. Due to its major applications in the production of plastic food or beverage containers and the coating of food cans, people of different ages are inevitably exposed to BPA in daily life. It is a contaminant with increasing exposure to it and exerts both toxic and estrogenic effects on mammalian cells. Aim of the work: the present study was designated to evaluate the histopathological and immunohistochemically effect of BPA on the histoarchitecture of pituitary, adrenal, ovarian and uterine axis of female albino rats and the ameliorative effect of antiestrogen drug and stem enhance. Experimental model and Methods: 20 female albino rats weighing 100 - 120 g. were kept under observation for about 15 days before the onset of the experiment for adaptation, then the rats were classified into 4 groups 5 rats for each, the first group was left without any treatment for 30 days as negative control group, the second group was administered with 20 mg/kg.bw of BPA for 15 consecutive days as positive control, the third group administered with 20 mg/kg.bw of BPA for 15 consecutive days and then treated with antiestrogen drug as 0.1 mg/100gm.bw for 15 day, the fourth group administered with the same dose for the same period and the treated with stem enhance [4.5 mg/100.bw] for 15 days. All rats are scarified and organs were histologically examined after processing. Results: The results showed that PA has a histopathological effects on vital organs [pituitary, adrenal, ovary, oviduct and uterus] even for a short period with minimal ameliorative effect of antiestrogen drug and stem enhance.

Blood Transfusion

Use of blood transfusion set in intraventricular neuroendoscopy.

Brohi, Shams Raza; Dilber, Muzamil

E-mail:shamsbrohi@yahoo.com

Peoples University of Medical and Health Sciences - Department of Neurosurgery

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 77-77

Keywords: Neuroendoscopy; Cerebral Ventricles

Blood Vessels

injuries

The role of 320 slice CT angiography in predicting vascular trauma.

Babar, Sadia; Amin, M. Umar; Kamal, Ahmed; Rana, Atif

E-mail:sadia.babar@gmail.com

Shifa International Hospital - Department of Radiology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 23-26

Keywords: Multidetector Computed Tomography; Angiography; Wounds and Injuries; Aneurysm

Abstract: Objective: To determine the accuracy of multidetector CT angiography [MDCT angiography] as initial diagnostic technique in depicting and characterizing post traumatic vascular injuries, looking for additional injuries and confirming the findings with intervention and follow-up. Study Design: Descriptive analytical study. Place and Duration of Study: Department of Radiology, Shifa International Hospital, Islamabad, from June 2010 to October 2013. Methodology: Patients who underwent MDCT angiography for clinically suspected post traumatic vascular injury were included. All MDCT angiographies were performed on 320 slice CT [Aquilion OneTM] and were reviewed by two independent consultant radiologists. The sites of injury were intracranial, neck and maxillofacial, chest, abdomen and extremities. The presence and characteristics of vascular injuries were confirmed by post-operative findings or digital subtraction angiography [DSA]. Sensitivity and specificity was calculated. Results: The age of the patients ranged from 7 to 90 years with 94% [48] males and 6% [3] females. Blunt trauma was commoner than penetrating trauma. The site of injury in majority was extremities. Majority of patients had post-traumatic pseudoaneurysm formation followed by arterial occlusion, thrombosis, active extravasation, spasm, arteriovenous malformation and combination injuries. Twenty-one [41%] patients were reported as having vascular injury and confirmed by surgery or DSA. Fifteen [29.5%] patients were reported as normal and had no intervention on follow-up. The sensitivity and specificity of MDCT angiography was found as 100% and 88%, NPV of 100%, PPV of 94% and accuracy of 96%. Conclusion: MDCT angiography can be reliably used as an initial diagnostic technique for the evaluation and characterization of post-traumatic vascular injuries.

Blood-Borne Pathogens

Outcome of accidental exposure prone to blood borne viral infections in an educational hospital.

Sali, Shahnaz; Tehrani, Shabnam; Abolghasemi, Sara

Shahid Beheshti University of Medical Sciences - Infectious Diseases and Tropical Medicine Research Center

Novelty in Biomedicine 2016; 4 (2): 67-69

Keywords: Occupational Exposure; Cross-Sectional Studies; Outcome Assessment (Health Care); Risk

Abstract: Background: The risk for transmission of blood-borne viruses [BBVs] such as Human immunodeficiency virus [HIV], hepatitis B virus [HBV] and hepatitis C virus [HCV] due to occupational exposure is a major concern in the health care setting. Materials and Methods: This study among 337 health care workers [HCWs] accidentally exposed to BBVs was carried out from January 2009 to March 2015. The data were reviewed in labbafinejad hospital, Tehran, Iran. Results: 4 HCWs had exposure to HBS Ag positive, which HBS antibody titer of them was higher than 10 mlu/ml, 6 HCWs were exposed to HCV seropositive patients underwent laboratory investigations for HCV-antibody on 4, 12, 24 weeks that results were negative. 3 cases had exposure to HIV seropositive patients which received standard antiretroviral post exposure prophylaxis. Conclusion: Timely performance for PEP [Post Exposure Prophylaxis] reducing BBVs transmission among HCWs.

Bone Marrow Transplantation

standards

The probability of finding a fully matched related donor: can it be helpful to determine the best alternative donor source?

Al Attas, Rabab; Al Harbi, Hassan

E-mail:rabab.attas@kfsh.med.sa

King Fahd Specialist Hospital - Department of Pathology and Laboratory Medicine

Bahrain Medical Bulletin 2016; 38 (1): 22-25

Keywords: Transplantation Conditioning; Living Donors; Histocompatibility Testing; Polymerase Chain Reaction; Bone Marrow; Retrospective Studies

Abstract: Background: In Western society, only one-third of patients who need bone marrow transplantation [BMT] would have a fully matched sibling donor [MSD]. In Arab countries, there is scarce information about the

likelihood of finding a fully MSD, although higher chance might be expected due to large family size. Objective: To report the probability of finding a fully matched sibling/related donor and probe the best strategy for alternative donor source. Design: A Retrospective Study Setting: King Fahad Specialist Hospital-Dammam [KFSH-D], Saudi Arabia. Method: HLA-typing of 1, 252 samples from 240 consecutive patients and their corresponding potential donors referred for HSCT were reviewed. HLA-low to medium resolution molecular typing by PCR -SSO for A, B, C, DR and DQ loci were performed on Luminex platform. The probability of finding a matched donor was determined by calculating the percentage of patients who are 10 out of 10 matched with corresponding donors. Result: The probability of finding MSD or relative in our populations was 59%. Ninety-five percent had fully matched siblings, 4% had fully matched parent/s, and 1% had fully matched relative. However, this rate was age dependent [28% in young children, 50% in older children and 70% in adults]. Conclusion: There is an overall high-rate of finding fully matched relative donors in Saudi compared to Western societies. Strategies to develop alternative donor sources should be prioritized taking into consideration this high rate, the current difficulty in establishing large registries and the promising outcome of haploidentical and cord blood transplantation.

Brain-Computer Interfaces

A study of various feature extraction methods on a motor imagery based brain computer interface system.

Resalat, Seyed Navid; Saba, Valiallah

University of Tehran - School of Electrical and Computer Engineering

Basic and Clinical Neuroscience 2016; 7 (1): 13-20

Keywords: Electroencephalography; Automatic Data Processing; Imagery (Psychotherapy)

Abstract: Introduction: Brain Computer Interface [BCI] systems based on Movement Imagination [MI] are widely used in recent decades. Separate feature extraction methods are employed in the MI data sets and classified in Virtual Reality [VR] environments for real-time applications. Methods: This study applied wide variety of features on the recorded data using Linear Discriminant Analysis [LDA] classifier to select the best feature sets in the offline mode. The data set was recorded in 3-class tasks of the left hand, the right hand, and the foot motor imagery. Results: The experimental results showed that Auto-Regressive [AR], Mean Absolute Value [MAV], and Band Power [BP] features have higher accuracy values, 75% more than those for the other features. Discussion: These features were selected for the designed real-time navigation. The corresponding results revealed the subject-specific nature of the MI-based BCI system; however, the Power Spectral Density [PSD] based alpha-BP feature had the highest averaged accuracy.

Breast Neoplasms

drug therapy

Anticancer potential of bee venom and propolis combined treatment on human breast adenocarcinoma cell line [MCF-7]

Helal, Eman G. E.; Al Jalaud, Nora Abdulaziz; El Garawani, Islam M.; Kahwash, Anwaar Alkamel

Al-Azhar University - Faculty of Science - Department of Zoology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 65-76

Keywords: MCF-7 Cells; Adenocarcinoma-drug therapy; Antineoplastic Combined Chemotherapy Protocols; Bee Venoms-pharmacology; Propolis-pharmacology; Autophagy-drug effects; Apoptosis-drug effects

Abstract: Backgrounds: Natural remedies were used for cancer treatments, particular breast cancer. Also, the consumption of food products containing high amount of flavonoids and antioxidants had reported to lower the risk of various cancers. Bee venom [BV] and propolis were produced by honey bee. They were characterized by naturopathic formulation, affordability and containing high amount of antioxidants. Moreover, they were used safely since ancient times globally. Although that, there is no information about the synergistic or antagonistic anticancer effects of their combination. This study was designed to evaluate cytotoxic and pro-apoptotic effects of BV, propolis, and their combination on breast cancer [MCF-7] cells. Materials and Methods: As preliminary study, MCF-7 cells were treated with BV [5, 10, and 20micro g/ml] and propolis [50, 150, and 450micro g/ml] to specify the desired combination doses of each treatment with no anticancer effect individually. Consequently, doses of [5micro g/ml BV+ 50micro g/ml propolis and 5micro g/ml BV+ 150micro g/ml propolis] were chosen to evaluate the possible synergistic anticancer potential between them. All groups in this study were examined at 2, 4, and 12 hours intervals. The morphological changes were evaluated by acridine orange/ ethidium bromide dual fluorescent staining and Giemsa staining to reveal the formation of apoptotic bodies or nuclear condensation and cytoplasmic blebbing, respectively. DNA fragmentation assay was also carried out to record the reduction in DNA content and apoptosis. Bcl-2 expression, cytoplasmic anti-apoptotic marker, was used to prove the apoptotic properties, and autophagic cell death by florescent microscopy was evaluated also. Results: Morphological observation by inverted and florescent microscopy revealed apoptotic cell death under exposure to BV [10 and 20micro g/ml] and propolis [450micro g/ml]. On the other hand, the results of combined treatments revealed significant morphological alterations after fluorescent and Giemsa staining. Apoptotic DNA fragmentation was clearly observed and Bcl-2 recoded significant down regulation which proved the apoptotic

properties of combined treatments. Additionally, autophagic degradation results also supported the occurrence of stress on treated cells leading finally to cell death. All results of powerful anticancer potential were obvious among all combined-treated groups in dose and time dependent manner. This clear that, the combined treatments have possible synergistic effect which, propose it as potential candidates to be used in development of chemotherapy.

CA1 Region, Hippocampal

pathology

Impaired memory and evidence of histopathology in CA1 pyramidal neurons through Injection of Abeta1-42 peptides into the frontal cortices of rat.

Eslamizade, Mohammad Javad; Madjd, Zahra; Rasoolijazi, Homa; Saffarzadeh, Fatemeh; Pirhajati, Vahid; Aligholi, Hadi; Janahmadi, Mahyar; Mehdizadeh, Mehdi
Iran University of Medical Sciences - School of Advanced Technologies in Medicine - Department of Neuroscience

Basic and Clinical Neuroscience 2016; 7 (1): 31-42

Keywords: Peptide Fragments; Amyloid beta-Peptides; Alzheimer Disease; Frontal Lobe; Brain Diseases; Memory; Rats, Wistar; Melatonin

Abstract: Introduction: Alzheimer's disease [AD] is one of the most common neurodegenerative disorders, which has much benefited from animal models to find the basics of its pathophysiology. In our previous work [Haghani, Shabani, Javan, Motamedi, and Janahmadi, 2012], a non-transgenic rat model of AD was used in electrophysiological studies. However, we did not investigate the histological aspects in the mentioned study. Methods: An AD model was developed through bilateral injection of amyloid-beta peptides [Abeta] into the frontal cortices. Behavioral and histological methods were used to assess alterations in the memory and [ultra]structures. Furthermore, melatonin has been administered to assess its efficacy on this AD model. Results: Passive avoidance showed a progressive decline in the memory following Abeta injection. Furthermore, Nissl staining showed that Abeta neurotoxicity caused shrinkage of the CA1 pyramidal neurons. Neurodegeneration was clearly evident from Fluoro-jade labeled neurons in Abeta treated rats. Moreover, higher NF-kappaB immunoreactive CA1 pyramidal neurons were remarkably observed in Abeta treated rats. Ultrastructural analysis using electron microscopy also showed the evidence of subcellular abnormalities. Melatonin treatment in this model of AD prevented Abeta- induced increased NF-kappaB from immunoreaction and neurodegeneration. Discussion: This study suggests that injection of Abeta into the frontal cortices results in the memory decline and histochemical disturbances in CA1 pyramidal neurons. Furthermore, melatonin can prevent several histological changes induced by Abeta.

Cardiac Output

An evaluation of contemporary cardiac output monitors.

Abdel Hakim, Karim; Kauts, Vipin; Tierney, Eamon

[E-mail:karim.hakim@khu.org.bh](mailto:karim.hakim@khu.org.bh)

King Hamad University Hospital - Department of Intensive Care

Bahrain Medical Bulletin 2016; 38 (1): 36-40

Keywords: Catheterization, Swan-Ganz; Pulmonary Wedge Pressure; Evaluation Studies as Topic

Caregivers

Testing the Arabic short form versions of the Parental-Caregivers Perceptions Questionnaire and the Family Impact Scale in Oman.

Al Riyami, I.A.; Thomson, W.M.; Al Harthi, L.S.

University of Otago - Sir John Walsh Research Institute

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 31-35

Keywords: Surveys and Questionnaires; Cross-Sectional Studies; Perception; Parents; Child

Abstract: Short form versions of the Parental-Caregivers Perception Questionnaire [P-CPQ] and Family Impact Scale [FIS] have been developed for use as measures of oral health-related quality of life in dental research. Objective: [1] To translate the original English short form versions of the P-CPQ and FIS and examine their validity, and [2] to describe the impact of early childhood caries on oral health-related quality of life in young Omani children and their families. Methods: Parents/caregivers of children awaiting treatment for early childhood caries completed the P-CPQ and FIS at the Military Dental Center in Oman. Data were obtained from 191 families [representing a 94.1% participation rate]. A global Oral Health Quality of Life [OHRQoL] item was used concurrently to examine the scales' validity. Results: The cross-sectional concurrent validity of the short form version of the P-CPQ was apparent in the significant gradient across the response categories of the global

OHRQoL item, but the FIS short form version did not perform as well. Conclusion: The P-CPQ appears to be valid, but further investigation of the [FIS] is required, along with examination of the scales' responsiveness to change.

Celiac Disease

Coeliac disease, mucosal change and IEL: doing what counts the best.

Marsh, Michael N.

University of Oxford - Wolfson College

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 1-5

Keywords: Mucous Membrane

The likelihood ratio and frequency of DQ2/DQ8 haplotypes in Iranian patients with celiac disease.

Khosravi, Asghar; Mansouri, Masoume; Nejad, Mohammad Rostami; Shahbazkhani, Bijan; Ekhlesi, Golnaz; Kalantari, Ebrahim

Tehran University of Medical Sciences - Digestive Disease Research Institute - Digestive Disease Research Center

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 18-24

Keywords: Likelihood Functions; HLA-DQ Antigens; Haplotypes; Cross-Sectional Studies; Patients

Abstract: Aim: The aim of this study was to evaluate the likelihood ratio and frequency of DQ2 and DQ8 in Iranian patients with celiac disease [CD]. Background: The HLA DQ2 and HLA DQ8 are the important mediators in the development of celiac disease. A few studies evaluated the frequency of HLA DQ2 and HLA DQ8 haplotypes among the Iranian population with low sample size. Patients and Methods: In this cross-sectional study, to predict HLA-DQ2 and DQ8 haplotypes, 141[73 male, 78 female] confirmed CD patients compared to 151 healthy controls were enrolled into this study during 2013-2014. HLA DQ2/ DQ8 haplotypes was determined in cases and controls using PCR-SSP technique. Results: DQ2 and DQ8 were positive in 80% [n=111] and 49% [n= 69] of CD patients and 36% [n=61] and 13% [n=21] of control group respectively. Moreover, 32% [n=45] of CD patients and 5.3% [n=8] of the control group were carrier of both haplotypes. In the case group about one-third of patients [32.2%] were positive for carrying both DQ2 and DQ8 heterodimers while only 5.3% [n=8] of the control group were carrier. In addition, the positive likelihood ratio of DQ2 and DQ8 were 1.74 [CI: 1.4- 2.1], and 2.6 [CI: 1.8- 2.7], respectively. Conclusion: The result of this study showed that the frequency of DQ8 among our population is higher than those reported by European countries, but it is close to those founded in South America and Middle East. This result suggests that the higher prevalence of HLA DQ8 pattern in Iranian CD patients is similar to non-European patients.

classification

Letter to the Editor GHFBB, Response to Pena AS: what is the best histopathological classification for celiac disease? does it matter?

Pulido, Olga M.

University of Ottawa - Department of Pathology and Laboratory Medicine

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 68-69

Keywords: Celiac Disease-pathology; Celiac Disease-diagnosis; Disease Management

therapy

Coeliac disease, diverticulosis and GI bleed: a treatment dilemma.

Hafeez, Muhammad; Salamat, Amjad

[E-mail:dmhafeez@yahoo.com](mailto:dmhafeez@yahoo.com)

Combined Military Hospital - Department of Medicine and Gastroenterology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 76-76

Keywords: Diverticulum-therapy; Gastrointestinal Hemorrhage-therapy

Cell Phones

Mobile phone use and the risk of parotid gland tumors: a retrospective case-control study.

Al Qahtani, K.

[E-mail:kqresearch@hotmail.com](mailto:kqresearch@hotmail.com)

King Saud University - College of Medicine - Department of Otolaryngology-Head and Neck Surgery

GJO-Gulf Journal of Oncology [The] 2016; (20): 71-78

Keywords: Parotid Neoplasms; Retrospective Studies; Case-Control Studies; Electromagnetic Fields; Risk Factors

Abstract: Background: Mobile phones are integral part of the modern lifestyle. As they emit radio frequency electromagnetic field, their role in carcinogenesis needs to be ascertained. The goal of this study was to investigate the association between the use of cellular phones and the risk for parotid gland tumors. Materials and Methods: A total of 26 patients diagnosed with parotid gland tumors and 61 healthy controls were enrolled through a hospital-based retrospective case-control study. The patients were referred and admitted to a tertiary hospital from January 1996 to March 2013. Results: The Odds of exposure were 3.47 times higher among patients compared to their controls. 95% CI suggested that the true Odds Ratio [OR] at the population level could be somewhere between 1.3 and 9.23 and so the observed OR was statistically significant at 5% level of significance. Conclusions: Overall, an association between the exposure of cellular phone use for more than 1 hour daily and parotid tumor was observed. This association should be interpreted with caution because of the relatively small sample size.

Cerebellar Ataxia

Contribution of somatic and dendritic SK channels in the firing rate of deep cerebellar nuclei: implication in cerebellar ataxia.

Abbasi, Samira; Abbasi, Ataollah; Sarbaz, Yashar; Shahabi, Parviz

Sahand University of Technology - Computational Neuroscience Laboratory - Department of Biomedical Engineering

Basic and Clinical Neuroscience 2016; 7 (1): 57-62

Keywords: Small-Conductance Calcium-Activated Potassium Channels; Cerebellar Nuclei; Computer Simulation

Abstract: Introduction: Loss of inhibitory output from Purkinje cells leads to hyperexcitability of the Deep Cerebellar Nuclei [DCN], which results in cerebellar ataxia. Also, inhibition of small-conductance calcium-activated potassium [SK] channel increases firing rate of DCN, which could cause cerebellar ataxia. Therefore, SK channel activators can be effective in reducing the symptoms of this disease, and used for the treatment of cerebellar ataxia. In this regard, we hypothesized that blockade of SK channels in different compartments of DCN would increase firing rate with different value. The location of these channels has different effects on increasing firing rate. Methods: In this study, multi-compartment computational model of DCN was used. This computational stimulation allowed us to study the changes in the firing activity of DCN neuron without concerns about interfering parameters in the experiment. Results: The simulation results demonstrated that blockade of somatic and dendritic SK channel increased the firing rate of DCN. In addition, after hyperpolarization [AHP] amplitude increased with blocking SK channel, and its regularity and resting potential changed. However, action potentials amplitude and duration had no significant changes. The simulation results illustrated a more significant contribution of SK channels on the dendritic tree to the DCN firing rate. SK channels in the proximal dendrites have more impact on firing rate compared to distal dendrites. Discussion: Therefore, inhibition of SK channel in DCN can cause cerebellar ataxia, and SK channel openers can have a therapeutic effect on cerebellar ataxia. In addition, the location of SK channels could be important in therapeutic goals. Dendritic SK channels can be a more effective target compared to somatic SK channels.

Cerebral Palsy

[Android application based for caregivers of children with cerebral palsy]

Dalvand, Hamid; Safari, Ameneh

[E-mail:hamiddalvand@gmail.com](mailto:hamiddalvand@gmail.com)

Arak University of Medical Sciences - School of Rehabilitation Sciences - Department of Occupational Therapy

Journal of Rehabilitation 2016; 16 (4): 282-285

Keywords: Education; Caregivers; Cell Phones; Mobile Applications; Mobile Health Units; Telemedicine

Abstract: Education via smart mobile phone and mobile health applications is a key element in e-learning. For the first time and in cooperation with occupational therapists and Health Information management specialists, an applied educational smart phone-based program was designed and implemented for mothering handling of children with cerebral palsy [CP] by caregivers. For this purpose, IntelIJiDe application version 13 for android was used. This application includes sections of acquaintance with children with CP, principles of motor development in children with CP, feeding, dressing, toileting, bathing, sleeping, lifting and carrying, playing,

anticonvulsant drugs, and about us. It is free and can be installed on smart mobile phones and Android tablets via Bluetooth. This application is an important step in easy, fast, and free access of families of children with CP to daily care information. It is hoped that this software resolve some of these families' problems.

Cervix Uteri

pathology

Is cryotherapy friend or foe for symptomatic cervical ectopy?

Cekmez, Yasemin; Sanlikan, Fatih; Gocmen, Ahmet; Vural, Aylin; Turkmen, SimgeBagci

E-mail: yaseminkandicekmez@hotmail.com

Umraniye Medical and Research Hospital - Department of Obstetrics and Gynaecology

Medical Principles and Practice 2016; 25 (1): 8-11

Keywords: Choristoma; Cryotherapy; Uterine Cervicitis; Pelvic Pain; Cross-Sectional Studies

Abstract: Objective: To evaluate the success rates and clinical outcomes of cervical cryotherapy applied to cervical ectopy for symptomatic relief. Subjects and Methods: A total of 124 women who underwent cryotherapy for symptomatic treatment of cervical ectopy were included in this study. Indications for treatment were: abundant leucorrhoea [n = 114], post-coital bleeding [n = 22], recurrent cervicitis [n = 30] and pelvic pain [n = 12]. Cryotherapy consisted of the use of carbon dioxide at -89[degree]C to destroy the ectopic columnar epithelium by freezing, and it was transmitted to the ectopy through a flat cryoprobe. No routine anaesthesia or analgesia was administered. All patients were questioned about the status of their symptoms after 6 weeks of treatment. Results: The highest success rate was obtained in patients with abundant leucorrhoea [n = 102; 89.5%], while the lowest success rate was achieved in subjects with pelvic pain [n = 7; 58%]. After treatment, no severe complications were observed, except for hydrorrhoea for a few days. Success rates were 9 times lower in patients who had 3 or more cervicitis episodes per 6 months. Conclusion: In this study, the success rate of cryotherapy was highest in patients with abundant leucorrhoea and lowest in patients with pelvic pain and recurrent cervicitis. Hence, we recommend that clinicians perform the procedure in such patients without much delay.

Chronic Periodontitis

Potential co-relation between chronic periodontitis and cancer - an emerging concept.

Shrihari, T.G.; Vasudevan, V.; Manjunath, V.; Devaraju, D.

E-mail: drshrihariomr@gmail.com

Krishnadevaraya College of Dental Sciences - Department of Oral Medicine and Radiology

GJO-Gulf Journal of Oncology [The] 2016; (20): 20-24

Keywords: Neoplasms; Intercellular Signaling Peptides and Proteins; Free Radicals; Cytokines; Matrix Metalloproteinases; Myeloid Cells; Inflammation Mediators

Abstract: Periodontal disease caused chiefly by bacteria is characterized by inflammation, bacteremia, and a strong immune response. It is based on evidence that a continuous long-term exposure to oral bacteremia and bacterial toxins induces inflammatory immune response after immune evasion releases growth factors such as FGF, EGF, TGF-Beta, free radicals such as ROS and NOS, cytokines such as TNFAlfa, IL-1 Beta, IL-6; and matrix metalloproteinase such as MMP-9. Immature myeloid cells such as macrophages, dendritic cells and granulocytes involved in chronic inflammation and tumor progression through immunosuppressive activity against innate and adaptive immunity by factors such as iNOS, Arginase1 and ROS, activate major transcriptional factors such as NF-KB and STAT3 that could contribute to genetic instability, uncontrolled cell proliferation, angiogenesis, resistance to apoptosis, epithelial to mesenchymal transition, immunosuppression, invasion and metastasis. This study is a product of research and analysis on the role of chronic inflammatory mediators of chronic periodontitis in progression to cancer.

Clavicle

radiography

Radiological mean age of fusion of medial end of the clavicle: a parameter of age.

Hassan, Qudsia; Memon, M. Umer; Khalil, Inayat ur Rehman; Ashraf, Tehreem; Arif, Muhammad Mustafa; Iqbal, Ali Shan

E-mail: drqudsiahassan@hotmail.com

Ziauddin University - Department of Forensic Medicine and Toxicology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 18-22

Keywords: Age Determination by Skeleton; Radiography; Cross-Sectional Studies; Growth

Abstract: Objective: To determine the mean age of fusion of medial end of clavicle by radiography. Study Design: Cross-sectional study. Place and Duration of Study: Departments of Forensic Medicine, Dow Medical College and Ziauddin University, Karachi, from June 2010 to May 2011. Methodology: The subjects for this study were selected from various government colleges of Karachi. The subjects were analyzed for age and further confirmation was done by interviews where birth records and other physical parameters of age were also assessed. X-rays chest PA view was taken focusing on the medial end of clavicle; and were examined by a consultant radiologist and complete fusion of the medial end was noted. P-value less than 0.05 was considered significant. Results: The mean age of fusion of medial end of the clavicle was found to be 21 +/- 1.43 years. Significant difference was observed in male to female age of fusion 21.14 +/- 1.41 years versus 20.65 +/- 1.94 years [p > 0.05]. Similarly, statistically significant differences were observed between lower to middle income class and higher income class of all society. No difference was observed among various ethnic groups. Conclusion: Socio-economic factors, such as diet and nutrition, directly affect bone growth and hence bones' age. The results of fusion of the medial end of the clavicle are not affected by ethnicity; however, it is significantly affected by gender. More studies should be conducted in various parts of the country to make a natural standard in setting up uniform criteria for assessing age at or above 21 years.

Colitis

chemically induced

An experimental model of colitis induced by dextran sulfate sodium from acute progresses to chronicity in C57BL/6: correlation between conditions of mice and the environment.

Taghipour, Niloofar; Molaie, Mahsa; Mosaffa, Nariman; RostamiNejad, Mohammad; Aghdaei, Hamid Asadzadeh; Anissian, Ali; Azimzadeh, Pedram; Zali, Mohammad Reza

Shahid Beheshti University of Medical Sciences - Research Institute for Gastroenterology and Liver Diseases

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 45-52

Keywords: Dextran Sulfate; Inflammatory Bowel Diseases; Mice, Inbred C57BL

Abstract: Aim: To induce acute colitis progresses to chronicity in C57BL/6 mice by dextran sulfate sodium. Background: Murine models are essential tools to understand IBD pathogenesis. Among different types of chemically induced colitis models, the dextran sulfate sodium [DSS]-induced colitis model is the most common model of IBD, due to its simplicity. Patients and Methods: Male C57BL/6 mice 6-8 weeks old, were collected and matched by age with controls. C57BL/6 mice treated with 2 cycles of 3.5% DSS for 4 days and 4 days of pure water between each cycle. After that, mice were sacrificed and the entire colon was removed. Small sections of the colon were fixed in formaldehyde, embedded in paraffin and sectioned with a microtome. Sections were stained with hematoxylin eosin to analyses the degree of inflammation. Results: After the first cycle oral administration of DSS, mice with severe and visible rectal bleeding and diarrhea entered into the acute phase. After day 4-5, bleeding and diarrhea were improved and mice entered into the chronic phase with peak levels of weight loss. Macroscopically, the inflammation was predominantly located in the distal colon. Microscopically, examination of the distal colon sections showed a decrease number of goblet cells, loss of crypts, signs of surface epithelial regeneration and moderate to severe infiltration of inflammatory cells in the mucosa. Conclusion: In order to achieve an experimental colitis model, our protocol is recommended for future therapies in IBD experimental modeling.

Collateral Circulation

Fatal derecruitment of occluded left anterior descending collaterals after left circumflex revascularization.

Boukhris, Marouane; Tomasello, Salvatore D.; Galassi, Alfredo R.

University of Catania - Catheterization Laboratory and Cardiovascular Interventional Unit - Department of Clinical and Experimental Medicine

Journal of the Saudi Heart Association 2016; 28 (1): 52-58

Keywords: Myocardial Revascularization; Coronary Vessels; Coronary Occlusion

Abstract: Coronary arteries are not definitely functionally terminal arteries, as previously thought; indeed, they are linked and interconnected by a rich network of collaterals. Chronic total occlusions [CTOs] represent a subset of frequent lesions encountered in everyday catheterization laboratory practice, generally associated with a developed system of collateral connections. These latter have the capacity to prevent myocardial necrosis and may even uphold metabolic supply to the ischemic territory to maintain its contractile capacity. Authors have reported a rapid and progressive reduction of collateral function and their decline after antegrade flow restoration, resulting in higher myocardial susceptibility to ischemia in the CTO territory. Here, we report the case of a fatal derecruitment of collaterals for a left anterior descending CTO not reopened, after left circumflex subocclusion revascularization.

Composite Resins

The effect of different polishing methods and storage media on discoloration of resin composites.

Deljoo, Z.; Sadeghi, M.; Azar, M.R.; Bagheri, R.
Shiraz University of Medical Sciences - Shiraz Dental School
JDB-Journal of Dental Biomaterials 2016; 3 (2): 226-232

Keywords: Color; Dental Restoration, Permanent; Dental Polishing

Abstract: Statement of Problem: Accumulation of plaque and staining due to a rough surface, and penetration of colourant agents from food and beverages in to the resin composite results in an incomplete polymerization. There is a little information on the effect of finishing and polishing techniques on the discoloration of nanohybrid and microhybrid composites when exposed to staining solutions. Objectives: To determine the degree of surface staining of nanohybrid and microhybrid composites after polishing and immersion in distilled water and two commonly used staining solutions. Materials and Methods: A nanohybrid [Ice; SDI] and microhybrid [Gradia direct; GC] composites were used. Disc-shaped specimens were prepared and treated with either a matrix finish or polished using Sof-Lex discs [3M/ESPE] and Enhance point [Dentsply]. After 24 h immersion in distilled water at 37[degree sign]C the specimens were polished and colour coefficients [CIE L[a*] b[a*] b[a*]] was measured by a spectrophotometer. All specimens were immersed in 37[degree sign]C distilled water in an incubator for 7 days and colour coefficients were measured again. The colour change $[\Delta E]$ was calculated using the following formula: $[\Delta E] = \sqrt{[\Delta L]^2 + [\Delta a]^2 + [\Delta b]^2}$ [1/2]. The data were analyzed using three-way ANOVA, one-way ANOVA/Tukey HSD and Student's t-test. Results: There was a significant interaction between resin composites, polishing systems and staining solutions [p < 0.05]. ANOVA and Tukey's tests showed that Ice had a significantly lesser colour change than Gradia direct and matrix finish revealed the smoothest surface followed by Sof-Lex discs and Enhance point. Distilled water and cola caused no perceptible colour change $[\Delta E] < 3.3$. The effect of surface polish on staining was statistically significant [p < 0.05]. Conclusions: Sof-Lex discs in comparison to Enhance point stimulated greater staining resistance for both composites. The nanohybrid exhibited less colour change than microhybrid composite. Coffee was the only storage media that induced a perceptible colour change $[\Delta E] > 3.3$ compared to cola and distilled water.

Coronary Artery Disease

Red cell distribution width can predict the significance of angiographically intermediate coronary lesions.

Acikgoz, Sadik Kadri; Acar, Burak; Aydin, Salehattin; Acikgoz, Eser; Er, Okan; Sensoy, Baris; Balci, Mustafa Mucahit; Yayla, Cagri; Sen, Fatih; Topal, Salih; Aydogdu, Sinan
[E-mail:drskad@gmail.com](mailto:drskad@gmail.com)

Turkiye Yuksek Ihtisas Education and Research Hospital - Cardiology Clinic

Medical Principles and Practice 2016; 25 (1): 31-35

Keywords: Erythrocyte Indices; Coronary Stenosis; Coronary Angiography; Fractional Flow Reserve, Myocardial; Logistic Models

Abstract: Objective: In the present study, the association between red cell distribution width [RDW] with functional significance of intermediate coronary artery lesions was investigated. Materials and Methods: Two hundred and forty-six consecutive patients, 168 males and 78 females, who underwent fractional flow reserve [FFR] measurement for angiographically intermediate coronary stenosis [40-70% in quantitative coronary analysis] in the left anterior descending coronary artery were enrolled into the study. The functional significance of intermediate coronary artery lesions was determined by FFR measurement. An FFR value <0.75 was defined as functionally significant. Venous blood samples were taken within 48 h before the FFR measurement, and RDW levels were determined by a Coulter LH Series hematology analyzer. Logistic regression analysis was used to examine the association between functional significance in FFR measurement and other variables. Results: Of the 246 patients, 62 [25.2%] exhibited significant functional stenosis [FFR <0.75] in the FFR measurement. The mean RDW level was significantly higher in patients with significant stenosis [14.19 +/- 0.73 vs. 13.69 +/- 0.77, p < 0.001]. In stepwise multivariate logistic regression analysis, RDW [OR = 2.489, 95% CI = 1.631-3.799, p < 0.001] and male gender [OR = 2.826, 95% CI = 1.347-5.928, p = 0.006] were independent predictors of significant functional stenosis. Conclusion: Increased RDW levels were associated with functional significance of angiographically intermediate coronary artery stenoses.

Coronary Vessel Anomalies

Anomalous coronary artery in a transplanted heart: a rare incidental diagnosis.

Abudiab, Muaz M.; Hakim, Fayaz A.; Fortuin, David F.; Scott, Robert L.
[E-mail:Abudiab.Muaz@mayo.edu](mailto:Abudiab.Muaz@mayo.edu)

Mayo Clinic - Department of Medicine - Division of Cardiovascular Diseases

Journal of the Saudi Heart Association 2016; 28 (1): 46-48

Keywords: Heart Transplantation; Coronary Angiography; Disease Management; Coronary Artery Disease

Abstract: Coronary artery anomaly is a rare postoperative coronary angiographic finding in heart transplant recipients. We report a case of anomalous origin of the right coronary artery in an asymptomatic 70-year-old heart transplant patient. Most coronary artery anomalies are benign, but surgical treatment may be necessary in major coronary artery anomalies that are known to have adverse outcomes.

Cryptosporidium parvum

drug effects

The efficacy of three medicinal plants; garlic, ginger and mirazid and a chemical drug metronidazole against cryptosporidium parvum: II- histological changes.

Abouel Nour, Mohamed F.; El Shewehy, Dina Magdy; Hamada, Shadia F.; Morsy, Tossou A.
Mansoura University - Faculty of Science - Department of Zoology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 185-200

Keywords: Cryptosporidiosis; Mice; Antiprotozoal Agents-therapeutic use; Garlic; Ginger; Plants, Medicinal; Resins, Plant; Metronidazole-therapeutic use

Abstract: Cryptosporidiosis parvum is a zoonotic protozoan parasite infects intestinal epithelial cells of man and animals causing a major health problem. This study was oriented to evaluate the protective and curative capacity of garlic, ginger and mirazid in comparison with metronidazole drug [commercially known] against Cryptosporidium in experimental mice. Male Swiss Albino mice experimentally infected with *C. parvum* were treated with medicinal plants extracts [Ginger, Mirazid, and Garlic] as compared to chemical drug Metronidazole. Importantly, *C. parvum*- infected mice treated with ginger, Mirazid, garlic and metronidazole showed a complete elimination in shedding oocysts by 9[th] day PI. The reduction and elimination of shedding oocysts in response to the treatments might be attributable to a direct effect on parasite growth in intestines, sexual phases production and/ or the formation of oocysts. The results were evaluated histopathological examination of ileum section of control mice [uninfected, untreated] displayed normal architecture of the villi. Examination of infected mice ileum section [infected, untreated] displayed histopathological alterations from uninfected groups. Examination of ileum section prepared from mice treated with garlic, ginger, mirazid, and metronidazole displayed histopathological alterations from that of the control groups, and showed marked histologic correction in the pattern with the four regimes used in comparison to control mice. Garlic successfully eradicated oocysts of infected mice from stool and intestine. Supplementation of ginger to infected mice markedly corrected elevation in the inflammatory risk factors and implied its potential antioxidant, anti-inflammatory and immunomodulatory capabilities. Infected mice treated with ginger, mirazid, garlic and metronidazole showed significant symptomatic improvements during treatment.

Culex

drug effects

Histochemical effects of some biological agents on culex pipiens larvae.

El Sobky, Mona M.; Ismail, Howaida I. H.; Assar, Abada A.

Menoufia University - Faculties of Medicine - Department of Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 81-92

Keywords: Biological Products; Ivermectin; Bacillus thuringiensis; Macrolides; Drug Combinations; Mosquito Control-methods; Pest Control, Biological-methods

Abstract: The histochemical effects of the lethal concentration that kills 50% of larvae [LC₅₀] of three biological agents, abamectin, Bacillus thuringiensis and spinosad on the carbohydrates [polysaccharides], proteins, nucleic acids and lipids content of the midgut and fat bodies of *Culex pipiens* 2nd instar larvae were studied. The results showed that the three tested compounds reduced the carbohydrates [polysaccharides], proteins, RNA synthesis and lipids content after 72 hours of treatment where abamectin was the most effective followed by Bacillus thuringiensis then spinosad.

Dental Arch

Evaluation of the fit of preformed nickel titanium arch wires on normal occlusion dental arches.

Al Barakati, Rakhn G.; Alqahtani, Nasser D.; Al Madi, Abdulaziz; Albarakati, Sahar F.; Al Kofide, Eman A.
King Saud University - King Khaled National Guard Hospital Jeddah

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 18-23

Keywords: Nickel; Titanium; Dental Occlusion; Orthodontic Wires

Abstract: Aim: To determine the fits of preformed nickel titanium [NiTi] archwires on dental arches with normal occlusion. Methods: Forty sets of upper and lower plaster models were obtained from men and women with Class I occlusions. Preformed 0.016" × 0.022" NiTi archwires from Rocky Mountain Orthodontics [RMO], 3 M Unitek, Ormco, and Dentaform were evaluated in terms of their fits on dental arches from male, female, and combined cases. Data were analyzed by using fourth- and sixth-order polynomial equations, analysis of variance [ANOVA], and the Duncan post hoc test. Results: In the upper arches, the best fit and least error were obtained with RMO Ovoid and Ormco Orthos Large archwires for male cases, but with 3 M Orthoform LA archwires for female and combined cases. In the lower arches, the best fit and least error were obtained with Ormco Orthos Large for male cases, with 3 M Orthoform LA and RMO Normal for female cases, and with 3 M Orthoform LA, RMO Normal, Ormco Orthos Large, and Ormco Orthos Small for combined cases. When both dental arches were matched, Ormco Orthos Large was the best wire for male cases. 3 M Orthoform LA was the best wire for female and combined cases. Conclusions: Using an archwire form with the best fit to the dental arch should produce minimal changes in the dental arch form when NiTi wires are used and require less customization when stainless-steel wires are used.

Dental Caries

A comparative study of oral health parameters in molar incisor hypomineralization and high-caries-risk children aged 8-11 years.

Ulusoy, Ayca Tuba; Tunc, Emine Sen; Bayrak, Sule; Onder, Hasan
Ondokuz Mayıs University - Faculty of Dentistry - Department of Pediatric Dentistry

Medical Principles and Practice 2016; 25 (1): 85-89

Keywords: Oral Health; Dental Enamel Hypoplasia; Child; DMF Index; Periodontal Index; Dental Plaque Index
Abstract: Objective: To compare oral health parameters: decayed missing filled teeth [dmft, DMFT], gingival index and plaque index in high-caries-risk children and children with molar incisor hypomineralization [MIH] Subjects and Methods: A study group of 81 children affected by MIH [49 girls, 32 boys] aged 8-11 years [mean 9.4 +/- 1.1] was race-, age- and sex-matched with 81 high-caries-risk children not affected by MIH [controls]. The MIH and control groups were divided into four subgroups according to age. The oral health parameters of both groups were recorded under clinical conditions. Mann-Whitney U and Kruskal-Wallis tests were used to compare the differences in the number of MIH-affected teeth between the groups. Other traits were evaluated with the ANOVA test, and Duncan's multiple comparison tests were used for comparing means. Linear and ordinal regression analyses were used to model the variables. Results: The mean age of the participants was 9.4 +/- 1.1 years, and the mean number of affected teeth was 7.7 [range 3-12] in the MIH group. The number of affected teeth and severity of MIH did not change significantly with age and sex [p > 0.05]. A comparison of the oral health parameters of MIH-affected and control children according to groups did not show any statistically significant differences between the groups for all parameters for all groups [p > 0.05] with the exception of DMFT values at 10 years of age [p < 0.05]. In a comparison of the total scores without taking age into account, the children with MIH showed a significantly higher DMFT value than the children without MIH [p < 0.05], but there were no significant differences between the dmft, GI and PI values of the study groups [p > 0.05]. Conclusion: The children in the MIH group had higher DMFT than those without MIH. Hence, the presence of MIH could have a detrimental effect on oral health parameters, especially on DMFT values.

Dental Implants

standards

Assessing the effect of dental implants thread design on distribution of stress in impact loadings using three dimensional finite element method.

Zarei, I.; Khajepour, S.; Sabouri, A.; Haghnegahdar, A.Z.; Jafari, K.
Islamic Azad University - College of Engineering - Department of Mechanical Engineering

JDB-Journal of Dental Biomaterials 2016; 3 (2): 233-240

Keywords: Bone and Bones; Printing, Three-Dimensional; Finite Element Analysis; Dental Stress Analysis; Stress, Mechanical

Abstract: Statement of Problem: Impacts and accidents are considered as the main factors in losing the teeth, so the analysis and design of the implants that they can be more resistant against impacts is very important. One of the important numerical methods having widespread application in various fields of engineering sciences is the finite element method. Among its wide applications, the study of distribution of power in complex structures can be noted. Objectives: The aim of this research was to assess the geometric effect and the type of implant thread on its performance; we also made an attempt to determine the created stress using finite element method. Materials and Methods: In this study, the three dimensional model of bone by using Cone Beam Computerized Tomography [CBCT] of the patient has been provided. The implants in this study are designed by Solid Works software. Loading is simulated in explicit dynamic, by struck of a rigid body with the speed of 1 mm/s to implant vertically and horizontally; and the maximum level of induced stress for the cortical and trabecular bone in the ANSYS Workbench software was calculated. Results: By considering the results of this study, it was identified that, among the designed samples, the maximum imposed stress in the cortical bone

layer occurred in the first group [straight threads] and the maximum stress value in the trabecular bone layer and implant occurred in the second group [tapered threads]. Conclusions: Due to the limitations of this study, the implants with more depth thread, because of the increased contact surface of the implant with the bone, caused more stability; also, the implant with smaller thread and shorter pitch length caused more stress to the bone.

Dental Restoration, Permanent

standards

Marginal micro-leakage of self-etch and all-in one adhesives to primary teeth, with mechanical or chemo-mechanical caries removal.

Nouzari, A.; Zohrei, A.; Ferooz, M.; Mohammadi, N.

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

JDB-Journal of Dental Biomaterials 2016; 3 (2): 220-225

Keywords: Dental Caries; Dental Bonding; Dental Cements; Tooth, Deciduous; Composite Resins

Abstract: Statement of Problem: Chemo-mechanical caries removal is an effective alternative to the traditional rotary drilling method. One of the factors that can influence micro-leakage is the method of caries removal. Objectives: To compare the micro-leakage of resin composite in primary dentition using self-etch and all-in one adhesives following conventional and chemo-mechanical caries removal. Materials and Methods: Sixty extracted human primary anterior teeth with class III carious lesions were collected. The selected teeth were divided randomly into two groups each consisting of 30 teeth. In group 1 carious lesions were removed using Carisolv multi mix gel. In group 2, caries was removed using round steel burs in a slow-speed hand piece. Then, the specimens in each group were randomly divided into two subgroups [A and B] of 15 and treated by either Clearfil SE Bond [CSEB] or Scotch bond. All prepared cavities were filled with a resin composite [Estelite]. All the specimens were stored in distilled water at 37[degree sign]C for 24 hours and then thermocycled in 5[degree sign] C and 55[degree sign] C water with a dwell time of 20 seconds for 1500 cycles. The specimens were immersed in 1% methylene blue solution for 24 hours, removed, washed and sectioned mesiodistally. The sectioned splits were examined under a stereomicroscope to determine the micro-leakage scores. The data were analyzed using Kruskal-Wallis Test in SPSS version 21. Results: There were no significant differences between micro-leakage scores among the four groups [p = 0.127]. Score 0 of micro-leakage was detected for 60% of the specimens in group 1-A [Carisolv + CSEB], 73% of the group 2-A [hand piece + CSEB], 80% of the group 1-B [Carisolv + Scotch bond], and 93% of the group 2-B in which caries was removed using hand piece and bonded with Scotch bond. Conclusions: Although caries removal using hand piece bur along with using Scotch bond adhesive performed less micro-leakage, it would seem that the use of Carisolv doesn't adversely affect the micro-leakage of composite restorations while using self-etch or all-in one adhesives.

Denture, Complete

Effect of three investing materials on tooth movement during flasking procedure for complete denture construction.

Salloum, Alaa'a M.

[E-mail:drsalloum74@hotmail.com](mailto:drsalloum74@hotmail.com)

Damascus University - Faculty of Dental Medicine - Department of Removable Prosthodontics

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 56-61

Keywords: Tooth Movement; Dental Pulp Calcification; Maxilla

Abstract: Problem statement: Tooth movement has been shown to occur during and after the processing of complete dentures. An understanding of this phenomenon may permit one to construct functional complete dentures that require less occlusal adjustment in the articulator and in the patient's mouth Purpose: The purpose of this study was to examine the effects of three different investing methods on tooth movement occurring during the processing of simulated maxillary complete dentures. Material and Methods: Forty-five similar maxillary dentures were made using heat-polymerized acrylic resin, and assigned randomly to three experimental groups [n = 15 each] according to investing method: plaster-plaster-plaster [P-P-P], plaster-stone-stone [P-S-S], and plaster-mix [P-M]. Specimens in all experimental groups were compression molded with denture base resin. Transverse interincisor [I-I] and intermolar [M-M] distances, and anteroposterior incisor-molar [LI-LM and RI-RM] distances, were measured with digital calipers at the wax denture stage [pre-polymerization] and after denture decasting [post-polymerization]. Analysis of variance and Tukey's test were used to compare the results. Results: M-M, LI-LM, and RI-RM movement was significantly greater in the P-P-P group than in the P-S-S and P-M groups; no significant difference in I-I movement was observed among groups. Transverse movement along M-M and I-I was significantly greater than anteroposterior movement in the P-P-P group; no significant difference among measurements was observed in the other two groups. Conclusion: The study results indicate that the use of dental stone or a 50:50 mixture of plaster and stone for investing of dentures is an important factor in efforts to control the magnitude of tooth movement.

Depressive Disorder

Elevated IL-17 and TGF-beta serum levels: a positive correlation between T-helper 17 cell-related pro-inflammatory responses with major depressive disorder.

Davami, Mohammad Hasan; Baharlou, Rasoul; Vasmehjani, Abbas Ahmadi; Ghanizadeh, Ahmad; Keshtkar, Mitra; Dezhkam, Iman; Atashzar, Mohammad Reza

Jahrom University of Medical Sciences - School of Medicine - Department of Immunology and Microbiology

Basic and Clinical Neuroscience 2016; 7 (2): 137-142

Keywords: Interleukin-17-blood; Transforming Growth Factor beta-blood; T-Lymphocytes, Helper-Inducer; Surveys and Questionnaires; Interleukins

Abstract: Introduction: Depression is a mental disorder that highly associated with immune system. Therefore, this study compares the serum concentrations of IL-21, IL-17, and transforming growth factor beta [TGF-beta] between patients with major depressive disorder and healthy controls. Methods: Blood samples were collected from 41 patients with major depressive disorder and 40 healthy age-matched controls with no history of malignancies or autoimmune disorders. The subjects were interviewed face to face according to DSM-IV diagnostic criteria. Depression score was measured using completed Beck Depression Inventory in both groups. The serum concentrations of IL-21, IL-17, and TGF-beta were assessed using ELISA. Results: The mean score of Beck Depression score in the patient and control groups was 35.4 +/- 5.5 and 11.1 +/- 2.3. IL-17 serum concentrations in the patients and the control group were 10.03 +/- 0.6 and 7.6 +/- 0.6 pg/mL, respectively [P=0.0002]. TGF-beta level in the patients group was significantly higher than compare to the control group; 336.7 +/- 20.19 vs. 174.8 +/- 27.20 pg/mL, [P<0.0001]. However, the level of IL-21 was not statistically different between the two groups 84.30 +/- 4.57 vs. 84.12 +/- 4.15 pg/mL [P>0.05]. Conclusion: Considering pro-inflammatory cytokines, current results support the association of inflammatory response and depressive disorder. So, it seems that pro-inflammatory factors profile can be used as indicator in following of depression progress and its treatment impacts.

Diabetes Mellitus

blood

Frequency of ABO/Rhesus blood groups in patients with diabetes mellitus.

Oner, Can; Dogan, Burcu; Telatar, Berrin; Yagan, Canan Fidan Celik; Oguz, Aytekin

E-mail:trcanoner@yahoo.com

Istanbul Milim University - School of Medicine - Department of Family Medicine

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 74-75

Keywords: Diabetes Mellitus, Type 1-blood; Diabetes Mellitus, Type 2-blood; Blood Group Antigens; ABO Blood-Group System; Rh-Hr Blood-Group System

Abstract: The correlation between ABO/Rh blood groups and diabetes mellitus is still controversial. The aim of this study was to determine the relationship between ABO/Rhesus blood groups and diabetes in Turkish population. This cross-sectional study was conducted in Istanbul Medeniyet University Goztepe Education and Training Hospital's Diabetes Units. The study group was composed of 421 patients with type-1 diabetes, 484 patients with type-2 diabetes and 432 controls. Blood samples were collected and tested for ABO/Rhesus blood groups. Data was analyzed by SPSS version 17.0. A significant association was found between blood groups and diabetes mellitus. The frequency of AB blood group was significantly higher in type-1 diabetics; and A blood group was significantly higher in type-2 diabetics. Furthermore, Rh negativity were significantly more frequent in type-2 diabetics.

diagnosis

Control of cardiovascular risk factors among people with diabetes: evaluation revisited.

Nasser, Jameel; Omran, Ahmed

E-mail:jnasser66@yahoo.com

Primary Care Health Center

Bahrain Medical Bulletin 2016; 38 (1): 15-17

Keywords: Cardiovascular Diseases-prevention and control; Cardiovascular Diseases-complications; Risk Factors; Evaluation Studies as Topic; Lipoproteins, LDL; Hemoglobin A, Glycosylated

Abstract: Objective: To assess control of hyperglycemia, hypertension and dyslipidemia among patients attending diabetes clinic in 2014 compared to 2005. Design: A Cross-Sectional Study Setting: Primary Health Center, Ministry of Health, Bahrain. Method: Medical records of patients attending diabetes clinic from 1 September 2014 to 31 December 2014 were reviewed. Data documented were age, sex, diabetes duration, Body Mass Index [BMI], smoking, glyated hemoglobin [A1C], oral hypoglycemic drugs and insulin regimen, blood pressure, antihypertensive drugs, lipids profile and statin type. Result: Three hundred seventy patients' records were reviewed. One hundred-thirty [35.1%] patients were males. Two hundred four [55.1%] patients were having diabetes for more than or equal to 15 years. Glycated hemoglobin < 53 mmol/l was achieved in 92

[24.9%] patients in 2014 compared to 134 [20.4%] patients in 2005 [P-Value=0.1]. Blood pressure \leq 130/80 was achieved in 126 [34.1%] patients in 2014 compared to 137 [13.7%] patients in 2005 [P-value <0.0001]. Low Density Lipoproteins <2.6 mmol/l was achieved in 301 [81.4%] patients in 2014 compared to 120 [12%] patients in 2005 [P-value <0.0001]. Conclusion: Significant improvements have been observed in control of the studied CV risk factors in 2014. However, control of hyperglycemia remains a challenge and needs to be improved.

Diabetic Foot

therapy

Maggot debridement therapy [MDT]: it is safe and economic for treating a diabetic foot ulcer.

El Tawdy, Ahmed Hassan Fawzi; Ibrahim, Eissa Abdel Hamed; Shokryabdallah, Eman; Al Sakhawy, Eman Mahmoud Aly; Morsy, Tosson A.

Military Medical Academy

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 223-234

Keywords: Debridement-economics; Larva; Debridement-methods; Diabetes Complications

Abstract: Diabetic foot ulcer [DFU] is the major global and devastating complication of diabetes mellitus that affects at least 20% of diabetic patients during their lifetime. This article presents an overview of the research evidence on maggot debridement therapy that serves as a guide to health professionals who may be users of this form of treatment now and in the future it is a time to apply this sample and safe worldwide approved method for diabetic foot ulcer to save money and avoid surgical intervention?

Dioxanes

toxicity

Inhibitory activity of protected edible plants on oxidative stress induced by oral 1, 4-dioxane.

Minaa, Said; Shaker, Emad S.; Mahmoud, Hemdan I.

E-mail: said_mnaa2@yahoo.com

Monoufia University - Faculty of Specific Education - Department of Home Economic

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 135-143

Keywords: Malondialdehyde; Catalase; Acetylcysteine; Oxidative Stress-drug effects; Plants, Edible; Rats, Sprague-Dawley; Liver

Abstract: 1, 4-Dioxane [DX] with two oxygen atoms make it hydrophilic and infinitely soluble in water. As a synthetic organic compound, it used widely throughout industry as a solvent. Dioxane causes numerous human ailments such as liver damage and kidney failure. It has been shown in research to be carcinogenic to animals, and is a potential carcinogen to humans. Daily administration for 1, 4-dioxane [100 mg/kg body weight] in drinking water for rats weighing 120 g, except for normal control group. Experimental animal for 42 days was followed through body weight, serum alkaline phosphatase, serum creatinine, malondialdehyde, and catalase enzyme activity; beside histological patterns for liver, kidney, brain and ovary sections. Protection treatment has been offered using oral injection N-acetyl cysteine [100mg/kg b.wt.], and fresh 200mg/kg b.wt. in diet meal for each of nabk, husk, and sycamore in separated groups. Body weight and CAT activity have decreased by 25.8, and 68.7%, respectively. While increase has found in MDA, ALP and creatinine values by 76, 48.9, and 67.3%, respectively. NAC showed improvement especially for MDA peroxidation marker and creatinine for kidney disorder. On the other hand, nabk improved CAT activity and husk for ALP liver mutagenicity marker. Intoxicated DX showed edema, kupffer cell activation, atrophy of glomerular tuft, and necrosis of neurons in liver, kidney and brain sections. Obviously nabk showed highly improvement in liver toxicity which is the most sensitive organ to DX as found in research.

Diptera

physiology

Antimicrobial activity for excretion and secretion of the greenbottle fly larvae *Lucilia sericata* [meigen] [diptera: calliphoridae]

Hassan, Mostafa I.; Amer, Mounir S.; Hammad, Kotb M.; Zidan, Mahmoud M.

[E-mail:mostafa012@gmail.com](mailto:mostafa012@gmail.com)

Al-Azhar University - Faculty of Science - Department of Zoology and Entomology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 179-184

Keywords: Larva-physiology; Gram-Negative Bacteria-drug effects; Gram-Positive Bacteria-drug effects; Anti-Bacterial Agents; Bodily Secretions

Abstract: Sterile larval excretion/secretion [ES] exhibited antibacterial activity against some species of bacteria. They were shown to inhibit the growth of Gram-positive bacteria *Staphylococcus aureus* and *Bacillus subtilis* Gram-negative bacteria *Pseudomonas aeruginosa*, *Escherichia coli* and *Klebsiella pneumoniae* and Fungi *Geotrichum candidum* and *Aspergillus fumigatus* thus exhibited limited inhibitory effect towards Gram-positive bacteria *Streptococcus pyogenes* and *Staphylococcus epidermidis* and Gram-negative *Proteus vulgaris* and Fungi *Syncephalastrum racemosum*, *Candida albicans*, that effect was slowed down when challenged with secretion on a solid media but no zone of complete inhibition was detected. Growth inhibiting activity was determined in liquid growth media using the Gram-positive, Gram-negative bacterial and fungal strains as indicator organisms.

Down Syndrome

genetics

Methionine synthase A2756G and reduced folate carrier1 A80G gene polymorphisms as maternal risk factors for Down syndrome in Egypt.

Moustafa, Maha; Gaber, Elham; Abo El Fath, Gamal

[E-mail:mmkmahmed@yahoo.com](mailto:mmkmahmed@yahoo.com)

Ain Shams University - Faculty of Science - Department of Biochemistry

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 217-221

Keywords: 5-Methyltetrahydrofolate-Homocysteine S-Methyltransferase-genetics; Reduced Folate Carrier Protein-genetics; Polymorphism, Genetic; Genetic Association Studies; Risk Factors; Mothers

Abstract: Background: Polymorphisms of genes encoding enzymes involved in folate metabolism have long been hypothesized to be maternal risk factors for Down syndrome, however, results are conflicting and inconclusive. Aim of the study: To analyze the effect of methionine synthase [MTR] A2756G, and reduced folate carrier [RFC1] A80G gene polymorphisms on the maternal risk for DS Patients: This study was conducted in the Medical Genetics Center, Ain-Shams University hospitals, on a total of 170 mothers of children, diagnosed with Down syndrome, who were attending the center. Eighty-five control mothers were also enrolled in the study. Methods: Genotype analyses were performed using PCR-RFLP to detect RFC1A80G and MTR A2756G gene polymorphisms in all case and control mothers. Results: Comparing RFC1A80G genotype frequency between both groups revealed, that the frequency of the AA genotype in case mothers [94.11%] is highly significantly [$p < 0.001$] greater than its frequency in control mothers [74.11%], with no significant difference between the two groups regarding GG genotype. Comparing RFC1 A80G allele frequency between the two groups revealed a high frequency of the A allele among case mothers [94.11%], which showed a highly statistically significant difference [$p < 0.001$] from the control group [55.29%], meanwhile the G allele showed a low frequency of 5.88% in DS mothers compared to 22.35% in the control mothers, with a highly statistically significant difference [$p < 0.001$] between the two groups. Regarding MTR A2756G polymorphism, it was found that the AA genotype predominated in the control group [65.88%] with a highly statistically significant difference [$p < 0.001$] from case mothers group [5.88%]. Comparing MTR allele frequency between the two groups revealed predominance of the G allele among mothers of DS children [76.47%]. Conclusion: Current results provide strong evidence that the MTR A2756G, and RFC1 80 A genotypes could be considered as maternal risk factors for DS in Egyptian mothers.

Drug Evaluation, Preclinical

Synthesis and biological evaluation of a mutual prodrug of norfloxacin and fenbufen.

Husain, Asif; Ahmad, Aftab; Khan, Shah A.

Hamdard University - Faculty of Pharmacy - Department of Pharmaceutical Chemistry

Journal of Taibah University Medical Sciences 2016; 11 (3): 277-281

Keywords: Norfloxacin-pharmacology; Phenylbutyrates-pharmacology; Anti-Bacterial Agents; Anti-Inflammatory Agents; In Vitro Techniques; Rats, Wistar

Abstract: Objectives: The study aimed to synthesize a mutual prodrug of norfloxacin and fenbufen with an objective of obtaining an effective and safer anti-inflammatory drug with useful antimicrobial actions. Methods: An amide-based mutual prodrug [NF-FN] was prepared following a single-step synthesis by condensing norfloxacin with fenbufen under appropriate laboratory conditions. Its structure was established on the basis of IR, NMR, Mass spectral data and elemental analysis. The prodrug [NF-FN] was evaluated for in-vitro antibacterial activity against two grampositive [Staphylococcus aureus and Bacillus subtilis] and two gram negative bacterial strains [Escherichia coli and Klebsiella pneumonia]. The in-vivo antiinflammatory activity and ulcerogenicity of the synthesized prodrug were investigated in Wistar albino rats at the doses of 10 and 30 mg/kg body weight, respectively. Results: The synthesized prodrug [NF-FN] showed very good activity against S. aureus and E. coli with MIC-6.25 mg/ mL, and good activity against B. subtilis and K. pneumonia with MIC-12.5 mg/mL. Its anti-inflammatory activity was found to be better than that of the parent drug fenbufen. It was also observed to less severe on gastric mucosa in comparison to reference drug, fenbufen. Conclusion: The prodrug showed promising results as anti-inflammatory agent however, its antibacterial action was found to be slightly weaker than the other parent drug norfloxacin.

Duodenal Obstruction

diagnosis

The uncommon diagnosis of Windsock deformity for a common presentation.

Sakrani, NidaFatima; Ahmed, Hussain; Al Saad, Isa Yusuf; Dunne, Kevin Patrick; Corbally, Martin

E-mail: nfs090430@rcsi-mub.com

King Hamad University Hospital - Department of Surgery

Bahrain Medical Bulletin 2016; 38 (1): 56-58

Keywords: Duodenal Obstruction-etiology; Duodenal Obstruction-surgery; Duodenal Obstruction-congenital; Vomiting; Weight Loss

Abstract: We report a two-year-old Indonesian female who presented with vomiting and weight loss for more than one month and was ultimately diagnosed with duodenal obstruction due to a windsock deformity. This is a rare and intrinsic congenital anomaly of the duodenum. The diagnosis as well as immediate and conclusive surgical management is discussed.

Echinococcosis

parasitology

Clinical and parasitological studies on pulmonary and hepatic hydatid cysts in hospitalized children and adults.

El Ghareeb, Azza S.; Waked, Neveen M.; Al Feky, Hala M.

E-mail: Dr_azzaelghareeb@yahoo.com

Faculties of Medicine, 6th October - Department of Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 9-18

Keywords: Echinococcosis, Hepatic; Echinococcosis, Pulmonary; Cross-Sectional Studies; Enzyme-Linked Immunosorbent Assay; Serologic Tests; Hospitalization

Abstract: A cross sectional study compared the clinical features of the pulmonary and hepatic hydatid cysts in children and adults and evaluated IHAT and ELISA techniques in diagnosis. The results showed that the patients ages were 5-14 years [10.6+/-3.7] in children and 16-75 years [32.2+/-14] in adults, patients 34 [75.5%] had liver cysts, 25 [55.5%] had pulmonary cysts and 7 [15.5%] had both liver and lung cysts. In hepatic hydatidosis, 7/34 [20.5%] cases were asymptomatic while others showed variable clinical manifestations. The commonest symptom was localized right hypochondrial pain in 13 [38.2%] and the least one was jaundice in 4 [11.7%]. The commonest sign was abdominal masses on the right hypochondrium in 88.2% and the least one was ascites in 5.8%. The commonest symptom of pulmonary hydatidosis was chest pain in 8 [34.7%] followed by cough and hemoptysis on 4 [17.3%] and the least one was cough and fever [8.6%]. Pulmonary hydatid cysts in children were significantly higher in males [17.3%] than females [4.3%], but without significance in adults [26% in male vs. 21.7% in females]. Sex difference in hydatid cyst frequencies between adults and children was significant [P

<0.05]. Mixed hepatic and pulmonary cysts were less in children than in adults [14.3%vs 85.7%], with huge pulmonary cysts of 20 cm were more common in children [37.7%] than in adults [17.7%]. The high sensitivity [95.5%] of ELISA-IgG recommended this test showed a dependable sero-diagnosing one.

Educational Measurement

methods

Assessing the validity of the cognitive load scale in a problem-based learning setting.

Hadie, Siti N.H.; Yusoff, Muhamad S.B.

Universiti Sains - School of Medical Sciences - Department of Anatomy

Journal of Taibah University Medical Sciences 2016; 11 (3): 194-202

Keywords: Education, Medical, Undergraduate-methods; Problem-Based Learning; Students, Medical; Reproducibility of Results; Cognition

Abstract: Objectives: The cognitive load scale has only been validated in non-problem-based learning settings. Hence, this study was conducted to assess the validity of this scale in a problem-based learning environment by testing its construct validity and internal consistency. Methods: We conducted a cross-sectional study on 125 first-year medical students after a problem-based learning session. Confirmatory factor analysis was performed to test its construct validity using the Analysis of Moment Structure software. The internal consistency of this inventory was determined through reliability analysis using the Statistical Package for Social Sciences software [SPSS]. Results: A total of 93 medical students completed the inventory. The analysis showed that the three-factor scale attained an acceptable level of goodness-of-fit indices, indicating good construct validity. The scale's Cronbach's alpha was more than 0.7, indicating a high level of internal consistency. All of the items attained a standardized factor loading of more than 0.5, which indicated high contributions to the respective scales. The mean levels of students' intrinsic load and self-perceived learning were high, and the mean level of students' extraneous load was low. These findings signalled that students learned well during the session despite difficult instruction.

Electromagnetic Fields

adverse effects

Association between electromagnetic field exposure and abortion in pregnant women living in Tehran.

Abad, Masoumeh; Malekafazali, Hossein; Simbar, Masoumeh; Mosaavi, Hassan Seyed; Khoei, Effat Merghati
Shahid Beheshti University of Medical Sciences - School of Nursing and Midwifery - Department of Reproductive Health

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 347-354

Keywords: Pregnant Women; Pregnancy; Abortion, Spontaneous; Medical Records

Abstract: Background: Health-related quality of life is affected by electromagnetic field exposure in each person everyday life. However, this is extremely controversial issue. Objective: Investigation of the associations between electromagnetic field exposure and miscarriage among women of Tehran. Materials and Methods: In this longitudinal study, 462 pregnant women with gestational age <12 wks from seven main regions of Tehran city in Iran with similar social and cultural status were participated. Women were interviewed face-to face to collect data. Reproductive information was collected using medical file recorded in those hospitals the subjects had delivery. The measuring device measured electromagnetic waves, Narda safety test solutions with valid calibration date at the entrance door of their houses. Results: A significant likelihood of miscarriage in women who exposed to significant level of electromagnetic wave. However, this association was not confirmed by Wald test. Conclusion: This study may not provide strong or consistent evidence that electromagnetic field exposure is associated or cause miscarriage. This issue may be due to small sample size in this study.

Elephantiasis, Filarial

epidemiology

Mosquito identification and molecular xenomonitoring of lymphatic filariasis in selected endemic areas in Giza and Qualioubiya governorates, Egypt.

Abdel Shafi, Iman R.; Shoeib, Eman Y.; Attia, Samar S.; Rubio, Jose M.; Edmardash, Yusuf; El Badry, Ayman A.

[E-mail:irriad@kasralainy.edu.eg](mailto:irriad@kasralainy.edu.eg)

Cairo University - Kasr Al-Ainy Faculty of Medicine - Department of Medical Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 93-100

Keywords: Elephantiasis, Filarial-transmission; Culex; Wuchereria bancrofti-isolation and purification; Insect Vectors-classification

Abstract: Lymphatic filariasis is a vector-borne health problem that has been focally endemic in Egypt for centuries. The chief vectors of transmission are Culicinae species. Control measures in the form of mass drug administration of DEC citrate treatment have been implemented in Nile delta for almost a decade. This study aimed to identify the prevalent mosquito species in endemic areas in Giza and Qualiubiya governorates and to monitor Wuchereria bancrofti infection by detecting the parasite DNA in collected mosquitoes. Adult mosquitoes were collected using light traps hung indoors. Microscopic examination was performed to identify and examine the morphologic characters of mosquitoes. Female Culex mosquitoes were subjected to semi-nested PCR to detect filarial DNA targeting repetitive DNA sequences [pWb12 repetitive region] specific for W.bancrofti. The results revealed 3 species of mosquitoes Culex pipiens, Culex pusillus and Culex quinquefasciatus with the predominance of Culex pipiens [85.7%]. Wuchereria bancrofti DNA was not detected in any of the collected mosquito pools. With the progress of elimination programme in Nile Delta, follow up studies with larger sample size are recommended as the predominance of Culex pipiens the main lymphatic filariasis vector remains a risk of transmission in such areas.

Emergency Medical Services

Physician perceptions and recommendations about pre-hospital emergency medical services for patients with ST-elevation acute myocardial infarction in Abu Dhabi.

Callachan, Edward L.; Alsheikh Ali, Alawi A.; Bruijns, Stevan; Wallis, Lee A.
University of Cape Town - Division of Emergency Medicine

Journal of the Saudi Heart Association 2016; 28 (1): 7-14

Keywords: Perception; Physicians; Myocardial Infarction; Patients

Abstract: Introduction: Physician perceptions about emergency medical services [EMS] are important determinants of improving pre-hospital care for cardiac emergencies. No data exist on physician attitudes towards EMS care of patients with ST-Elevation Myocardial Infarction [STEMI] in the Emirate of Abu Dhabi. Objectives: To describe the perceptions towards EMS among physicians caring for patients with STEMI in Abu Dhabi. Methods: We surveyed a convenience sample of physicians involved in the care of patients with STEMI [emergency medicine, cardiology, cardiothoracic surgery and intensive care] in four government facilities with 24/7 Primary PCI in the Emirate of Abu Dhabi. Surveys were distributed using dedicated email links, and used 5-point Likert scales to assess perceptions and attitudes to EMS. Results: Of 106 physician respondents, most were male [82%], practicing in emergency medicine [47%] or cardiology [44%] and the majority [63%] had been in practice for >10 years. Less than half of the responders [42%] were "Somewhat Satisfied" [35%] or "Very Satisfied" [7%] with current EMS level of care for STEMI patients. Most respondents were "Very Likely" [67%] to advise a patient with a cardiac emergency to use EMS, but only 39% felt the same for themselves or their family. Most responders were supportive [i.e. "Strongly Agree"] of the following steps to improve EMS care: 12-lead ECG and telemetry to ED by EMS [69%], EMS triage of STEMI to PCI facilities [65%], and activation of PCI teams by EMS [58%]. Only 19% were supportive of pre-hospital fibrinolytics by EMS. There were no significant differences in the responses among the specialties. Conclusions: Most physicians involved in STEMI care in Abu Dhabi are very likely to advise patients to use EMS for a cardiac emergency, but less likely to do so for themselves or their families. Different specialties had concordant opinions regarding steps to improve pre-hospital EMS care for STEMI.

Endodontics

Rotary endodontics in primary teeth - a review.

George, Sageena; Anandaraj, S.; Issac, Jyoti S.; John, Sheen A.; Harris, Anoop

E-mail: drsageenajosek@gmail.com

PMS College of Dental Science and Research - Department of Pedodontics and Preventive Dentistry

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 12-17

Keywords: Tooth, Deciduous; Pulpotomy

Abstract: Endodontic treatment in primary teeth can be challenging and time consuming, especially during canal preparation, which is considered one of the most important steps in root canal therapy. The conventional instrumentation technique for primary teeth remains the "gold-standard" over hand instrumentation, which makes procedures much more time consuming and adversely affects both clinicians and patients. Recently nickel-titanium [Ni-Ti] rotary files have been developed for use in pediatric endodontics. Using rotary instruments for primary tooth pulpectomies is cost effective and results in fills that are consistently uniform and predictable. This article reviews the use of nickel-titanium rotary files as root canal instrumentation in primary teeth. The pulpectomy technique is described here according to different authors and the advantages and disadvantages of using rotary files are discussed.

Endometrial Neoplasms

diagnosis

Diagnostic accuracy of diffusion weighted magnetic resonance imaging in the detection of myometrial invasion in endometrial carcinoma.

Taufiq, Marium; Masroor, Imrana; Hussain, Zainab

The Aga Khan University Hospital - Department of Radiology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 13-17

Keywords: Diffusion Magnetic Resonance Imaging; Myometrium-pathology; Cross-Sectional Studies; Neoplasm Invasiveness; Magnetic Resonance Imaging

Abstract: Objective: To determine the diagnostic accuracy of Diffusion-Weighted Magnetic Resonance Imaging [DWMRI] in the detection of myometrial invasion in endometrial cancer taking histopathology as gold standard. Study Design: Cross-sectional validation study. Place and Duration of Study: Department of Radiology, The Aga Khan University Hospital, Karachi, from January to December 2012. Methodology: DWMRI [b-value = 50, 400 and 800 s/mm²] was performed in 85 patients of biopsy-proven endometrial carcinoma before hysterectomy using body and spine coil at 1.5 Tesla. DWI was evaluated for presence of myometrial invasion by tumor with histopathology as gold standard. Sensitivity, specificity, the negative predictive value and positive predictive value and accuracy of DWI were assessed against the gold standard. Results: On DWI, superficial myometrial invasion was found in 42 patients and deep myometrial invasion in 43. On histopathology, superficial myometrial invasion was found in 53 patients and deep myometrial invasion in 32. Hence sensitivity, specificity, positive predictive value, negative predictive value and accuracy for the assessment of myometrial invasion by endometrial tumor on DW images was 90%, 73%, 67%, 92% and 80%, respectively. Diagnostic accuracy of diffusion-weighted magnetic resonance imaging in detection of myometrial invasion in endometrial cancer was 80%. Conclusion: DWI is highly accurate in assessing myometrial invasion and can be used as an adjunct to routine MRI for pre-operative evaluation of myometrial invasion of endometrial cancer.

Endometriosis

classification

Endometriosis classification-the quest for the Holy Grail?

Khazali, Shaheen

Ashford and St. Peter's Hospitals NHS Foundation Trust

Journal of Reproduction and Infertility 2016; 17 (2): 67-67

Epilepsy, Temporal Lobe

Brain derived neurotrophic factor modification of epileptiform burst discharges in a temporal lobe epilepsy model.

Eftekhari, Sanaz; Mehrabi, Soraya; Karimzadeh, Fariba; Joghataei, Mohammad Taghi; Khaksarian, Mojtaba; Hadjighassem, Mahmoud Reza; Katebi, Majid; Soleimani, Mansooreh

Iran University of Medical Sciences - Cellular and Molecular Research Center - Department of Neuroscience

Basic and Clinical Neuroscience 2016; 7 (2): 115-120

Keywords: Rats, Wistar; Polymorphism, Genetic; Stroke; Brain-Derived Neurotrophic Factor; Transforming Growth Factor beta1

Abstract: Introduction: Transforming Growth Factor-Beta 1 [TGF-beta1] is a pleiotropic cytokine with potent anti-inflammatory property, which has been considered as an essential risk factor in the inflammatory process of Ischemic Stroke [IS], by involving in the pathophysiological progression of hypertension, atherosclerosis, and lipid metabolisms. -509C/T TGF-beta1 gene polymorphism has been found to be associated with the risk of IS. The aim of this meta-analysis was to provide a relatively comprehensive account of the relation between -509C/T gene polymorphisms of TGF-beta1 and susceptibility to IS. Methods: Male Wistar rats were divided into sham [receiving phosphate buffered saline within dorsal hippocampus], pilocarpine [epileptic model of TLE], single injection BDNF [epileptic rats which received single high dose of BDNF within dorsal hippocampus], and multiple injections BDNF [epileptic rats which received BDNF in days 10, 11, 12, and 13 after induction of TLE] groups. Their electrocorticogram was recorded and amplitude, frequency, and duration of spikes were evaluated. Results: Amplitude and frequency of epileptiform burst discharges were significantly decreased in animals treated with BDNF compared to pilocarpine group. Conclusion: Our findings suggested that BDNF may modulate the epileptic activity in the animal model of TLE. In addition, it may have therapeutic effect for epilepsy. More studies are necessary to clarify the exact mechanisms of BDNF effects.

Escherichia coli

isolation and purification

Isolation of atypical enteropathogenic and shiga toxin encoding Escherichia coli strains from poultry in Tehran, Iran.

Doregiraee, Fatemeh; Alebouyeh, Masoud; Fasaei, Bahar Nayeri; Charkhkar, Saeed; Tajedin, Elahe; Zali, Mohammad Reza

University of Tehran - Faculty of Veterinary Medicine - Department of Microbiology and Immunology

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 53-57

Keywords: Prevalence; Shiga Toxin; Poultry; Shiga-Toxigenic Escherichia coli; Enteropathogenic Escherichia coli

Abstract: Aim: The purpose of this study was to investigate the prevalence of enteropathogenic Escherichia coli [EPEC] and shiga toxin producing E. coli [STEC] strains in healthy broilers in Iran. Background: STEC and EPEC strains as diarrheagenic E. coli are among the most prevalent causative agents in acute diarrhea. Domestic animals, mainly cattle and sheep, have been implicated as the principal reservoirs of these pathotypes; however their prevalence among the broilers is varied among different countries. Patients and Methods: A total of 500 cloacal swab samples from broilers of five different poultry houses [A-E] were collected to investigate the presence of stx1, stx2, hly, eae, and bfp virulence genes among the E. coli isolates by polymerase chain reaction. The shiga toxin encoding strains were evaluated serologically to detect their interaction with a commercial antiserum against O157 antigen. Results: Out of the 500 collected samples, 444 E. coli strains were isolated. Three strains [0.67%] presented at least one of the studied virulence genes [stx2, hly and eae], two strains were identified as STEC [stx2+, O157:nonH7] and one as an atypical EPEC strains [eae+] [bfp-]. Conclusion: The study established the presence of STEC and atypical EPEC in healthy broilers in Iran. Poultry might serve as vectors for transmission of pathogenic E. coli to human populations.

Esophageal Achalasia

surgery

The early efficacy of Heller myotomy in the treatment of Iranian patients with achalasia.

Abdi, Saeed; Forotan, Mojgan; Nikzamir, Abdolrahim; Zomorodi, Saeedeh; JahaniSherafat, Somayeh
Shahid Beheshti University of Medical Sciences - Gastroenterology and Liver Diseases Research Center

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 30-35

Keywords: Manometry; Cross-Sectional Studies; Patients

Abstract: Aim: The purpose of this study was to determine the efficacy of Heller myotomy for the treatment of achalasia in a referral center in Tehran, and investigate the clinical characteristics, manometric results and treatment responses among three achalasia subtypes in Iranian patients. Background: Esophageal achalasia is an unusual swallowing disorder, characterized by high pressure in the lower esophageal sphincter [LES] on swallowing, failure relaxation of the LES and the absence of peristalsis in esophageal. Patients and Methods: In this cross sectional study, clinical symptom and esophageal manometry before and 2 months after treating with Heller myotomy in 20 patients with achalasia who were referred to Taleghani Hospital, Tehran, in 2013 were evaluated. Patients' demographic, clinical features and response to treatment were analyzed using SPSS software [version 20, Chicago, IL, USA]. Results: All the diagnostic criteria measured after the treatment were significantly different [P<0.05] before and after the therapy. The average decline in the length of the esophagus was 1.8 cm and dysphasia score was 7.25 units. Also an average decline in LES Resting Pressure, LES Residual Pressure, PIP, and IRP were 23.2 mmHg, 14.3 mmHg, 3.4 mmHg and 17.8 mmHg, respectively. Conclusion: Results of this study showed that the Heller myotomy is highly effective in relieving dysphasia in patients with achalasia. Also, type II achalasia is the most common subtype of achalasia with a better response to Heller myotomy compared to the other types.

Estradiol

pharmacology

A comparison of the effects of transdermal estradiol and estradiol valerate on endometrial receptivity in frozen-thawed embryo transfer cycles: a randomized clinical trial.

Davar, Robab; Janati, Sima; Mohseni, Fereshteh; Khabazkhoob, Mehdi; Asgari, Soheila
Shahid Sadoughi University of Medical Sciences - Research and Clinical Center for Infertility

Journal of Reproduction and Infertility 2016; 17 (2): 97-103

Keywords: Estradiol-analogs and derivatives; Endometrium; Transdermal Patch; Embryo Transfer; Prospective Studies; Pregnancy Outcome

Abstract: Background: The purpose of this study was to determine the optimal endometrial preparation protocol by comparing the clinical outcome of two methods of endometrial preparation in frozen-thawed embryo transfer [FET] cycles, including that is, oral estradiol and 17 beta-estradiol transdermal patch. Methods: In this randomized controlled trial, women underwent either conventional IVF or intracytoplasmic sperm injection [ICSI] who had at least two top-quality embryos appropriate for cryopreservation and frozen embryos from previous cycles. In the study group [n=45], 17-B estradiol transdermal patches 100 microg were applied from the second day of the cycle and continued every other day. Then, each patch was removed after four days. In the control group [n=45], oral estradiol valerate 6 mg was started at the same time and continued daily. Results: There was a significant difference in estradiol level on the day of progesterone administration and the day of embryo transfer between the two groups [p=0.001 in both], but no significant difference was observed between them in biochemical and clinical pregnancy rates [32.6% vs. 33.3%, p=1.000 and 30.2% vs. 33.3%, p=0.810, respectively]. Conclusion: It is suggested that estradiol transdermal patches be used instead of oral estradiol in FET cycles. Due to the reduced costs, drug dose, and emotional stress as well as the simplicity of the protocol for patients.

Ethidium

Focal injection of Ethidium bromide as a simple model to study cognitive deficit and its improvement.

Goudarzvand, Mahdi; Choopani, Samira; Shams, Alireza; Javan, Mohammad; Khodaii, Zohreh; Ghamsari, Farhad; Naghdi, Naser; Piryaei, Abbas; Haghparast, Abbas
E-mail:m118medical@yahoo.com

Alborz University of Medical Sciences - School of Medicine - Department of Physiology and Pharmacology

Basic and Clinical Neuroscience 2016; 7 (1): 63-73

Keywords: Hippocampus; Rats, Wistar; Cognition Disorders; Injections; Brain Injuries

Abstract: Introduction: Memory and cognitive impairments are some of devastating outcomes of Multiple Sclerosis [MS] plaques in hippocampus, the gray matter part of the brain. The present study aimed to evaluate the intrahippocampal injection of Ethidium Bromide [EB] as a simple and focal model to assess cognition and gray matter demyelination. Methods: Thirty Wistar rats were divided into three groups: control group, which received saline, as solvent of EB, into the hippocampus; and two experimental groups, which received 3 microL of EB into the hippocampus, and then, were evaluated 7 and 28 days after EB injection [n=10 in each group], using a 5-day protocol of Morris Water Maze [MWM] task as well as Transmission Electron Microscopy [TEM] assay. Results: Seven days after EB injection, the behavioral study revealed a significance increase in travelled distance for platform finding in the experimental group compared to the control group. In addition, the nucleus of oligodendrocyte showed the typical clumped chromatin, probably attributed to apoptosis, and the myelin sheaths of some axons were unwrapped and disintegrated. Twenty-eight days after EB injection, the traveled distance and the time spent in target quadrant significantly decreased and increased, respectively in experimental groups compared to the control group. Also, TEM micrographs revealed a thin layer of remyelination around the axons in 28 days lesion group. Discussion: While intracerebral or intraventricular injection of EB is disseminated in different parts of the brain and can affect the other motor and sensory systems, this model is confined locally and facilitates behavioral study. Also, this project could show improvement of memory function subsequent to the physiological repair of the gray matter of the hippocampus.

Eye Injuries, Penetrating

pathology

Epithelial ingrowth after penetrating trauma.

Sadiq, Mohammad Ali A.; Shaheer, Muhammad; Sarwar, Muhammad Suhail; Abbas, Tanvir; Khan, Asad Aslam
King Edward Medical University - Department of Ophthalmology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 68-69

Keywords: Wounds, Penetrating; Endothelium, Corneal; Epithelium; Anterior Eye Segment; Pain; Photophobia

Abstract: This is a case report about the anterior segment findings of epithelial ingrowth in a young female patient after penetrating trauma. The patient underwent multiple surgeries after penetrating trauma and epithelial ingrowth was noted on regular follow-up. Epithelial ingrowth was noted along the inner surface of corneal endothelium along with the presence of cysts. These findings suggest that epithelium penetrated through the site of perforation and grew along endothelium. Although epithelial ingrowth is a commonly reported complication of photorefractive surgery, it is rarely reported after trauma to eye. To authors' knowledge, this is the first reported case of epithelial ingrowth in Pakistan.

Fasciola hepatica

immunology

Lympho-proliferative responses to various Fasciola hepatica worm's antigens: an in vitro study.

Sharaf, Osama F.; Amir, El Amir M.; Hawash, Yousry A.

[E-mail:ofsharaf@hotmail.com](mailto:ofsharaf@hotmail.com)

Menoufia University - National Liver Institute - Department of Medical Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 217-222

Keywords: Cell Proliferation; Antigens, Helminth-physiology; Lymphocytes-physiology; Fascioliasis; Helminth Proteins; Sheep Diseases

Abstract: Fascioliasis is an important zoonotic disease with approximately 2-4 million people infected worldwide and a further 180 million at risk of infection. *F. hepatica* can survive within the bile ducts for many years through its ability to suppress the host immunity with Fasciola cathepsin L1 cysteine protease and Glutathione S transferase playing an important role. The aim of the present study is to investigate the in vitro lympho-proliferative responses of hepatic hilar lymphocytes [HLN] of infected sheep in response to different *F. hepatica* antigens. The suppressive effects of Fasciola excretory/secretory [ES] and tegument [TEG] and their fractions were also investigated. Our results showed that both ES and TEG had significant suppressive effects on lymphoproliferation, up to 74% and 92%, respectively. When these antigens were fractionated, fraction 3 [MW of >10000-30000] of both ES [64%] and TEG [59%] in addition to fraction 4 [MW of <= 10000] of TEG [38%] inherited the suppressive effects. Identification of the potential molecule[s] with such suppressive effects on lymphocytes in TEG fraction 4 could reveal vaccine candidates.

Femoral Neck Fractures

Subcapital femoral neck fracture after treatment of an intertrochanteric fracture with proximal femoral intramedullary nail.

Kim, Joo Yong; Kong, Gyu Min

Inje University - Busan Paik Hospital - Department of Orthopaedic Surgery

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 78-79

Keywords: Hip Fractures; Fracture Fixation, Intramedullary; Bone Nails; Femur

Fertilization in Vitro

Effect of granulocyte colony stimulating factor [G-CSF] on IVF outcomes in infertile women: An RCT.

Eftekhari, Maryam; Hosseiniadat, Robabe; Baradaran, Ramesh; Naghshineh, Elham

Shahid Sadoughi University of Medical Sciences - Research and Clinical Center for Infertility

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 341-346

Keywords: Granulocyte Colony-Stimulating Factor; Pregnancy Rate; Pregnancy Outcome; Infertility, Female; Endometrium

Abstract: Background: Despite major advances in assisted reproductive techniques, the implantation rates remain relatively low. Some studies have demonstrated that intrauterine infusion of granulocyte colony stimulating factor [G-CSF] improves implantation in infertile women. Objective: To assess the G-CSF effects on IVF outcomes in women with normal endometrial thickness. Materials and Methods: In this randomized controlled clinical trial, 100 infertile women with normal endometrial thickness who were candidate for IVF were evaluated in two groups. Exclusion criteria were positive history of repeated implantation failure [RIF], endocrine disorders, severe endometriosis, congenital or acquired uterine anomaly and contraindication for G-CSF [renal disease, sickle cell disease, or malignancy]. In G-CSF group [n=50], 300 micro g trans cervical intrauterine of G-CSF was administered at the oocyte retrieval day. Controls [n=50] were treated with standard protocol. Chemical, clinical and ongoing pregnancy rates, implantation rate, and miscarriage rate were compared between groups. Results: Number of total and mature oocytes [MII], two pronuclei [2PN], total embryos, transferred embryos, quality of transferred embryos, and fertilization rate did not differ significantly between two groups. So there were no significant differences between groups in chemical, clinical and ongoing pregnancy rate, implantation rate, and miscarriage rate. Conclusion: our result showed in normal IVF patients with normal endometrial thickness, the intrauterine infusion of G-CSF did not improve pregnancy outcomes.

Foreign Bodies

A rare case of tracheobronchial foreign body aspiration in an adult patient admitted to the ICU: a case report and review of the literature.

Al Bshabshe, Ali A.

[E-mail:albshabshe@yahoo.com](mailto:albshabshe@yahoo.com)

King Khalid University - Department of Medicine/Critical Care

Journal of Taibah University Medical Sciences 2016; 11 (3): 274-276

Keywords: Trachea; Bronchi; Inhalation; Intensive Care Units; Bronchoscopy; Accidents, Traffic

Abstract: We report an exceedingly rare case of a foreign body [FB] discovered in the tracheobronchial tree of an adult male admitted to the intensive care unit [ICU]. The patient was admitted in a state of deep coma after sustaining injuries in a road traffic accident. The head, neck and chest CT scans revealed a foreign body lodged within his tracheobronchial tree. Emergency fibre optic bronchoscopy was performed using a size 8 endotracheal tube. Multiple pieces of glass were then removed by fibre optic bronchoscope using a stone retrieval basket. This case report highlights the importance of thorough clinical and radiological evaluation of polytrauma patients. A rigid bronchoscope is the recommended treatment modality for tracheobronchial foreign body removal, followed by a flexible fibre optic scope.

surgery

When cheating goes wrong: hearing device migrated to the middle ear cavity.

Alansari, Hassan; Alawadhi, Arwa; Riskalla, Andrew

[E-mail:hassan.alansari21@gmail.com](mailto:hassan.alansari21@gmail.com)

King Hamad University Hospital - Department of ENT

Bahrain Medical Bulletin 2016; 38 (1): 48-49

Keywords: Hearing; Ear, Middle-injuries; Earache; Ear; Foreign Bodies-etiology

Abstract: A twenty-four-year-old Bahraini male presented to emergency with bloody discharge from the left ear and mild earache. History revealed insertion of a hearing device in the left external canal, which migrated to the middle ear cavity. The device was removed under general anaesthesia; one mm in diameter foreign body was extracted with a surgical hook through the tympanic membrane perforation. The patient did not suffer any major complication.

Fragile X Syndrome

genetics

Molecular characterization of X chromosome fragility in idiopathic mental retardation.

Omar, Heba Alla Hosny; Kamal, Tarek M.; Abd Alkhalek, Heba Salah; El Nady, Ghada H.; Salem, M.S.Z.

National Institute of Neuro-motor System

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 165-172

Keywords: Fragile X Mental Retardation Protein-genetics; Intellectual Disability-genetics; X Chromosome; Chromosome Fragility; Genetic Linkage; Phenotype

Abstract: Background: Fragile X syndrome [FXS] is the most common form of inherited mental retardation. Frequency of fragile X syndrome among male siblings and relatives of mentally retarded patients is relatively high. Cytogenetic diagnosis of FXS is unreliable since it is ineffective for the diagnosis of premutated males or females. Proper molecular diagnosis is a pre-requisite for providing proper counseling advice. Subjects and Methods: Sixty-four males with idiopathic mental retardation, ranging in age from 4.2 to 19 years [10.92±/− 4.00] were clinically pre-selected, based on scoring protocol comprising eight features of the syndrome, before molecular testing. A rapid polymerase chain reactionbased screening was applied for detection of expanded FMR1 alleles. Samples that did not yield the normal band lengths were subjected to a second PCR screen. The secondary screen utilizes a chimeric primer demonstrating the presence or absence of an expanded allele. Results: Amplification of FMR1 gene by PCR of tested patients revealed that 8 cases [12.5%] have full mutation and 6 cases [9.4%] have premutation. A wide range of Fra X-scoring ranging from 1 to 7 features was detected in examined cases. Significant clinical features included large prominent ears, hyperextensibility of joints and macroorchidism in post pubertal males. Conclusions: A simplified checklist of fragile X should be used for patients with idiopathic MR and those patients above score 3 should be tested for FXS. The diagnostic assay may be used as a screening method for fragile X syndrome being rapid and cost effective compared to other techniques. In addition, screening of all relatives of proven patients should be performed to detect clinically unidentified cases for provision of proper counseling and optimal management of detected cases.

Fraser Syndrome

genetics

Fraser syndrome: Phenotypic variability and unusual findings in four Egyptian families.

Abdalla, Ebtesam M.; Zayed, Louay H.; Issa, Noha M.; Amin, Asmaa K.

E-mail: ebtesam.nasr@alex-mri.edu.eg

Alexandria University - Medical Research Institute - Department of Human Genetics

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 233-238

Keywords: Pedigree; Phenotype; Syndactyly; Urogenital Abnormalities

Abstract: Background and aim: Fraser syndrome [FS] is a rare autosomal recessive disorder characterized by cryptophthalmos, cutaneous syndactyly, laryngeal malformations and urogenital defects. It may be also associated with ear, nose and skeletal abnormalities. There is a marked interfamilial clinical variability. However, there is strong phenotypic similarity and concordance of the degree of severity of the disease within a family. Our aim was to report new cases of FS from the Egyptian population. Patients and Methods: The study was carried out on 6 new cases of FS from four Egyptian families. All patients satisfied the diagnostic criteria for FS. Results: Cryptophthalmos and ambiguous genitalia were each present in 5/6 of the studied cases, while syndactyly and urinary tract abnormalities were found in 4/6 of them. Nasal anomalies, sclerocornea and abnormal hair growth pattern were constant features observed in 100% of the cases. The frequency of additional anomalies in our series was also higher than those previously reported as umbilical abnormalities and contractures of large joints. Conclusion: In conclusion, our findings add further evidence for the clinical variability associated with FS. The studied cases showed inconsistent compatibility with life and variable expressions in prenatal sonographic findings and postnatal clinical manifestations.

Frontal Sinusitis

therapy

Role of balloon sinuplasty in the treatment of frontal sinusitis.

Bazuhair, Abdulaziz; Alawadhi, Arwa; Alreefy, Hiba

E-mail: azoz.baz@hotmail.com

King Hamad University Hospital - Department of ENT

Bahrain Medical Bulletin 2016; 38 (1): 44-45

Keywords: Frontal Sinusitis-diagnosis; Frontal Sinus-radiography; Anti-Bacterial Agents; Steroids; Anesthesia, Local

Abstract: A fifty-one-year-old male was diagnosed with recurrent frontal sinusitis; the patient completed the full course of optimal medical therapy: nasal steroids, antibiotics and nasal douches. The patient's symptoms did not improve including frontal headaches, nasal congestion and facial tenderness over the frontal sinus. CT scan of the sinuses was performed, and it confirmed the diagnosis of isolated right frontal sinusitis. The patient underwent "balloon sinus dilatation under local anesthesia" in the ENT outpatient clinic, and he was followed-up for 18 months to monitor any complication or symptom. This was the first case that had balloon sinuplasty procedure in Bahrain under local anesthesia in a clinic setting.

Fungi

Sodium chloride stress induced morphological changes in some halotolerant fungi.

Al Tamie, Mona S.S.

E-mail: d.mst3@hotmail.com

Qassim University - College of Science

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 109-126

Keywords: Culture Media; Saline Solution, Hypertonic-pharmacology; Salt-Tolerance

Abstract: Materials and Methods: Nine fungal isolates namely *Emericill anidulans*, *Mucor racemosus*, *Alternaria pluriseptata* *Penicillium canescens*, *Syncephalastrum racemosum*, *Aspergillus fumigatus*, *Alternaria chlamydospora*, *Aspergillus parasiticus* and *Ulocladium atrum* were isolated from AL - SHEGA area at AL-QASSIM region. Results: The influence of different sodium chloride concentrations on the growth rate, morphological and ultrastructure were studied. Considerable differences in their growth rate and morphology were detected on medium containing different concentrations of sodium chloride [NaCl]. Low growth rates were observed on high NaCl concentrations. At 15% NaCl, low growth of *Emericill anidulans*, *Penicillium canescens*, *Syncephalastrum racemosum*, *Aspergillus parasiticus* and *Mucor racemosus* was detected, whereas all fungal isolates were failed to grow at 20% NaCl. Scanning Electron Microscope [SEM] revealed that all fungal asexual reproduction organs were metamorphosed at higher NaCl concentration, fungal heads and sporangia were speculated or elongated. Sporangioophores and conidiophores were shortened and dwarfed, little number of conidia or spores were detected.

Gait

[Comparison of electromyographic activity pattern of knee two-joint muscles between youngs and olders in gait different speeds]

Khodaveisi, Hamideh; Anbarian, Mehrdad; Khodaveisi, Maryam

E-mail: khodaveisi_h@yahoo.com

Islamic Azad University, Hamedan Branch - Faculty of Humanities - Department of Physical Education and Sport Sciences

Journal of Rehabilitation 2016; 16 (4): 324-333

Keywords: Electromyography; Knee Joint; Lower Extremity; Cross-Sectional Studies

Abstract: Objective: In recent years, it has been focused much attention on gait analysis. Factors such as speed, age and gender affect gait parameters. The purpose of the present study was to compare the electromyographic activity pattern of knee two-joint muscles between younger and older subjects in different gait speeds. Materials and Methods: The method of current study was analytical cross-sectional method in which 15 healthy young men and 15 old men, were selected conveniently. Electromyographic activity of rectus femoris, biceps femoris, semitendinus and gastrocnemius were recorded during walking with preferred [100%], slow [80%] and fast [120%] speeds in a 10 meter walkway. Normalized RMSs of muscles were compared using RM-ANOVA and Tokey's tests by SPSS 18 software. Results: According to results, RMSs of rectus femoris in midstance [$P<0.01$] and gastrocnemius in loading response [$P=0.02$] phases in all walking speeds were higher in older subjects than in younger ones, and it increased with speed in both age groups [$P<0.01$]. Biceps femoris RMS in terminal stance at 80% speed, was lower in older subjects than in younger ones [$P=0.01$] and it increased with walking speed [$P=0.01$]. Semitendinus activity in loading and midstance phases at 120% speed was higher in older subjects than in younger ones [$P<0.01$], and it increased with speed in both age groups in swing phase [$P<0.05$]. Conclusion: According to the results, older subjects have more muscle co-contraction around knee at high speed in midstance phase than younger subjects. These age-related changes in muscle activity, leads to increase in joint stiffness and stability during single support, and probably play a role in reducing push off power at faster speeds.

Gallbladder Neoplasms

EGFR and HER-2/neu expression in gallbladder carcinoma: an institutional experience.

Hadi, R.; Pant, M.C.; Husain, N.; Singhal, A.; Khurana, R.; Agarwal, G.R.; Masood, S.; Awathi, N.P.

E-mail: drrahathadi@yahoo.com

Lohia Institute of Medical Sciences

GJO-Gulf Journal of Oncology [The] 2016; (20): 12-19

Keywords: Receptor, Epidermal Growth Factor; Receptor, ErbB-2; Prospective Studies; Drug Therapy; Chemoradiotherapy; Radiotherapy

Abstract: Background: Gallbladder cancer [GBC] is the most common malignancy of the biliary tract in India. Despite the recent advancement in the understanding of the cancer biology, the disease still remains a therapeutic challenge with poor prognosis and low survival. Surgery is the primary modality of treatment and rest of the modalities are basically adjuvant in nature. This study was performed to evaluate the epidermal growth factor receptor [EGFR] and human epidermal growth factor receptor-2 [HER-2/neu] expression in GBC. Methods: The present study was prospective and done in tertiary super-specialty institute of northern India. This was a pilot study, and at the time of completion, 29 samples were found suitable which were later submitted for EGFR and HER-2/neu evaluation. The sample includes both cases of GBC [$n=18$] and cholecystitis [$n=11$] as control. [Table 1] After performing necessary processing, slides were incubated with primary antibody [EGFR] ready to use [RTU] BioGenex, India and HER-2/neu dilution 1: 600, Dakopatts [Denmark]. Then slides were incubated with secondary antibody [Real Envision Detection Kit, Dakopatts, Denmark]. Finally in mounted slides, cell membrane staining was used to assess positivity for EGFR and HER-2/neu. Results: EGFR was positive in 21/29 [72.41%] overall, out of which 14/18 [77.78%] positive in cases and 7/11 [63.64%] positive in control. [Table 1, 3][Figure 2]. For HER-2/neu, it was positive in 21/29 [72.41%] overall, just like in EGFR mentioned above, but positive 12/18 [66.67%] in cases and 9/11 [81.82%] in control respectively. [Table 1, 3][Figure 3]. Conclusion: Despite the efforts by many investigators, GBC continues to represent a major challenge in oncology. Surgical resection remains the only curative treatment for this disease. The roles of radiation, chemoradiation, and chemotherapy in neoadjuvant and adjuvant settings remained to be defined in prospective studies. With further studies based on molecular understanding and developing new targeted therapies, we will be in better position to manage GBC and increase the survival rate.

pathology

Clinicopathological spectrum of gall bladder cancer in Kashmir - an institutional study.

Makhdoomi, R.; Bashir, N.; Bhat, N.; Bashir, S.; Mustafa, F.; Aiman, A.; Charak, A.; Hussain, S.; Shafi, S.; Bhat, S.; Bashir, N.; Zahir, Z.; Shah, P.

E-mail: rumanamak@gmail.com

Sher-i-Kashmir Institute of Medical Sciences - Department of Pathology

GJO-Gulf Journal of Oncology [The] 2016; (20): 79-85

Keywords: Retrospective Studies; Adenocarcinoma; Carcinoma, Squamous Cell; Carcinoma, Small Cell; Gallstones; Carcinoma, Squamous Cell; Biomarkers, Tumor

Abstract: Gallbladder cancer is a highly aggressive malignancy that usually presents at an advanced incurable stage. It is the fifth most common gastro-intestinal tumor and leads to approximately 2800 deaths in United States annually. This was a retrospective study carried out in the Department of Pathology, Sher-i-Kashmir Institute of Medical Sciences, a 650-bed super speciality hospital in Kashmir valley. We reviewed the histopathological records of all the patients who were diagnosed as carcinoma gallbladder from Dec 2009-Dec 2013. Gross findings and histopathological findings were noted from the departmental archival material and clinical records of the patients including the clinical presentation, laboratory investigations, radiological investigations, pre-operative diagnosis and intra-operative findings, were retrieved from the hospital records. We analyzed 57 cases of carcinoma gallbladder for their clinicopathological features. It included 19 males and 37 females. In our study, adenocarcinomas accounted for 87.5% of total carcinomas. Incidentally, all but one patient where gall stones were found, adenocarcinomas were seen. We have 4 patients of squamous cell carcinoma. In our series we have a single case of small cell carcinoma which was positive for neuroendocrine markers. In our study, gall stones were seen only in 8 cases [14%] of the total cases.

Gastric Outlet Obstruction

Endoscopic pyloroplasty for severe gastric outlet obstruction due to alkali ingestion in a child.

Dehghani, Seyed Mohsen; Aldaghi, Mitra; Javaherizadeh, Hazhir

Shiraz University of Medical Sciences - School of Medicine

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 64-67

Keywords: Endoscopy, Gastrointestinal; Alkalies; Eating; Child

Abstract: A common belief is that alkali ingestion causes severe esophageal damage and limited gastric injury due to the buffering action of acid. Gastric injury has been observed in patients who ingested alkali. Gastric outlet obstruction [GOO] secondary to caustic ingestion occurs due to fibrosis after resolution of the acute injury and inflammation, most commonly 6 to 12 weeks after initial ingestion. The traditional treatment for GOO related to ingestion of corrosive agents is surgery. Experience with endoscopic balloon dilation of corrosive-induced GOO is limited in children. This is the first report of endoscopic pyloroplasty in a child with GOO due to caustic alkalis ingestion that was treated with balloon dilation [using TTS balloon ranging from 6-15 mm] in Iran. Four dilation sessions were required for symptomatic relief of dysphagia. After one year of follow up, weight gain was normal.

Gastritis, Atrophic

Gastric atrophy: use of OLGA staging system in practice.

Molaei, Mahsa; Ehtiyati, Ara; Mashayekhi, Reza; Rafizadeh, Mitra; Zojaji, Homayoun; Mirsattari, Dariush; Farahani, Roya Kishani

Shahid Beheshti University of Medical Sciences - Gastroenterology and Liver Diseases Research Center - Pathology Department

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 25-29

Keywords: Neoplasm Staging; Cross-Sectional Studies; Stomach Neoplasms; Gastritis; Risk

Abstract: Aim: This study used the OLGA system to characterize the histology pattern of gastritis in dyspeptic outpatients with a mean age of 45 years from regions with different gastric cancer risks. Background: Several classification systems have been purposed for understanding the status of the gastric mucosa. Currently, the Sydney system is the most widely employed. Nevertheless, the applicability of the Sydney system in therapeutic and prognostic areas is a matter of debate. Given this shortcoming an international group of gastroenterologists and pathologists developed a new system named Operative Link on Gastritis Assessment [OLGA]. Patients and Methods: In this cross-sectional comparative study the OLGA system was used to characterize the histology pattern of gastritis in 685 dyspeptic patients referring to the department of gastroenterology of a training hospital. Results: No significant correlation was found between active inflammation and total OLGA score [P > 0.05]. Also, no statistically significant correlation was found between activity and intestinal metaplasia, dysplasia, atrophy, and cancer [P > 0.05]. Even though, there is a positive correlation between mild chronic inflammation and total OLGA score, no correlation has been identified between chronicity and dysplasia or cancer [P > 0.05]. Nearly, in all cases with no dysplasia OLGA score was zero but all patients with gastric cancer OLGA score was more than two. Conclusion: Generally, the activity is not a useful factor in predicting prognosis and its loss of relation with total OLGA score does not make OLGA score any less predictable.

Gastrointestinal Diseases

Recent advances in gastrointestinal immunology.

Materacki, Luke; Al Dulaimi, David
Alexandra Hospital - Department of Gastroenterology

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 70-71

Keywords: Allergy and Immunology

Gastrointestinal Neoplasms

Burden of gastrointestinal cancers and problem of the incomplete information; how to make up the data?

Sharifian, Abdolhamid; Pourhoseingholi, Mohamad Amin; Baghestani, Ahmadsreza; Hajizadeh, Nastaran; Gholizadeh, Sepideh
Gandy General Hospital

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 12-17

Keywords: Tumor Burden; Mortality; Prevalence; Vital Statistics; Incidence

Abstract: Cancer registration is an important source for measuring the burden of cancer in a population. In practice, however, quite frequently incorrect patients are registered or data items can be inaccurately recorded or not recorded at all. Also the process or quality of these registrations varies among countries. In this paper, we briefly discussed some statistical techniques including; Mortality and Incidence Analysis Model [MIAMOD], Prevalence and Incidence Analysis Model [PIAMOD], Bayesian Inference and Capture-recapture methods, which provide tools to re-correct the incomplete or misclassified cancer statistics with regards to gastrointestinal cancers.

Genital Diseases, Male

radiography

Detecting diseases of neglected seminal vesicles using imaging modalities: a review of current literature.

Dagur, Gautam; Warren, Kelly; Suh, Yiji; Singh, Navjot; Khan, Sardar A.
SUNY at Stony Brook - Department of Physiology and Biophysics

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 293-302

Keywords: Seminal Vesicles-pathology; Neglected Diseases; Rare Diseases; Fertility

Abstract: Seminal vesicles [SVs] are sex accessory organs and part of male genitourinary system. They play a critical role in male fertility. Diseases of the SVs, usually results in infertility. Diseases of the SVs are extremely rare and are infrequently reported in the literature. We address the current literature of SV pathologies, symptoms, diagnosis, and treatment options. We review the clinical importance of SVs from PubMed. The current imaging modalities and instrumentation that help diagnose SV diseases are reviewed. Common pathologies including, infection, cysts, tumors, and congenital diseases of the SVs are addressed. Many times symptoms of hematospermia, pain, irritative and obstructive lower urinary tract symptoms, and infertility are presented in patients with SVdiseases.

Ghrelin

pharmacology

Effects of ghrelin on sexual behavior and luteinizing hormone beta-subunit gene expression in male rats.

Babaei Balderlou, Farrin; Khazali, Homayoun
Shahid Beheshti University - Faculty of Biological Sciences - Department of Animal Sciences

Journal of Reproduction and Infertility 2016; 17 (2): 88-96

Keywords: Luteinizing Hormone, beta Subunit; Sexual Behavior; Gene Expression; Oligopeptides

Abstract: Background: The hormones of hypothalamo-pituitary-gonadal [HPG] axis have facilitative effects on reproductive behavior in mammals. Ghrelin as a starvation hormone has an inhibitory effect on HPG axis' function. Hence, it is postulated that ghrelin may reduce the sexual behavior through inhibiting of HPG axis. The aim of this study was to examine the effects of ghrelin and its antagonist, [D-Lys3]-GHRP-6, on sexual behavior and LH beta-subunit gene expression in male rats. Methods: In this experimental study, 128 male Wistar rats

were divided into two groups. Each group was further subdivided into eight subgroups [n=8 rats/subgroup] including the animals that received saline, ghrelin [2, 4 or 8 nmol], [D-Lys3]-GHRP-6 [5 or 10 nmol] or co-administration of ghrelin [4 nmol] and [D-Lys3]-GHRP-6 [5 or 10 nmol] through the stereotaxically implanted cannula into the third cerebral ventricle. The sexual behavior of male rats encountering with females and the hypophyseal LH beta-subunit gene expression were evaluated at two different groups. Data were analyzed by ANOVA and p<0.05 was considered statistically significant. Results: Ghrelin injection [4 and 8 nmol] significantly [p<0.01] increased the latencies to the first mount, intromission and ejaculation as well as the post-ejaculatory interval. Also, 4 and 8 nmol ghrelin significantly [p<0.05] increased the number of mount and decreased the number of ejaculation. In co-administrated groups, [DLys3]- GHRP-6 antagonized the effects of ghrelin. Ghrelin injection [4 and 8 nmol] reduced the LH beta-subunit gene expression while pretreatment with [D-Lys3]- GHRP-6 improved the gene expression. Conclusion: Ghrelin decreased the sexual behavior and LH beta-subunit gene expression in male rats, whereas [D-Lys3]-GHRP-6 antagonizes these effects.

Gingival Retraction Techniques

Gingival retraction methods for fabrication of fixed partial denture: literature review.

Safari, S.; Vossoghi Sheshkalani, Ma; Vossoghi Sheshkalani, Mi.; Hoseini Ghavam, F.; Hamed, M.
Kerman University of Medical Sciences - School of Dentistry - Department of Prosthodontics

JDB-Journal of Dental Biomaterials 2016; 3 (2): 205-213

Keywords: Dental Impression Technique; Dental Implants; Denture, Partial, Fixed

Abstract: Fixed dental prosthesis success requires appropriate impression taking of the prepared finish line. This is critical in either tooth supported fixed prosthesis [crown and bridge] or implant supported fixed prosthesis [solid abutment]. If the prepared finish line is adjacent to the gingival sulcus, gingival retraction techniques should be used to decrease the marginal discrepancy among the restoration and the prepared abutment. Accurate marginal positioning of the restoration in the prepared finish line of the abutment is required for therapeutic, preventive and aesthetic purposes. In this article, conventional and modern methods of gingival retraction in the fixed tooth supported prosthesis and fixed implant supported prosthesis are expressed. PubMed and Google Scholar databases were searched manually for studies on gingival tissue managements prior to impression making in fixed dental prosthesis since 1975. Conclusions were extracted and summarized. Keywords were impression making, gingival retraction, cordless retraction, and implant. Gingival retraction techniques can be classified as mechanical, chemical or surgical. In this article, different gingival management techniques are discussed.

Glioblastoma

therapy

A retrospective comparative study of concomitant chemoradiotherapy followed by adjuvant temozolomide versus radiotherapy alone in newly diagnosed Glioblastoma multiforme - an experience at Radium institute, Patna medical college and hospital, India.

Raj, S.; Pandit, P.N.; Kishor, K.

E-mail:shraddharaj@gmail.com

Safdarjung Hospital

GJO-Gulf Journal of Oncology [The] 2016; (20): 6-11

Keywords: Chemoradiotherapy; Dacarbazine-analogs and derivatives; Chemotherapy, Adjuvant; Radiotherapy; Retrospective Studies

Abstract: Introduction: Glioblastoma Multiforme [WHO grade IV glioma] still remains a dreadful diagnosis in oncology with the median survival ranging between 12 to 17 months, despite the recent advances in its management[11, 12] It is the most common malignant primary tumour in adults[13]. The standard of care is Maximal Safe Resection followed by Concomitant Chemo Radiotherapy. Methods: During the period 2006 to 2010 at Radium Institute, Patna Medical College and Hospital [PMCH] in India, a study was conducted on 37 newly diagnosed GBM cases in which the control-arm [c-arm] received Conventional Radiotherapy [60Gy/30 number] only whereas the study arm [s-arm] received Concomitant Chemoradiotherapy followed by Adjuvant Temozolomide. Results: The median survival was 15.4 months in the s-arm as compared to 12.4 months in the c-arm. The OS showed a significant improvement with p-value of 0.05 and PFS also showed a benefit with a p-value of 0.005. Conclusion: The results were encouraging with improvement in OS as well as PFS in the s-arm and were at par with the other similar studies conducted in different parts of the world.

Global Health

education

Overseas medical aid - where do you stand?.

Corbally, Martin

[E-mail:martin.corbally@khuh.org.bh](mailto:martin.corbally@khuh.org.bh)

King Hamad University Hospital - Department of Surgery

Bahrain Medical Bulletin 2016; 38 (1): 7-7

Keywords: World Health Organization; Delivery of Health Care-methods; Health Services Research

Gram-Negative Bacteria

genetics

Isolation of ESBL-producing gram-negative bacteria and in silico inhibition of ESBLs by flavonoids.

Swain, Shasank S.; Padhy, Rabindra N.

Siksha 'O' Anusandhan University - Central Research Laboratory

Journal of Taibah University Medical Sciences 2016; 11 (3): 217-229

Keywords: beta-Lactamases; beta-Lactam Resistance; Computer Simulation; Flavonoids-therapeutic use; Molecular Docking Simulation

Abstract: Objective: To evaluate nosocomial accounts of 426 extended spectrum b-lactamase [ESBL] - producing strains from 705 isolates of 9 pathogenic gram-negative bacteria in vitro. We analysed the genetic divergence of ESBLs by constructing a phylogenetic tree and modelled flavonoid inhibition of ESBLs with in silico molecular docking to determine effective control options. Methods: Nine ESBL-producing bacteria were isolated from urine samples and their antibiograms were determined by the disc-diffusion method. Comparative models of the 9 ESBL enzymes were generated computationally using reference sequences, and validated by Ramachandran plots. Molecular docking with 11 flavonoids was conducted against the ESBL models. Results: Isolated strains were floridly multidrug-resistant. From the docking study, the predicted minimum energy value of amikacin was -8.108 kcal/mol against the wild type TEM-1 ESBL of *Acinetobacter baumannii*, while the docking value against the mutant type *Escherichia coli* was -7.388 kcal/mol. The docking scores obtained corroborated the in vitro results showing that the antibiotic was incapable of controlling the ESBL of the mutant strain. Among 11 flavonoids tested against the mutant ESBL of *E. coli*, epigallocatechin 3-gallate and eriodictyol, with docking scores of -9.448 and -8.161 kcal/mol, respectively, were the most effective, with druglikeness scores of 0.39 and 1.37, respectively, compared to 1.03 for amikacin. Conclusion: Docking scores and drug-likeness scores indicated that flavonoids are compelling alternative antimicrobial agents that could serve as complementary therapy for newly arising ESBL-producing bacteria.

Granulomatosis with Polyangiitis

complications

Wegener's granulomatosis causing subglottic stenosis: Experiences at a tertiary care hospital of the Eastern India.

Swain, Santosh K.; Sahu, Mahesh C.; Parida, Jyoti R.

[E-mail:swainsantoshhbbsr@yahoo.com](mailto:swainsantoshhbbsr@yahoo.com)

Siksha "O" Anusandhan University - Institute of Medical Sciences - Department of Otorhinolaryngology

Journal of Taibah University Medical Sciences 2016; 11 (3): 211-216

Keywords: Laryngostenosis; Tertiary Care Centers; Prospective Studies; Demography

Abstract: Objectives: To study the clinical profile and management of Wegener's granulomatosis [WG] with subglottic stenosis [SGS] at a tertiary teaching hospital in Eastern India. Methods: This prospective study incorporated a case series of six patients treated between 2007 and 2015 for WG with SGS. The demographic details of the patients, such as age, sex, clinical presentation, laryngeal endoscopy, imaging, laboratory tests, and medical and surgical options, are described. Results: Of the six patients, five had laryngeal symptoms, such as hoarseness or breathing difficulty, at the time of presentation. There were four female and two male patients ranging in age from 14 to 62 years. The diagnosis of all six patients was confirmed via histopathological examination. Of the six patients, one had isolated subglottic involvement, and four had a positive antineutrophilic cytoplasmic autoantibody [C-ANCA] test on presentation. All of the patients received immunosuppressant and steroid therapies at the time of diagnosis. Five patients required tracheostomy with subglottic dilatation with cold steel instruments followed by the local injection of steroids and mitomycin-C application. Four patients have

shown clinical improvement. Conclusion: Although WG is a rare clinical condition, it is often confused with common ailments, which delays diagnosis, and it may involve the subglottis. The subglottis is a vital part of the laryngotracheal airway, and mild obstruction can be life threatening. The accurate and timely diagnosis of WG helps to prevent life-threatening complications, such as SGS.

Hallux Valgus

Correlation between Manchester grading scale and American orthopaedic foot and ankle society score in patients with hallux valgus.

Iliou, Kalliopi; Paraskevas, George; Kanavaros, Panagiotis; Barbouti, Alexandra; Vrettakos, Aristidis; Gekas, Christos; Kitsoulis, Panagiotis

E-mail: ilioukalliopi@hotmail.com

University of Ioannina - School of Medicine - Department of Anatomy

Medical Principles and Practice 2016; 25 (1): 21-24

Keywords: Foot; Ankle; Orthopedics; Congenital Abnormalities

Abstract: Objective: To evaluate the correlation between the Manchester Grading Scale and the American Orthopaedic Foot and Ankle Society [AOFAS] score in patients with a hallux valgus deformity. Subjects and Methods: The study sample included 181 feet of 122 patients with hallux valgus and 424 feet of 212 individuals without hallux valgus deformity as the control group. The severity of hallux valgus, utilizing a relative nonmetric scale, the Manchester Grading Scale, and the metric AOFAS score, was determined for all individuals in the hallux valgus and control groups. SPSS version 18 [Chicago, Ill., USA] was used for data analysis. Results: According to the Manchester Grading Scale, the 424 feet of the normal group were classified as 'no deformity'. In the hallux valgus group, 85 feet were classified as 'mild deformity', 67 as 'moderate deformity' and 29 as 'severe deformity'. The AOFAS total score in the control group was 99.14. In the hallux valgus group, patients with mild or moderate deformity had total scores of 86.20 and 68.19, respectively. For those with severe hallux valgus, the total score was 44.69 and the differences were statistically significant [$p = 0.000$]. Using the Pearson correlation, strong negative correlations were found between the AOFAS score and the hallux valgus angle [HVA; $r = -0.899$, $p = 0.000$]. Strong negative correlations were demonstrated between the AOFAS score and the first intermetatarsal angle [IMA] as well [$r = -0.748$, $p = 0.000$]. Conclusions: The AOFAS score was negatively associated with the Manchester Grading Scale, HVA and first IMA. As the severity of hallux valgus increased, the AOFAS score seemed to decrease.

Heart Block

Late-presenting complete heart block after pediatric cardiac surgery.

Nasser, Bana Agha; Mesned, AbduRahman; Mohamad, Tagelden; Kabbani, Mohamad S.

E-mail: bana30pedia@yahoo.com

Prince Sultan Cardiac Center - Pediatric Cardiac Intensive Care

Journal of the Saudi Heart Association 2016; 28 (1): 59-62

Keywords: Pediatrics; Thoracic Surgery; Delayed Diagnosis; Risk Factors

Abstract: Late presenting complete heart block after pediatric cardiac surgery is a rare complication and its management is well defined once the initial diagnosis is made timely and appropriately. In this report we described a child who underwent atrioventricular septal defect repair with a normal sinus rhythm during the postoperative period, as well as during the first 2 years of follow up. She subsequently developed complete heart block with bradycardia that required insertion of a pacemaker. Here we discuss this unusual late-presenting complication, possible risk factors, and management.

Heart Failure

Early thrombus formation in patient with Heart Ware left ventricular assist device presenting with acute heart failure.

Ucar, Mustafa; Karakas, Mustafa Serkan; Bayrak, Murat; Altekin, Refik Emre; Koksel, Umut; Bayezid, Omer

Akdeniz University - Medical Faculty - Department of Cardiology

Journal of the Saudi Heart Association 2016; 28 (1): 49-51

Keywords: Ventricular Dysfunction, Left; Thrombosis; Heart Diseases; Heart-Assist Devices; Heart Ventricles

Abstract: Heart failure is one of the leading causes of mortality and morbidity in the world. Heart transplantation is still the gold standard therapy despite emerging treatment options. Due to the limited number of available donors, the use of ventricular assist devices has increased. However, increasing incidences of complications are observed with using these devices. In this article, surgical treatment of a huge mobile thrombus formation in an inflow cannula due to ineffective anticoagulation in a 59 year-old man who received a Heart Ware ventricular assist device because of ischemic cardiomyopathy is presented.

Hemostasis

Hemostasis in uncontrolled esophageal variceal bleeding by self-expanding metal stents: a systematic review.

Pontone, Stefano; Giusto, Michela; Filippini, Angelo; Cicerone, Clelia; Pironi, Daniele; Merli, Manuela
University of Rome - Department of Surgical Sciences

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 6-11

Keywords: Gastrointestinal Hemorrhage; Self Expandable Metallic Stents; Esophageal and Gastric Varices

Abstract: Aim: The aim of this systematic review was to evaluate the current reported efficacy and the mortality rate of SEMS treatment in uncontrolled bleeding patients. Background: Esophageal variceal bleeding [EVb] represents a life threatening pathology. Despite the adequate pharmacologic and endoscopic treatment, continuous or recurrent bleeding, named as uncontrolled bleeding, occurs in 10-20% of cases. A new removable, covered, and self-expanding metal stent [SEMS] was proposed to control the variceal bleeding. Materials and Methods: The study was conducted according to the PRISMA statement. Studies were identified by searching MEDLINE [1989-present] and SCOPUS [1989-present] databases. The last search was run on 01 July 2015. Results: Nine studies [period range=2002-2015] met the inclusion criteria and were included in quantitative analysis. High rate of SEMS efficacy in controlling acute bleeding was observed, with a reported percentage ranging from 77.7 to 100%. In 10% to 20% of patients, re-bleeding occurred with SEMS in situ. Stent deployment was successful in 77.8% to 100% of patients while 11 to 36.5% of patients experienced stent migration. Conclusion: SEMS could be effective and safe in control EVb and can be proposed as a reliable option to balloon tamponed for patient stabilization and as a bridging to other therapeutic approach.

Hepatitis B

epidemiology

Evaluation of hepatitis B infection prevalence in institutionalized intellectually disabled children.

Davoudbeglou, Foad; Mesdaghi, Mehrnaz; Goudarzi, Hossein; Shojaei, Fariba; Aram, Hourieh; Vaezjalali, Maryam

Shahid Beheshti University of Medical Sciences - School of Medicine - Department of Immunology

Novelty in Biomedicine 2016; 4 (2): 61-66

Keywords: Prevalence; Hepatitis B virus; Hepatitis B Vaccines; Mentally Disabled Persons; Risk Factors; Intellectual Disability

Abstract: Background: Hepatitis B virus [HBV] infection causes chronic infection in human population, with high mortality. One of the high risk communities is mentally retarded children, who are institutionalized. Special conditions in these centers predispose children for HBV infection and transmission to healthy people. In this study our objective was to determine the prevalence of HBV infection among institutionalized mentally retarded children and study its associated risk factors. Materials and Methods: In this study, 250 mentally retarded children [younger than 14 years old] were included. They were living in 5 nursing institutions, located in different parts of Tehran. Hepatitis B surface antigen [HBsAg] was measured in the sera of these patients by ELISA method. Results: Among 250 children, 20 children [8%] were HBsAg positive. HBV infection in girls was more than boys [11% to 5.6%]. Among the types of mental retardation, children with cerebral palsy had the highest positive result for HBsAg. The most HBV infection [28.5%] was seen in children with longest duration of being institutionalized [10 to 11 years]. Vaccinated children were more HBsAg positive [8.7%] than non-vaccinated children [5.3%]. However, no significant relationship was observed between any of these factors and HBsAg positivity. Conclusion: Despite improvement of people's health condition and implementation of HBV vaccination, the prevalence of HBV infection is increased in institutionalized mentally retarded children, which highlights the need for active measures to reduce this infection among this high risk population.

Hepatitis C, Chronic

drug therapy

Monocyte chemotactic protein and response to pegylated interferon-alpha-2A treatment in patients with chronic hepatitis C [CHC] genotype 4.

Mohamed, Amal A.; Sayed, Ola; Ali, Omnia E.; Sayed, Ghadir A.; Moustfa, Zainab; El Agawy, Waleed Ahmed
E-mail: amalahmedhpc@yahoo.com

National Hepatology and Tropical Medicine Institute - Department of Biochemistry

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 117-124

Keywords: Case-Control Studies; Prospective Studies; Interferon-alpha; Polyethylene Glycols; Recombinant Proteins; Chemokine CCL2; Genotype; Hepacivirus-genetics

Abstract: The prevalence of hepatitis C virus [HCV] infection varies across the world, with the highest number of infections reported in Egypt. Monocyte chemoattractant protein-1 [MCP-1] is a potent chemokine, and its hepatic expression is up-regulated during chronic HCV infection. Fifty naïve patients with chronic hepatitis C in National Hepatology and Tropical Medicine Research Institute and 20 healthy volunteers as controls were enrolled in a prospective study designed with strict inclusion criteria to nullify the effect of confounding variables and further minimize selection bias. Fifty naïve patients were treated with PEG-IFN- α 2b, at a dose of 180 μ g/kg subcutaneously every week plus ribavirin at a dose of 1000- 1200 mg/day, according to the patient's body weight, for 48 weeks. Quantification of HCV-RNA by real-time PCR and MCP-1 by ELISA were performed for every patient and controls. There was a statistically significant difference between patients and control group as regards the quantity of MCP-1 [P <0.05] [Mann-Whitney test] [P =0.004]. There was a significant difference between responders and nonresponders regarding MCP-1 [P < 0.05], responders showed a higher percentage of cases with initial MCP-1 < 306 [P < 0.05]. We conclude the importance of the detection of MCP-1 expression at the start of therapy as a factor for assessing the likelihood of HCV genotype 4 patients to achieving a sustained virological response to treatment with IFN- α 2 in combination with ribavirin.

genetics

The fundamental role played by cell cycle proteins in controlling cell proliferation in chronic hepatitis C virus infection.

Farid, Saadia; Rashed, Laila; Sweilam, Samya
Cairo University - National Hepatology and Tropical Medicine Research Institute - Department Of Tropical Medicine, Biochemistry, and Medical Biochemistry

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 9-17

Keywords: Cell Cycle Proteins-genetics; Cyclin-Dependent Kinase Inhibitor p15; Microtubule-Associated Proteins; Mad2 Proteins; Cyclin-Dependent Kinase Inhibitor p27; Cell Proliferation; Liver Cirrhosis-genetics

Abstract: Background: examining the alteration of cell cycle genes in early hepatitis C virus [HCV] found that altered expression of mitotic checkpoint genes, MAD2L1, KNTC1, CDC16 and CDC34, KNTC1 known as "rough deal protein" [ROD] is part of a complex involved in elaborating an inhibitory signal due to improper chromosomal alignment during cell division. Aim of the work: attempt for the identification of proteins [genes], which act as predictive factors to identify patients with high risk of cell transformation and HCC development. Patients and Methods: fifty three patients with chronic HCV infection, age ranged between 18 and 58 years, time of assessment was before starting therapy of hepatitis C at the National Hepatology and Tropical Medicine Research Institute. Ten healthy individuals were included to serve as controls. All the patients and controls were subjected to the following: history, clinical examination, abdominal ultrasonography, and collection of blood samples for routine laboratory investigation; CBCs. Liver biopsy was done to all patients and controls, patients revealed mild fibrosis [Metavir fibrosis scores from F1 to F3]. Also, we used freshly frozen liver biopsies mRNA levels with perspective protein levels of four genes: P27, P15, KNTC1, MAD2L1. Results: significant association of P27, P15, KNTC1 and MAD2L1 with the progression of liver fibrosis in chronic HCV liver biopsy was found. Conclusion: there is altered gene expression in HCV-associated liver disease. Recommendations: The emerging interest of hepatologists in the influence of genetic factors in HCV. Evaluation of the expression of key proteins related to the cell cycle and apoptosis in chronically infected patients with HCV would be of significance to understand disease pathogenesis, and will help in identifying novel prognostic indicators.

Herniorrhaphy

methods

Hybrid approaches for complex parastomal hernia repair.

Zhang, Heng; Xie, Jia Ming; Miao, Jian Qing; Wu, Hao Rong
The Second Affiliated Hospital of Soochow University - Department of General Surgery

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 72-73

Keywords: Retrospective Studies; Abdominal Pain; Hernia; Colostomy

Abstract: Parastomal hernia is one of the major complications of colostomy with high occurrence. From October 2011 to November 2014, a retrospective study was conducted by analyzing and following up data of 16 patients suffering from parastomal hernia who underwent a hybrid technique repair. The safety and efficacy of the hybrid technique for parastomal hernia repair was investigated in terms of complications. All cases were operated successfully and had no major immediate postoperative complications other than mild abdominal pain in 5 cases. No long-term postoperative complications were reported in the follow-up. The authors found hybrid technique to be safe and effective for parastomal hernia repair with fewer complications.

Huntington Disease

A grey box neural network model of basal ganglia for gait signal of patients with Huntington disease.

Pourhedayat, Abbas; Sarbaz, Yashar

University of Tabriz - School of Engineering-Emerging Technologies - Department of Mechatronics Engineering

Basic and Clinical Neuroscience 2016; 7 (2): 107-114

Keywords: Basal Ganglia; Neural Networks (Computer); Neurotransmitter Agents

Abstract: Introduction: Huntington disease [HD] is a progressive neurodegenerative disease which affects movement control system of the brain. HD symptoms lead to patient's gait change and influence stride time intervals. In this study, we present a grey box mathematical model to simulate HD disorders. This model contains main physiological findings about BG. Methods: We used artificial neural networks [ANN] and predetermined data to model healthy state behavior, and then we trained patients with HD with this model. All blocks and relations between them were designed based on physiological findings. Results: According to the physiological findings, increasing or decreasing model connection weights are indicative of change in secretion of respective neurotransmitters. Our results show the simulating ability of the model in normal condition and different disease stages. Conclusion: Fine similarity between the presented model and BG physiological structure with its high ability in simulating HD disorders, introduces this model as a powerful tool to analyze HD behavior.

Hypotrichosis

genetics

Intragenic deletion mutation in the gene desmoglein 4 underlies autosomal recessive hypotrichosis in six consanguineous families.

Muhammad, Dost; Khan, Bushra; Raza, Syed I.; Ahmad, Farooq; Channa, Naseem A.; Ansar, Muhammad; Ahmad, Wasim; Basit, Sulman

Quaid-i-Azam University - Faculty of Biological Sciences - Department of Biochemistry

Journal of Taibah University Medical Sciences 2016; 11 (3): 203-210

Keywords: Sequence Deletion; Genetic Association Studies; Desmogleins-genetics; Consanguinity

Abstract: Objectives: Localized autosomal recessive hypotrichosis is a non-syndromic human hair loss disorder, affecting scalp, eyebrows and eyelashes, and other parts of the body. Six consanguineous families with this form of hair loss disorder were investigated at both the clinical and molecular levels. Methods: Linkage in six families with twenty-one affected members was tested by genotyping microsatellite markers linked to autosomal recessive hypotrichosis loci including localized autosomal recessive hypotrichosis [LAH] 1, 2 and 3. Sequence analysis of the entire coding and splice sites of the gene DSG4 was performed to search for the disease-causing mutation. Results: Genotyping established linkage in families to the DSG4 gene at LAH1 locus on chromosome 18q21.1. Sequence analysis detected an intragenic deletion mutation [Ex5-8 del] in affected members of all six families. Conclusion: Identification of recurrent mutation in six additional Pakistani families strengthens the body of evidence that this is an ancestral mutation that is widespread among different Pakistani ethnic groups.

Imatinib Mesylate

pharmacology

The effects of imatinib mesylate on cellular viability, platelet derived growth factor and stem cell factor in mouse testicular normal leydig cells.

Kheradmand, Fatemeh; Hashemnia, Seyyed Mohammad Reza; Valizadeh, Nasim; Roshan Milani, Shiva

Urmia University of Medical Sciences - Cellular and Molecular Research Center - Department of Biochemistry

Journal of Reproduction and Infertility 2016; 17 (2): 82-87

Keywords: Platelet-Derived Growth Factor; Stem Cell Factor; Leydig Cells; Mice

Abstract: Background: Growth factors play an essential role in the development of tumor and normal cells like testicular leydig cells. Treatment of cancer with anti-cancer agents like imatinib mesylate may interfere with normal leydig cell activity, growth and fertility through failure in growth factors' production or their signaling pathways. The purpose of the study was to determine cellular viability and the levels of, platelet derived growth factor [PDGF] and stem cell factor [SCF] in normal mouse leydig cells exposed to imatinib, and addressing the effect of imatinib on fertility potential. Methods: The mouse TM3 leydig cells were treated with 0 [control], 2.5, 5, 10 and 20 micro M imatinib for 2, 4 and 6 days. Each experiment was repeated three times [15 experiments in each day]. The cellular viability and growth factors levels were assessed by MTT and ELISA methods, respectively. For statistical analysis, one-way ANOVA with Tukey's post hoc and Kruskal-Wallis test were performed. A p-value less than 0.05 was considered statistically significant. Results: With increasing drug concentration, cellular viability decreased significantly [p<0.05] and in contrast, PDGF levels increased [p<0.05].

Different imatinib concentrations had no significant effect on SCF level. Increasing the duration of treatment from 2 to 6 days had no obvious effect on cellular viability, PDGF and SCF levels. Conclusion: Imatinib may reduce fertility potential especially at higher concentrations in patients treated with this drug by decreasing cellular viability. The effect of imatinib on leydig cells is associated with PDGF stimulation. Of course future studies can be helpful in exploring the long term effects of this drug.

Immunologic Surveillance

Natural killer cells enhance the immune surveillance of cancer.

Nouroz, Faisal; Bibi, Farzana; Noreen, Shumaila; Masood, Nosheen

[E-mail:faisalnouroz@gmail.com](mailto:faisalnouroz@gmail.com)

Hazara University Mansehra - Department of Botany

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 149-154

Keywords: Killer Cells, Natural-immunology; Neoplasms-immunology; Cytokines-immunology; Phytochemicals-pharmacology

Abstract: Immune system [IS] is comprised of molecules, cells, tissues and organs involved in host defense mechanism from infectious agents or tumor cells. On crossing the cell barriers by these infectious agents, the defense mechanism is alerted by the immune system to respond against these invading microbes. Innate immune response [IIR] and acquired immune response [AIR] are working in parallel to control these invading microbes. IIR is composed of various types of phagocytes and lymphocytes, while AIR is comprised of T and B lymphocytes. All the cells of the immune system cooperatively work against infectious agents and cancerous cells but Natural killer [NK] cells are playing an important role to respond to tumor by enhancing the expression of complementary domain [CD86] on dendritic cells [DCs] and production of IL-12. NK cells demolished tumor through perforin and granzyme, which are important for immune surveillance and death of tumor cells induced by cytokines such as tumor necrosis factor [TNF], Fas ligand [CD178], interferon- γ [IFN- γ] and IL-10. These cytokines have inhibited proliferation of tumor by inducing antiangiogenic factors and maintaining cross talk with other immune cells. Natural products like transfer factor plus, immune modulator mix, ascorbic acid, Ganoderma lucidum, Agaricus blazei teas, nitrogenated soy extract, Andrographis paniculata and several phytochemicals enhanced the efficiency of NK cells in controlling cancers. Further studies will unravel the impact of NK cells in cancer control and how NK efficiency can be further enhanced.

Infertility

Models predicting success of infertility treatment: a systematic review.

Zarinara, Alireza; Zeraati, Hojjat; Kamali, Koorosh; Mohammad, Kazem; Shahnazari, Parisa; Akhondi, Mohammad Mehdi

Reproductive Biotechnology Research Center

Journal of Reproduction and Infertility 2016; 17 (2): 68-81

Keywords: Forecasting; Therapeutics

Abstract: Background: Infertile couples are faced with problems that affect their marital life. Infertility treatment is expensive and time consuming and occasionally isn't simply possible. Prediction models for infertility treatment have been proposed and prediction of treatment success is a new field in infertility treatment. Because prediction of treatment success is a new need for infertile couples, this paper reviewed previous studies for catching a general concept in applicability of the models. Methods: This study was conducted as a systematic review at Avicenna Research Institute in 2015. Six data bases were searched based on WHO definitions and MESH key words. Papers about prediction models in infertility were evaluated. Results: Eighty one papers were eligible for the study. Papers covered years after 1986 and studies were designed retrospectively and prospectively. IVF prediction models have more shares in papers. Most common predictors were age, duration of infertility, ovarian and tubal problems. Conclusion: Prediction model can be clinically applied if the model can be statistically evaluated and has a good validation for treatment success. To achieve better results, the physician and the couples' needs estimation for treatment success rate were based on history, the examination and clinical tests. Models must be checked for theoretical approach and appropriate validation. The privileges for applying the prediction models are the decrease in the cost and time, avoiding painful treatment of patients, assessment of treatment approach for physicians and decision making for health managers. The selection of the approach for designing and using these models is inevitable.

Infertility, Female

Laparoscopic fimbrioplasty and neosalpingostomy in female infertility: a review of 402 cases at the gynecological endoscopic surgery and human reproductive teaching hospital in Yaounde-Cameroon.

Kasia, Jean Marie; Ngowa, Jean Dupont Kemfang; Mimboe, Yolande Salome; Toukam, Michel; Ngassam, Anny; Noa, Claude Cyrille; Belinga, Etienne; Medou, Alexis

University of Yaounde - Faculty of Medicine and Biomedical Sciences - Department of Obstetrics and Gynaecology

Journal of Reproduction and Infertility 2016; 17 (2): 104-109

Keywords: Laparoscopy; Salpingostomy; Endoscopy; Adnexal Diseases; Cross-Sectional Studies; Retrospective Studies

Abstract: Background: More than 70 million couples suffer from infertility worldwide. The aim of this study was to evaluate the fertility outcomes after laparoscopic fimbrioplasty and neosalpingostomy in female infertility. Methods: Laparoscopic distal tuboplasty was carried out for 402 cases at the Gynecological Endoscopic Surgery and Human Reproductive Teaching Hospital in Yaounde-Cameroon in Central Africa from December 2002 to December 2007. Laparoscopic fimbrioplasty and neosalpingostomy were done using bipolar electrocoagulation and conventional endoscopic instruments. Log-rank test was used to compare cumulative rate curves of intrauterine pregnancy with respect to the tubal stages. $P < 0.05$ was considered statistically significant. Results: The mean age of the patients was 31.6 +/- 5.45 years. Secondary infertility was the most frequent type of infertility [70.14%]. The laparoscopic tubal surgery done consisted of fimbrioplasty in 185[46%] cases and neosalpingostomy in 217 [54%] cases. Of 260 women followed up after tuboplasty, there were overall 74 [28.48%] pregnancies; 68[26.1%] intrauterine pregnancies and 6[2.3%] ectopic pregnancies. Pregnancy rates were significantly associated to the tubal stage [63% in stage 1, 15% in stage 3 and 00% in stage 4; $p < 0.001$] and the adnexal adhesion scores [73.91% in the absence of adnexal adhesions and 8.8% in the case of a severe adnexal adhesion score]. Of the 68 intrauterine pregnancies, there were 60[88%] live births and 8[12%] spontaneous abortions. Conclusion: It is believed that laparoscopic fimbrioplasty and neosalpingostomy should be the preferred choice when faced with tubal distal occlusion in a context of female infertility. This implies that training in endoscopic surgery should be regarded as an important issue in developing countries.

The role of religious coping strategies in predicting depression among a sample of women with fertility problems in Shiraz.

Aflakseir, Abdolaziz; Mahdiyari, Mansoureh

E-mail: aaflakseir@shirazu.ac.ir

Shiraz University - School of Education and Psychology - Department of Clinical Psychology

Journal of Reproduction and Infertility 2016; 17 (2): 117-122

Keywords: Adaptation, Psychological; Religion; Depression

Abstract: Background: One of the most common mental health problems among women with infertility problems is depression. Research has shown that religious beliefs and practices can help people to cope with difficult situations. The purpose of this study was to explore the role of different religious coping strategies in predicting depression in a group of infertile women in Shiraz. Methods: A total of 72 women with fertility problems were recruited from several private infertility clinics in Shiraz using convenience sampling. The participants completed the research questionnaires including Beck Depression Inventory and Religious Coping Scale. The Religious Coping Scale consists of five dimensions including practice, active, passive, benevolent reappraisal and negative religious coping. Descriptive statistics [frequency percentage, mean and standard deviation], Pearson's correlation and simultaneous multiple regression analysis were used for data analysis using SPSS version 16. A p-value less than 0.05 was considered statistically significant. Results: The present study showed that about 30% of women with fertility problems experienced the symptoms of depression. The findings also indicated that the most commonly used religious coping strategy was practice religious coping, while the least commonly used religious coping strategies were passive and negative religious coping. The findings also showed that active religious coping, practice religious coping and benevolent reappraisal coping predicted depression reduction. Conclusion: This study highlights the effect of religious coping on depression reduction of women with fertility problems. In other words, women who used religious coping strategies were less likely to experience depression symptoms.

Socio-demographic correlates of women's infertility and treatment seeking behavior in India.

Sarkar, Sanjit; Gupta, Pallavi

E-mail: sanjitips@gmail.com

International Institute for Population Sciences

Journal of Reproduction and Infertility 2016; 17 (2): 123-132

Keywords: Demography; Drug-Seeking Behavior; Therapeutics

Abstract: Background: Infertility is an emergent issue in India. Until recently, very few studies have understood the patterns and consequences of infertility in India. Family planning programs in India also viewed exclusively the patterns and determinants of overfertility rather than infertility. Furthermore, there is the lack of information about treatment seeking behavior of infertile couples. Therefore, this paper aimed to examine the extent of infertility and treatment seeking behavior among infertile women in India. An attempt was also made to evaluate

the effects of socio-demographic factors on treatment seeking behavior. Methods: The study used the data from the District Level Household and Facility Survey carried out in India during 2007-08. Several statistical techniques such as chi-square test, proportional hazard model and binary logistic regression model were used for the analysis. Results: Approximately, 8% of currently married women suffered from infertility in India and most of them were secondary infertile [5.8%]. Within India, women's infertility rate was the highest in west Bengal [13.9 percent] and the lowest in Meghalaya [2.5 percent]. About 80% of infertile women sought treatment but a substantial proportion [33%] received non-allopathic and traditional treatment due to expensive modern treatment and lack of awareness. Conclusion: In the context of policy response, it can be said that there is a need to improve the existing services and quality of care for infertile women. Treatment for infertility should be integrated into the larger reproductive health packages.

Inflammation

Chronic inflammation and cancer: paradigm on tumor progression, metastasis and therapeutic intervention.

Khan, S.; Jain, M.; Mathur, V.; Feroz, S.M.A.

[E-mail:samarkhan8@gmail.com](mailto:samarkhan8@gmail.com)

Jazan University - College of Dentistry - Dept. of Oral and Maxillofacial Pathology

GJO-Gulf Journal of Oncology [The] 2016; (20): 86-93

Keywords: Neoplasms; Disease Progression; Neoplasm Metastasis; Neoplasm Invasiveness; Cytokines; Chemokines; Chronic Disease

Abstract: As early as the 19th century, inflammation has been perceived to have a link with cancer but this perception has waned through the passing of time. In recent years however a renewed interest on inflammation and cancer connection stemming from different lines of work has been evolved that leads to a generally-accepted paradigm. In the tumor microenvironment, smouldering inflammation contributes to the proliferation and survival of malignant cells, angiogenesis, metastasis, subversion of adaptive immunity, reduced response to hormones and chemotherapeutic agents. Thus, this review will try to unravel and explain molecular events, mediators and regulators linking inflammation to cancer.

Intestinal Polyposis

diagnosis

Cronkhite-Canada syndrome; a case report and review of the literature.

Safari, Mohammad Taghi; shahrokh, Shabnam; Ebadi, Shahram; Sadeghi, Amir

Shahid Beheshti University of Medical Sciences - Gastroenterology and Liver Diseases Research Center

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 58-63

Keywords: Review Literature as Topic; Neoplastic Syndromes, Hereditary; Peutz-Jeghers Syndrome

Abstract: Cronkhite- Canada syndrome [CCS] considered as a rare and non-hereditary disorder. Gastrointestinal polyposis and diarrhea along with some extra signs and symptoms such as hypoproteinemia, and epidermal manifestations are recognized in this syndrome. The pathophysiology of this syndrome is not completely understood and it seems that inflammatory processes may be involved. We present a 50 year-old man with hamartomatous polyps throughout the colon and long-lasting diarrhea not responding to typical therapies during three years.

Keratitis

diagnosis

Multi-resistant Enterococci and Morganella morganii: a rare cause of complicated keratitis.

Albuainain, Abdulrahman; Khan, Muhammad Shabbir; Ali, Ghada Al Bin

[E-mail:asa.albuainain@gmail.com](mailto:asa.albuainain@gmail.com)

Bahrain Defense Force Hospital - Eye and Laser Center

Bahrain Medical Bulletin 2016; 38 (1): 59-61

Keywords: Keratitis-microbiology; Keratitis-complications; Morganella morganii-pathogenicity; Enterococcus; Keratitis-therapy; Anti-Bacterial Agents

Abstract: An eighty-five-year-old female presented with preexisting conditions of benign essential hypertension, dyslipidemia, chronic renal failure and diabetes mellitus type 2. She had gastroenteritis, pain and redness in right [blind] eye with corneal decompensation, scarring and right-eye corneal ulcer with hypopyon. Corneal scrapings sent for culture report revealed growth of Morganella Morganii and Enterococci Corneal ulcer was successfully treated with topical and oral antibiotics.

Kidney Failure, Chronic

Outcome of end-stage renal disease patients with advanced uremia and acidemia.

Ur Rehman, Iqbal; Idrees, Muhammad Khalid; Shoukat

E-mail: siutpakistan@gmail.com

Sindh Institute of Urology and Transplantation [SIUT] - Dewan Farooq Medical Complex - Department of Nephrology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 31-35

Keywords: Patient Outcome Assessment; Uremia; Acidosis; Renal Dialysis; Cross-Sectional Studies

Abstract: Objective: To determine the outcome of End-Stage Renal Disease [ESRD] patients presenting with advanced uremia and acidemia requiring hemodialysis and adverse events seen within 72 hours of admission. Study Design: Cross-sectional study. Place and Duration of Study: Sindh Institute of Urology and Transplantation, Karachi, Pakistan, from October 2010 to March 2011. Methodology: ESRD patients with advanced uremia and acidemia were included in the study. History, physical examination, complete blood count, serum urea, creatinine, electrolytes, arterial blood gases analysis, and ultrasound of kidneys were done in each patient. Adverse events and outcome were recorded for the next 72 hours. Data was analyzed by SPSS version [10]. Mean value and standard deviation of quantitative measurements were calculated and statistical significance computed by t-test. A p-value ≤ 0.05 was taken as significant. Statistical significance of categorical variables was determined by chi-square test. Results: Out of the 194 ESRD patients [mean age 46.54 +/- 14.07 years], 28 [14%] expired and 166 [86%] survived within 72 hours of admission. Hypotension requiring inotropic support was the commonest adverse event observed in 40 [20.6%] cases followed by fits in 31 [16%]; and 25 [12.9%] patients required ventilatory support. Mortality was high in patients above 50 years of age. There was no statistically significant difference between two genders regarding adverse events and mortality. Conclusion: The morbidity and mortality of patients with ESRD are serious concerns. Early referral of patients with ESRD, before they develop severe acidosis, can prevent significant morbidity and mortality.

Lactase

genetics

The Frequency of the LCT⁻¹³⁹¹⁰C>T polymorphism associated with lactase persistence diverges among Euro-descendant groups from Brazil.

Boschmann, Stefanie Epp; Boldt, Angelica Boldt; De Souza, Iliada Rainha; Petzl Erler, Maria Luiza; Messias Reason, Lara Jose

E-mail: iarareason@hc.ufpr.br

Medical Principles and Practice 2016; 25 (1): 18-20

Keywords: Lactase-Phlorizin Hydrolase; Polymorphism, Genetic; Intestine, Small; Lactose Intolerance; Genes

Abstract: Objective: The aim of this study was to investigate the frequency of the LCT⁻¹³⁹¹⁰C>T polymorphism associated with a high expression of lactase in the small intestine during adulthood, and to infer the lactase persistence and adult-type hypolactasia phenotypes among Euro-Brazilians and Mennonites from South Brazil. Materials and Methods: A sequence-specific PCR method to genotype the LCT⁻¹³⁹¹⁰C>T polymorphism in 292 Euro-Brazilians and 151 Mennonites [a group with European ancestry and a long history of endogamy] was developed. Using an exact test of population differentiation, the genotype and allele frequency between these and other Brazilian populations were compared. Results: The frequency of -13910*T was significantly higher among the Mennonites when compared to the Euro-Brazilian cohort [0.63 vs. 0.33, $p < 0.000001$]. Accordingly, Mennonites had a higher prevalence of the lactase persistence genotype [88.1 vs. 55.5%, $p < 0.000001$]. The distribution of -13910*T differed between Mennonites and all other Brazilian groups [$p < 0.0001$]. The Euro-Brazilians from Curitiba displayed differences when compared to all other Brazilian groups [$p < 0.0001$], even to Euro-Brazilians from a different geographic region [$p = 0.0003$], but were similar to those from Porto Alegre [$p = 0.2$]. Conclusion: Differences in the -13910*T-associated lactase persistence distribution among Euro-Brazilian groups reflect the ancestry and admixture of each particular group and should be considered for adult-type hypolactasia screening.

Language Disorders

[Production of a protocol on early intervention for speech and language delays in early childhood: a novice experience in Iran]

Vameghi, Roshanak; Sajedi, Firouzeh; Yadegari, Fariba; Zarifian, Talieh; Shahshahanipour, Soheila; Hatamizadeh, Nikta; Farazi, Mortaza; Darouei, Akbar; Soleimani, Farin; Azari, Nadia; Mehdipour, Nayereh; Ashtari, Atiyeh; Teimouri, Robab

University of Social Welfare and Rehabilitation Sciences - Pediatric Neurorehabilitation Research Center

Journal of Rehabilitation 2016; 16 (4): 374-382

Keywords: Guideline Adherence; Early Intervention (Education); Speech Disorders; Child

Abstract: Objective: Speech and language disorders, when happening during childhood will ultimately lead to important negative outcomes in the life of the child. The farther we move from this critical period, that is, the first 3 years of life, the less will be the positive effects of environmental stimuli on the development of speech and language. Early detection of children at risk for or in the preliminary phases of developmental delays and provision of early intervention services for them is of utmost importance. The objective of this research was to compile and produce protocols for early intervention in childhood speech and language developmental disorders in Iranian children. Materials and Methods: This study was conducted in two main phases: review phase and qualitative phase. In the review phase, all accessible search engines and databases, especially those for systematic reviews and guidelines were searched. In the qualitative study phase, several focus group discussions and rounds of Delphi were carried out with 20 experts in 7 subgroups, who were selected purposively. Results: The result of this study is presented as 7 intervention packages, including the following domains of disorders: prelingual lingual hearing impairment, speech sound disorders, dysphagia, stuttering, and dysarthria. Conclusion: Most studies have confirmed the effectiveness and need for early interventions for children with speech and language impairment. However, most do not explain the details of these interventions. Before the present study, no systematic and evidence-based protocol existed for early intervention in childhood speech and language impairments, in Iran; and due to language differences, as well as possible differences in the speech and language developmental process of children of different communities, making direct use of non-Persian references was not possible and effective. Thus, there was a clear demand for the production of such a protocol.

Leukemia

diagnosis

Infant leukemia.

Majed, Kameela Sayed Juma Fadhel; Alsaad, Khulod

E-mail: KFadhel@health.gov.bh

Salmaniya Medical Complex - Department of Pediatrics

Bahrain Medical Bulletin 2016; 38 (1): 53-55

Keywords: Leukemia-therapy; CHOP protocol; Anemia; Leukemia-genetics; Thrombocytopenia; Drug Therapy

Abstract: An eleven-month-old Bahraini infant girl, born full-term, vaccinated up-to-age, with normal milestone development; she was referred from King Hamad University Hospital [KHUH] with one-month history of high grade on and off fever associated with cough; her CBC showed anemia [7.4g/dl] and thrombocytopenia [30x109/L]. On examination, multiple bruises and small cervical lymph nodes were observed. CBC showed blasts [30%]. Bone marrow aspiration, flow cytometry and cytogenetic were sent for Mixed Lineage Leukemia [MLL] rearrangement. She was low risk; she received chemotherapy. This case was reported because of its rarity and up-to-date chemotherapy modalities which is linked to specific cytogenetic abnormality.

Leukemia, Myeloid, Acute

genetics

Detection of TET2, KRAS and CBL variants by Next Generation Sequencing and analysis of their correlation with JAK2 and FLT3 in childhood AML.

Akin, Dilara Fatma; Oner, Deniz Aslar; Mumcuoglu, Mine; Ezer, Ustun; Bahce, Muhterem; Kurekci, Emin; Akar, Nejat

E-mail: dilara2684@hotmail.com

LOSEV Foundation for Children with Leukemia - Cancer Genetics Research Laboratory

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 209-215

Keywords: DNA-Binding Proteins-genetics; Proto-Oncogene Proteins-genetics; Proto-Oncogene Proteins p21(ras)-genetics; Proto-Oncogene Proteins c-cbl-genetics; fms-Like Tyrosine Kinase 3-genetics; Janus Kinase 2-genetics; Sequence Analysis, DNA-trends

Abstract: Background: Acute myeloid leukemia [AML] is a heterogeneous clonal disorder in terms of cytogenetic and molecular aberrations. Ten-Eleven-Translocation 2 [TET2], Kirsten rat sarcoma viral oncogene homolog [KRAS], and Casitas B-cell lymphoma [CBL] have an important role pathogenesis of acute myeloid leukemia [AML] and their activated mutations confer proliferative and survival signals. Aim: In this study, we aimed to find possible genetic markers for molecular analysis in childhood AML by screening hot-spot exons of TET2, KRAS, and CBL using Next Generation Sequencing [NGS] analysis. In addition, association between found variants and mutations of Janus Kinase-2 [JAK2] and Fms-Related Tyrosine Kinase [FLT3] were analyzed which are important prognostic risk factors for AML. Methods: Eight patients who were diagnosed with pediatric AML at Losante Pediatric Hematology- Oncology Hospital were included to the study. Hot-spot exons of TET2, KRAS and CBL genes were screened using the NGS method. Furthermore, FLT3-Internal Tandem Duplicate [FLT3-ITD] and JAK2-V617F were analyzed by Real Time Polymerase chain Reaction [Real Time-PCR]. Results: In total, we identified 20 variants in studied genes by NGS. In our patient group, 16 variants in the TET2

(seven novel, seven missense and two silent), two variants in the KRAS (one missense and one intronic) and two variants in the CBL (two novel) were found. All of AML patients were found negative for JAK V617 F. Three of the eight patients (37.5%) showed mutations of both FLT3-ITD and TET2, KRAS, CBL. Conclusion: We found novel mutations for TET2, KRAS, and CBL. The detected variants in this article seem to be the first screening results of genes studied by NGS in childhood AML patients. Our results also showed some degree of association between FLT3-ITD and TET2, KRAS, CBL mutations.

Lidocaine

therapeutic use

Lidocaine skin patch [lidopat[registered] 5%] is effective in the treatment of traumatic rib fractures: a prospective double-blinded and vehicle-controlled study.

Cheng, Yu Jen

[E-mail:yujen.cheng@msa.hinet.net](mailto:yujen.cheng@msa.hinet.net)

I-Shou University - E-Da Cancer Treatment Hospital - Department of Surgery

Medical Principles and Practice 2016; 25 (1): 36-39

Keywords: Transdermal Patch; Rib Fractures; Pain; Double-Blind Method; Prospective Studies; Analgesia

Abstract: Objective: The purpose of this study was to determine the efficacy of the Lidopat[registered] 5% skin patch in relieving rib fracture pain. Subjects and Methods: From June 2009 to May 2011, 44 trauma patients with isolated rib fractures were enrolled in this study and randomized in a double-blind method into 2 groups. The experimental group [group E: 27 patients] used a Lidopat[registered] 5% skin patch at the trauma site and took an oral analgesic drug for pain relief. The placebo group [group P: 17 patients] used a placebo vehicle patch and an oral analgesic drug. Results: The mean age, weight and hospital stay of patients were 56.8 +/- 13.8 years, 67.4 +/- 12.6 kg and 6.34 +/- 1.3 days, respectively. In the first 4 days, there were no significant differences in pain scores between the groups [p > 0.05]. After the 5th day, the average pain score was significantly less in group E [mean 1.5] than in group P [mean 3.10; p < 0.05]. There was no significant difference in the number of fractured ribs between groups [p = 0.904]. The use of meperidine and the length of hospital stay [6.0 vs. 6.9 days] were both significantly less in group E [p = 0.043 and 0.009, respectively]. Conclusion: In this study, the use of the Lidopat[registered] 5% skin patch in patients with isolated rib fractures alleviated pain and shortened the hospital stay, and a lower dose of pain-relieving medication was used.

Life Change Events

[Face and convergent validity of Persian version of rapid office strain assessment [ROSA] checklist]

Armal, Afrouz; Mokhtarinia, Hamidreza; Biglarian, Akbar; Abdi, Kianoosh

University of Social Welfare Rehabilitation Science - Department of Ergonomics

Journal of Rehabilitation 2016; 16 (4): 356-365

Keywords: Outcome Assessment (Health Care); Cross-Sectional Studies; Surveys and Questionnaires; Reproducibility of Results; Checklist

Abstract: Objective: The aim of this work was translation, cultural adaptation and validation of the Persian version of the Rapid Office Stress Assessment [ROSA] checklist. Materials and Methods: This descriptive cross sectional study was conducted according to the IQOLA method. 100 office workers were selected in order to carry out a psychometric evaluation of the ROSA checklist by performing validity [face and convergent] analyses. The convergent validity was evaluated using RULA checklist. Checklist face validity was performed in two stages, firstly by consulting specialists in the field of physiotherapy, occupational therapy, and ergonomics and then through evaluating checklist by 9 ergonomists. Data analysis were done using SPSS 19. Results: The results indicated that on the whole the translation of phrases and questionnaire sentences was easy and the quality of translation was good. Validation of the Persian version questionnaire was checked and major changes were made to the ROSA checklist. Spearman correlation coefficient between total score of ROSA check list and RULA checklist was significant [r=0.7, P<0.0001]. Conclusion: The translated version of the ROSA checklist is acceptable in terms of face validity, convergent validity in target society, and hence provides a useful instrument for assessing Iranian office workers.

Liver Cirrhosis

blood

Serum markers for assessing liver fibrosis in Egyptian patients with chronic hepatitis B and C co-infection versus chronic hepatitis C.

Mobarak, Lamiaa

[E-mail:lamiaamobarak@yahoo.com](mailto:lamiaamobarak@yahoo.com)

National Hepatology and Tropical Medicine Research Institute

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 125-130

Keywords: Biomarkers; Hepatitis B, Chronic; Hepatitis C, Chronic; Coinfection

Abstract: Chronic hepatitis B and C can progress to hepatic fibrosis and cirrhosis. The stage of liver fibrosis is critical for decision of treatment and prediction of outcomes, as life threatening complications highly develop in cirrhotic patients. The aim of this study was to evaluate the diagnostic accuracy of non-invasive serum markers in the assessment of liver fibrosis in patients with combined chronic hepatitis B and C versus those with chronic hepatitis C. This study included 2 groups; G1: combined chronic hepatitis B and C, which included 71 patients and G2: chronic hepatitis C, which included 70 patients. Liver biopsy results from both groups were recorded. Three validated blood indices Fibro Q, Fibro alpha, and Biotechnology Research Center [BRC] were tested for optimal cut off values for assessing liver fibrosis in both groups. The results showed that the area under receiver operating characteristic curves [AUROC] for Fibro Q in differentiating significant fibrosis [$>F2$] from non-significant fibrosis [$\leq F2$] was 0.79 [95% CI: 0.60-0.89] in the first group and 0.85 [95% CI: 0.71-0.98] in the second group. AUROC for BRC was 0.76 [95% CI: 0.63-0.89] in the first group and 0.75 [CI: 0.60-0.89] in the second group. Fibro alpha performed less in both groups based on AUROC 0.69 and 0.68 in the first and second group respectively.

Lung Injury

surgery

Emergency surgery for major pulmonary injury.

Mokoena, Taole

[E-mail:taole.mokoena@up.ac.za](mailto:taole.mokoena@up.ac.za)

University of Pretoria - Faculty of Health Sciences - Department of Surgery

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 60-62

Keywords: Emergencies; Thoracic Injuries; Thoracotomy; Pneumonectomy; Wounds and Injuries; Resuscitation

Abstract: Severely shocked patients with thoracic injury often require emergency thoracotomy before a definite diagnosis can be made. A method of management of pulmonary injury is described by performing exploratory resuscitative anterolateral thoracotomy which can be extended across the sternum to the opposite side, if necessary. Control of haemorrhage from the lung is achieved by mass clamping of the hilum and waiting for further resuscitation. After adequate resuscitation, specific management of the lung injury is performed as indicated. This approach was used in 26 cases of life-threatening pulmonary injury. Exposure of the injured lung was good in all cases. Pneumonography was performed in 8, segmental resection in 8 and pneumonectomy in 5 cases. Surgery and resuscitation were abandoned in 5 unsalvageable cases. Eleven patients [42%] survived. All general and trauma surgeons should be able to perform emergency thoracotomy for trauma. The method described here is simple, needs no special equipment and is suitable for most instances.

Lymphohistiocytosis, Hemophagocytic

Griscelli syndrome type 2 - A case report and clinical approach to silver blonde hair.

Durrani, Sana; Chicka, Michael; Afroze, Bushra

[E-mail:bushra.afroze@aku.edu](mailto:bushra.afroze@aku.edu)

Aga Khan Medical University - Department of Pediatrics and Child Health

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 229-232

Keywords: Piebaldism; Immunologic Deficiency Syndromes; Hair

Abstract: Griscelli syndrome type 2 is a rare autosomal recessive disease caused by mutations in the RAB27A gene. It is characterized by pigmentary dilution of the skin and hair causing silvery gray hair, hemophagocytic lymphohistiocytosis and characteristic light microscopy findings in scalp hair shaft seen as large irregular clumps of pigment as opposed to the evenly distributed pigment along the hair shaft without any clumps. We describe a boy with classic features of Griscelli syndrome type 2 from Pakistan in whom a homozygous mutation in the RAB27A gene was identified that showed a single base substitution [c.598C> T] predicted to cause premature protein termination [p.Arg200[asterisk]]. We also present a clinical approach to silver blonde hair differentiating between the Griscelli syndrome types 1, 2 and 3, Chediak Hegashi Syndrome and Elejalde Syndrome.

Lymphoma

Multidetector CT [MDCT] Findings of primary hepatic lymphoma.

El Badrawy, A.; Tawfik, A.M.; Mahmoud, W.; Abdel Salam, E.; Taalab, M.M.; Farouk, O.; Zakaria, Y.; Shebl, A.M.; El Hadaad, H.

E-mail: adelelbadrawy@hotmail.com

Mansoura Faculty of Medicine - Radiology Department

GJO-Gulf Journal of Oncology [The] 2016; (20): 64-70

Keywords: Liver Neoplasms; Multidetector Computed Tomography; Retrospective Studies; Lymphatic Diseases; Biopsy

Abstract: Objective: The aim of this study was to describe the triphasic multidetector CT [MDCT] finding of primary hepatic lymphoma [PHL]. Materials and Methods: This retrospective study included eighteen patients. Each patient presented with primary hepatobiliary lymphoma without associated lymphadenopathy or other visceral involvement. Triphasic CT scanning was performed on one of two systems [64 MD CT] in 12 patients and [6 MDCT] in 6 patients. All eighteen patients underwent ultrasound percutaneous trucut liver biopsy using 18-gauge biopsy needle. Pathology was confirmed on all cases. Results: Four of eighteen patients presented with a single focal lesion. Thirteen of eighteen patients presented with multiple well defined focal lesions. One patient presented with a diffuse hepatic involvement. On triphasic CT, three patients showed gradual progressive contrast enhancement. Lesions remained isodense to the liver on the arterial phase with mild enhancement in the portal phase and showed washout on the delayed phase in two patients. The remaining thirteen patients showed multiple hypodense non-enhancing lesions. Conclusions: PHL presents a wide spectrum of imaging findings on triphasic MDCT with no characteristic imaging pattern. MDCT can be used for detection of the lesion and biopsy is used for diagnosis. PHL should always be considered in the differential diagnosis of a liver focal lesion either single or multiple.

Primary parotid lymphoma from a regional cancer center in South India.

Govind, B.K.; Lakshmaiah, K.C.; Lokanatha, D.; Suresh, B.; Premalata, C.S.; Rao, C.R.; Abraham, L.J.; Lokesh, K.N.; Rajeev, L.K.; Arroju, V.; Sathyanarayanan, V.

Kidwai Memorial Institute of Oncology - Department of Medical Oncology

GJO-Gulf Journal of Oncology [The] 2016; (20): 25-29

Keywords: Parotid Neoplasms-surgery; Retrospective Studies; Radiotherapy; Immunotherapy

Abstract: Primary parotid lymphoma [PPL] is an unusual entity and there is limited data in Indian population. Hence we undertook this retrospective observational study of primary parotid lymphoma at our Center in Southern India. This study includes 7 consecutive cases diagnosed as PPL by tissue biopsy/superficial/deep parotidectomy confirmed by immunohistochemistry between January 2007 and December 2012. Results: Median age was 54 years [range 29- 78 years], and it was more common in males. According to Ann Arbor stage, Advanced stage [stage III and IV] was seen in 2 [28.57%]. According to the International Prognostic Index [IPI], most [6] were low risk [85.7%]. Overall survival ranged from 1-45 months with median OS of 18 months. To conclude, PPL presents more often in early stage and low IPI score. Surgery +/- chemioimmunotherapy with radiotherapy to the parotid is the standard treatment at present.

Malaria, Falciparum

diagnosis

Assessment of three blood genomic-DNA preparation methods for malaria molecular diagnosis.

Al Harthi, Saeed A.

E-mail: sasharathi@uqu.edu.sa

Umm Al-Qura University - Faculty of Medicine - Department of Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 1-8

Keywords: Malaria, Falciparum-blood; DNA, Protozoan-genetics; Sensitivity and Specificity; Polymerase Chain Reaction-methods; Plasmodium falciparum-genetics

Abstract: Species-specific PCR techniques are highly sensitive and reliable alternatives to clSpecies-specific PCR techniques are highly sensitive and reliable alternatives to classical methods for malaria diagnosis and speciation, especially in endemic regions under advanced control or elimination programs where asymptomatic and low-density infections are increasingly reported. Nevertheless, the performance of these techniques is directly affected by the quality of isolated DNA templates. A Plasmodium falciparum/vivax-specific diagnostic Nested- PCR [Pf/Pv N-PCR] was used to assess three DNA preparation methods, Qiagen[registered sign] Mini-Chromatographic kit [QIAmp[registered sign]] and Jena-Biosciences[registered sign]DNA isolation kit [JB[registered sign]] for genomic DNA extraction from EDTA-preserved whole blood samples, and Whatman-FTA[registered sign] purification reagent [FTA[registered sign]] for DNA preparation from dry blood spots [DBS] collected onto FTA[registered sign]- cardsA total of 84 out of 137 blood specimens collected from malaria suspicious febrile patients who visited five health care centres in south-western endemic localities of Saudi Arabia were found P. falciparum positive by at least one method. Among these, only 76 [90%] were reported P.

falciparum malaria positive by two expert microscopists. No other species of Plasmodium were detected. Pf/Pv N-PCR revealed 84/84 [100%], 75/84 [89%], and 81 [96%] P. falciparum positive samples using DNA templates prepared by QIAmp[registered sign], JB[registered sign], and FTA[registered sign] purification methods, respectively. Therefore, Pf/Pv N-PCR, when applied to QIAmp[registered sign] DNA templates showed to be a highly sensitive diagnostic method, particularly useful for submicroscopic specimens from clinically malaria suspicious patients in endemic areas. On the other hand, Pf/Pv N-PCR of FTA[registered sign]-DBS DNA templates revealed 5 positive cases missed by microscopy, encouraging its use as an affordable field semi-adapted protocol for malaria active screening, especially in remote rural regions with limited laboratory infrastructure.

epidemiology

Malaria: a general minireview with reference to Egypt.

Saleh, Ahmad Megahed Ahmad; Adam, Samia Mohammad; Ibrahim, Abeer Mohammad Abdallah; Morsy, Tosson A.

Military Medical Academy

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 35-48

Keywords: Antimalarials-therapeutic use; Travel

Abstract: The majority of world's population-live in areas at risk of malaria transmission. Malaria is a serious Anopheles-borne disease that causes symptoms like the flu, as a high fever, chills, and muscle pain also, anemia, bloody stools, coma, convulsion, fever, headache, jaundice, nausea, sweating and vomiting. Symptoms tend to come and go in cycles. Apart from Anopheles vector, malaria could be transmitted nosocomial, blood transfusion or needle-stick injury Some types of malaria may cause more serious damage problems to heart, lungs, kidneys, or brain. These types can be deadly. The primary factors contributing to the resurgence of malaria are the appearance of drug-resistant strains of the parasite, the spread of insecticideresistant strains of the mosquito and the lack of licensed malaria vaccines of proven efficacy. In rare cases, people can get malaria if they come into contact with infected blood as in blood transfusion or needle-stick injury also nosocomial and congenital malaria was reported. This is a mini-review of malaria with information on the lethal to humans, Plasmodium falciparum, together with other recent developments in the field.

Mastectomy, Modified Radical

Effect of one versus two drain insertion on postoperative seroma formation after modified radical mastectomy.

Ebrahimifard, Farzaneh

[E-mail:drebrahimifard@gmail.com](mailto:drebrahimifard@gmail.com)

Shahid Beheshti University of Medical Sciences - Department of Surgery

Novelty in Biomedicine 2016; 4 (2): 45-50

Keywords: Seroma; Breast Neoplasms; Drainage; Postoperative Period

Abstract: Background: Modified radical mastectomy [MRM] is still one of globally accepted surgical techniques for breast cancer and in some selected patient is the gold standard type of surgery. The most frequent complication of this procedure is seroma under skin flaps or in the axilla as reported as much as 30% in some studies. The use of closed suction drainage system to reduce the incidence of this complication has been routinely accepted by surgeons; however, length of catheter stay and the number of catheters inserted in the wound are still controversial. The present study compares the results of single versus double drain insertion in patients undergoing MRM for breast cancer. Materials and Methods: The study was conducted on 100 women with breast cancer who were candidate for MRM surgery during 2007-2010 referred to Modarres hospital, Tehran, Iran as a randomized group matched controlled trial. Results: There was no significant difference between the two groups in terms of age, BMI, and tumor weight [P=0.406] [Table 1]. Similarly, the difference between the two groups was insignificant in tumor size [T] and number of lymph nodes involved [P=0.145]. There was no significant difference between the two groups in timing of axillary drain removal [P=0.064]. No significant differences were observed between the two groups in mean aspirated fluid [P=0.071] and mean aspirated sera [P=0.484] after removal of drains. Conclusion: This study revealed one drain insertion in MRM surgery is as effective as two drain and probably less morbidity and cost.

Meningioma

Iatrogenic seeding of tumor cells in thigh soft tissue upon surgical removal of intracranial meningioma.

Maddah, Ghodratollah; Shabahang, Hossein; Zehi, Vahid; Sistani, Nouriyeh Sharifi; Nejad, Hossein Mashhadi Mashhad University of Medical Sciences - Endoscopic and Minimally Invasive Surgery Research Center

Basic and Clinical Neuroscience 2016; 7 (2): 159-164

Keywords: Meningeal Neoplasms; Neoplasm Seeding; Thigh

Abstract: Introduction: Meningioma is a benign and slowly-growing tumor that is responsible for 20% of brain neoplasms. It can be accompanied by some genetic disorders such as neurofibromatosis type 2 and is more common among women. As a space occupying lesion, it produces a wide range of signs and symptoms by compressing the adjacent and underlying tissues in the brain. Trauma and viruses are possible etiologies for meningioma. The ideal treatment of benign meningioma is surgical resection. Case Presentation: In this case report, we present a middle-aged man with a seeding metastasis of the cranial meningioma [after its removal] in the left thigh. During the removal operation, fascia lata had been used to repair the dura mater and the skin defect was repaired primarily. Conclusion: We believe that the occurrence of meningioma at the site of incision in the thigh is related to using the same surgical instruments for the removal of the brain tumor.

Meningitis

Acute meningitis on account of orbital bone fracture: a case report.

ArabMazar, Zahra; Shokouhi, Shervin; MoghtaderMojhdehi, Amirhossein

E-mail: arabmazar@sbm.ac.ir

Shahid Beheshti University of Medical Sciences - Infectious Diseases and Tropical Medicine Research Center

Novelty in Biomedicine 2016; 4 (2): 84-86

Keywords: Streptococcus pneumoniae; Meningitis, Bacterial; Fractures, Bone; Orbital Fractures

Abstract: Background: Streptococcus pneumoniae [S. pneumoniae] is a gram-positive pathogen bacteria which causes a variety of diseases, including otitis media, bacteremia, and meningitis. Cases Report: A 19-year-old man with paroxysm was admitted to emergency department of hospital. He was diagnosed with S. pneumoniae meningitis on the basis of an analysis of the cerebrospinal fluid and blood culture. Conclusion: We present a rare case of meningitis. The treatment was successful by just relying on the antibiogram test results. Vancomycin treatment was discontinued, and the patient fully recovered with Ceftriaxone.

Meningoencephalitis

Egyptian eosinophilic and infectious meningoencephalitis and their impact on psychological aspects.

El Bahnasawy, Mamdouh M. M.; El Feky, Mohammad Reda; Morsy, Ayman T.A.; Ismail, Mousa, A.M.; Morsy, Tosson A.

Military Medical Academy

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 67-80

Keywords: Central Nervous System Parasitic Infections; Eosinophilia-cerebrospinal fluid; Psychology

Abstract: Meningoencephalitis is an acute inflammation of the brain and spinal cord and their covering protective membranes. Meningitis can be life-threatening because of the inflammation's proximity to the brain and spinal cord; therefore, the condition is classified as a medical emergency. The commonest symptoms of meningitis are headache and neck stiffness associated with fever, confusion or altered consciousness, vomiting, and an inability to tolerate light [photophobia] or loud noises [phonophobia]. Children often exhibit only nonspecific symptoms, such as irritability and drowsiness. If a rash is present, it may indicate a particular cause of meningitis; for instance, meningitis caused by meningococcal bacteria may be accompanied by a characteristic rash. A broad variety of allergic, infectious, neoplastic, and idiopathic diseases are associated with increased blood and/or tissue eosinophilia and range in severity from self-limited conditions to life-threatening disorders. Although accepted upper limits of normal blood eosinophil numbers vary somewhat, a value above 600 eosinophils /microL of blood is abnormal in the vast majority of cases. Generally speaking, there are several possible causes of eosinophils in the CSF; undoubtedly parasitic infection is one of the main causes.

Methicillin-Resistant Staphylococcus aureus

drug effects

Effect of linezolid alone and in Combination with other antibiotics, on methicillin-resistant staphylococcus aureus.

Yehia, Hoda; El Said, Manal; Azmy, Magda; Badawy, Moushira; Mansy, Soheir; Gohar, Hamida; Madany, Nadia Theodor Bilharz Research Institute - Department of Electron Microscopy

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 57-66

Keywords: Linezolid-pharmacology; Anti-Bacterial Agents-pharmacology; Drug Therapy, Combination; Microbial Sensitivity Tests; Methicillin Resistance

Abstract: The prevalence of methicillin-resistant Staphylococcus aureus [MRSA] strains has presented a new challenge in antimicrobial medication. Linezolid is a new drug with potent activity on Grampositive pathogens such as MRSA. The aim of the study was to investigate the in vitro activity of linezolid alone and in combination with imipenem, vancomycin or rifampicin to determine the most active therapy against MRSA strains. Twenty

clinical MRSA strains were isolated from patients admitted to inpatient departments and outpatient clinics of Theodor Bilharz Research Institute. Standard strain MRSA ATCC 43300 was included as a control. The MICs of MRSA strains to linezolid, vancomycin, imipenem and rifampicin were evaluated using E test. Time-kill curve were used to assess the in vitro activity of linezolid [at 8x MIC] alone and in combination with imipenem [at 32x MIC], vancomycin or rifampicin [at 8x MIC]. Scanning and transmission electron microscopy were performed to compare bacterial morphological alterations owing to the different combinations. Time-kill studies showed synergistic effect when linezolid combined with imipenem was tested against all the MRSA strains. Linezolid plus vancomycin or rifampicin combinations did not display any synergism or antagonism. Scanning and transmission electron microscopy observations confirmed the interactions observed in time kill experiments. Linezolid in combination with subinhibitory concentrations of imipenem can be bactericidal against MRSA strains and appears to be a promising combination for the treatment of MRSA infections. No synergistic activity was seen when the linezolid and vancomycin or rifampicin were combined. Linezolid could prevent the emergence of mutants resistant to rifampicin.

Middle Lobe Syndrome

etiology

Pulmonary arteriovenous malformation: a culprit of middle lobe syndrome?.

Massloom, Hasan S.

[E-mail:hasan.massloom@JHAH.com](mailto:hasan.massloom@JHAH.com)

Johns Hopkins Aramco Healthcare Saudi Aramco

Bahrain Medical Bulletin 2016; 38 (1): 50-52

Keywords: Middle Lobe Syndrome-diagnosis; Middle Lobe Syndrome-complications; Pulmonary Artery-abnormalities; Pulmonary Veins-abnormalities; Physical Therapy Modalities; Anti-Bacterial Agents

Abstract: Middle lobe syndrome [MLS] refers to lobar atelectasis and bronchiectasis and is either obstructive or non-obstructive type. A 63-year-old asthmatic female patient presented with recurrent pneumonia and unrelenting cough which proved to be due to pulmonary arteriovenous malformation that led to obstructive MLS. CT scan showed right middle lobe volume loss, bronchiectasis and dilated pulmonary vessels. The patient was operated for right middle lobectomy. The pathological examination revealed pulmonary arteriovenous malformation with post obstructive changes. Pulmonary arteriovenous malformation should be part of the differential diagnosis of MLS and should prompt early referral for surgery. Middle lobe is anatomically susceptible to obstruction of the bronchus and to atelectasis due to its poor drainage and ventilation. Conservative treatment with antibiotics, bronchodilators, and chest physiotherapy are effective in 33.3 to 66.6% of patients. Lobectomy is required in a third of MLS patients who fail conservative management or have persistent symptoms that last more than 6 months or have malignant obstruction.

Mitomycin

toxicity

Mitomycin-C induced genotoxic effect in lymphocytes and histological alterations in testes of male albino mice.

Ei Alfy, Nagla Zaky Ibrahim; Mahmoud, Mahmoud Fathy; Abdullah, Ayman Mohammad

Ain Shams University - Faculty of Education - Department of Biological and Geological Sciences

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 18-27

Keywords: Lymphocytes-drug effects; Testis-pathology; Testis-drug effects; Mice; Comet Assay; Dose-Response Relationship, Drug; Time Factors

Abstract: Background: mitomycin-C [MC] is an anti-cancer drug against several tumor types, including colon, breast and head and neck. In this demonstration, the genotoxic effects of mitomycin-C on DNA content and testicular tissue of male albino mice *Mus musculus* were studied. Materials and Methods: mitomycin-C treated animal was injected intraperitoneally with tested doses of mitomycin-C single time at the first day of the experiment. Comet assay was used to detect the DNA damage in mice lymphocytes and the mean of total comet score was increased by dose and time among all treated groups. Results: The histological alterations caused in the testis of mice after mitomycin-C treatment displayed variable changes in both the seminiferous tubules and the interstitial tissue. Changes in seminiferous tubules were represented by hypoplasia of the germinal epithelium and spermatogenic arrest at various stages of spermatogenesis. The most prominent changes reported in the intertubular tissue were represented by the presence of a homogeneous and intensely eosinophilic ground substance in the interstitial areas, congestion of blood vessels as well as haemorrhage. The histological changes were also significantly increased by time and dose.

Morphine Dependence

complications

Impacts of morphine addiction on spermatogenesis in rats.

Takzare, Nasrin; Samizadeh, Esmaeil; Shoar, Saeed; Zolbin, Masoumeh Majidi; Naderan, Mohammad; Lashkari, Ali; Bakhtiarian, Azam

Tehran University of Medical Sciences - Department of Anatomy

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 303-308

Keywords: Substance-Related Disorders; Fertility; Spermatogenesis; Spermatogenesis-Blocking Agents; Naloxone-pharmacology; Rats, Wistar

Abstract: Background: There are numerous investigations on wide range of issues that disrupt regulatory spermatogenesis, individuals who are exposed to drug abuse faced infertility and immature spermatogenesis. Objective: The aim of this study was to evaluate the addiction effects of morphine and its derivatives on rats spermatogenesis. Materials and Methods: 40 male Wistar rats were randomly divided into 5 equal groups, which were exposed either with intravenous morphine, naloxone, naloxone and morphine, sham [with normal saline injection] and a control group without infusion. Spermatogenesis was assessed after three months via histological sections with hematoxylin and eosin staining, using a light microscope based on measurement of spermatogonia, spermatocyte, spermatid, and spermatozoa. Results: Those rats that received opioids had changes in spermatogenesis function. The population of spermatogenesis cycle cells at spermatogonia, spermatocyte, spermatid, and spermatozoa stages was significantly decreased in those rats that received opioid in comparison to the control group [$p < 0.05$]. Histological studies revealed that changes in different groups of opioid application might affect sperm formation. Sperm count in morphine group was [0+/-0] and in naloxone group, naloxone+morphine, sham and control were 235+/-3.77, 220+/-3.81, 247.12+/-6.10 and 250+/-6.54, respectively [$p < 0.001$]. Conclusion: Morphine could affect all spermatogenesis stages.

Multiple Myeloma

Exploring the clinicopathological parameters affecting the outcome in Egyptian patients with multiple myeloma.

Sallam, Y.A.; Samra, M.A.; Gaber, A.A.

E-mail:ysallam@hotmail.com

Cairo University - National Cancer Institute - Department of Medical Oncology

GJO-Gulf Journal of Oncology [The] 2016; (20): 51-63

Keywords: Patient Outcome Assessment; Disease-Free Survival; Survival Rate; Retrospective Studies; Hypercalcemia; Plasma Cells

Abstract: Background: Multiple myeloma [MM] is a plasma-cell neoplasm in which the interplay of several clinical, pathological and genetic parameters affects the patient's prognosis and response to treatment and survival. Aim: The aim of this study was to evaluate the different clinicopathological parameters of MM patients in correlation with response to therapy, progressionfree survival [PFS] and overall survival [OS]. Methods: This retrospective study was performed on 60 MM patients diagnosed at NCI, Cairo University from January 2005 to December 2008. The patients were evaluated for different clinicopathological parameters which were correlated to their response to treatment, OS and PFS. Results: Sixty patients were followed up for a median period of 21 months wherein about 90% received 1st line treatment: 34 VAD, 17 MP and 3 dexamethasone. Six patients [10%] were referred for BSC. CR was achieved by 15%, 11.7% achieved good PR, 6.7% achieved PR, 22.1% have stable disease, 35% experienced disease progression. ECOG PS-I patients have 39 months median survival compared to 12 months for patients with PS ECOG-II [P 0.005]. Patients with multiple skeletal lesions [= >3] have median OS of 19 months [P 0.03]. Patients who presented with plasmacytoma have better OS than those without [38 months versus 14 months] [P<0.05]. Patients <60 years old have a better median OS compared to patients >60 years [37 months versus 12 months] [P 0.001]. OS was 39 months in female patients versus 14 months in male patients [P0.025]. Median OS was 9 months for patients with comorbidities versus 27 months for those without [P0.01], 39 months for patients with non-detected paraproteinuria versus 18 months for those with paraproteinuria [P 0.045], 18 months for stage II disease versus 12 months for stage III disease [P0.001], 12 months for patients with elevated serum LDH versus 39 months for those with normal levels [P 0.001], 27 months for patients with normal serum creatinine level versus 13 months for those with elevated levels [> 1.4 mg/dl] [P 0.005], 27 months for patients with normal serum calcium levels versus 10 months for those with hypercalcemia [P 0.03]. Conclusion: Besides FISH-guided molecular cytogenetic classification of myeloma abnormality, a specific risk-stratification model based upon the patient's age, sex, performance status, lytic bone lesions, plasma cells labeling index, serum creatinine, calcium, LDH, B2M and paraproteins in serum and urine, can depict the response to treatment, OS and PFS of patients with MM.

Multiple Sclerosis

Expanded disability status scale-based disability and dental-periodontal conditions in patients with multiple sclerosis.

Hatipoglu, Hasan; Kabay, Sibel Canbaz; Hatipoglu, Mujgan Gungor; Ozden, Hilmi
Dumlupinar University - Faculty of Medicine - Departments of Periodontology

Medical Principles and Practice 2016; 25 (1): 49-55

Keywords: Disability Evaluation; Dental Plaque Index; Periodontal Index; DMF Index; Oral Health

Abstract: Objective: The aim of this study was to evaluate the association between different disability states in patients with multiple sclerosis [MS] as determined by the expanded disability status scale [EDSS] and dental-periodontal measures. Subjects and Methods: Eighty patients with MS [64 females and 16 males] were included in this study. Data on MS types, attack frequency, disease duration, EDSS scores and orofacial complaints prior to an MS attack were obtained from medical records. The plaque index [PI], probing depth [PD], clinical attachment level [CAL], gingival index [GI], decayed-missing-filled teeth [DMFT] index and number of present teeth were measured during one dental examination for each subject. The MS patients were divided into the following 2 groups based on their EDSS scores: low physical disability [L-DS] and high physical disability [H-DS]. Differences in dental parameters between groups of low and high disability were investigated. $p < 0.05$ was considered statistically significant. Results: The mean age of the participants was 38.06 ± 10.11 years. Age and disease duration were higher in the H-DS MS group than in the L-DS MS group [$p < 0.05$]. The PI, PD and GI were higher and the number of filled teeth was lower in the H-DS MS group than in the L-DS MS group [$p < 0.05$]. The EDSS scores of the H-DS MS group presented a significant correlation with the number of decayed teeth [$r = -0.548$, $p = 0.005$]. Orofacial complaints prior to an MS attack were reported by 18 [22.5%] patients. Conclusion: Oral measurements revealed various differences between groups of low and high disability in MS patients. In addition, some maxillofacial-oral complaints prior to an MS attack were observed.

Pathophysiological concepts in multiple sclerosis and the therapeutic effects of hydrogen sulfide.

Talaei, Fatemeh

E-mail: Talaei@irimc.org

Tehran University of Medical Sciences - Novel Drug Delivery Systems Lab

Basic and Clinical Neuroscience 2016; 7 (2): 121-136

Keywords: Hydrogen Sulfide-therapeutic use; In Vitro Techniques

Abstract: Introduction: Multiple sclerosis [MS] is generally known as a manageable but not yet curable autoimmune disease affecting central nervous system. A potential therapeutic approach should possess several properties: Prevent immune system from damaging the brain and spinal cord, promote differentiation of oligodendrocyte progenitor cells [OPCs] into mature oligodendrocytes to produce myelin, prevent the formation of fibronectin aggregates by astrocytes to inhibit scar formation, and enhance function of healthy endothelial cells [ECs]. Methods: To determine if an increase in sulfur contents through H₂S, a potent antioxidant known to induce protective autophagy in cells, could provide the above desired outcomes, peripheral blood mononuclear cells [PBMNCs], OCPs, astrocytes, and ECs were treated with NaHS [50 microM] in vitro. Results: Transmigration assay using EC monolayer showed that serotonin increased migration of PBMNC while pretreatment of EC with NaHS inhibited the migration induced by serotonin treatment. NaHS upregulated proteins involved in immune system response and downregulated PBMNCs- and EC-related adhesion molecules [LFA-1 and VCAM-1]. Furthermore, it had a cell expansion inducing effect, altering EC morphology. The effects of NaHS on OPCs and astrocytes were studied compared to mTOR inhibitor rapamycin. In NaHS treated astrocytes the induced fibronectin production was partially inhibited while rapamycin almost fully inhibited fibronectin production. NaHS slowed but did not inhibit the differentiation of OCPs or the production of myelin compared to rapamycin. Conclusion: The in vitro results point to the potential therapeutic application of hydrogen sulfide releasing molecules or health-promoting sulfur compounds in MS.

Myocardial Infarction

Effect of cardiac rehabilitation on blood pressure and functional capacity in patients after myocardial infarction.

Parvand, Mandana; Goosheh, Babak; Sarmadi, Alireza

E-mail: parvandmn@yahoo.com

Tarbiat Modares University - Department of Physical Therapy

Novelty in Biomedicine 2016; 4 (2): 56-60

Keywords: Blood Pressure; Cross-Sectional Studies; Functional Residual Capacity

Abstract: Background: Before the year 1950 treatment of myocardial infarction patients was complete bed rest for several weeks and reduces physical activity for several months. Cardiac rehabilitation based on exercise training reduces the effects of deconditioning of bed rest. The primary purpose of this study was to determine the methods and means of prevention and treatment of coronary artery disease. Materials and Methods: This study was designed clinical trial and cross sectional study before and after intervention, the effect of our new protocol was assessed according to method of Bruce stress test. Measurement consisted of Blood Pressure and Functional Capacity, which were recorded and compared before and after intervention. Results: There was a

significant increase in functional capacity according to method of Bruce stress test after ten session of training. The criterion deviation at functional capacity variable was 13.19 +/- 2.242 METS and 24.42 +/- 6.00 METS before and after 10 sessions. Respectively, this obtained METS [body oxygen survey at rest state equal to 3/5 milliliter oxygen to each kg person weight at minute] rise amount from secondary posttest to primary test [P<0.05]. There was also a significant decrease in systolic blood pressure after ten session of training. The criterion deviation and average was 121.5 +/- 8.83 and 112.00 +/- 9.18 for systolic blood pressure. This decline amounts has a meaningful variable amount given P-value <0.05. Conclusion: Cardiac rehabilitation can increase the performance of blood circulation and uptake of oxygen in body. These changes showed a significant increase in functional capacity it can also reduce resistance of blood circulation and showed a significant decrease in systolic blood pressure.

Nails, Ingrown

therapy

Answers to medical quiz.

Bahrain Medical Bulletin 2016; 38 (1): 69-69

Keywords: Hallux-microbiology; Hallux-injuries; Arthritis; Nails, Ingrown-surgery

Neck Pain

[Comparison of cervical extensor muscles thickness in females with chronic nonspecific neck pain and healthy individuals by ultrasonography]

Baghi, Raziye; Karimi, Noureddin; Rahnama, Leila

University of Social Welfare and Rehabilitation Sciences - Department of Physiotherapy

Journal of Rehabilitation 2016; 16 (4): 366-373

Keywords: Ultrasonography

Abstract: Objective: Neck pain is one of the most common musculoskeletal disorders. Structural and functional alteration of cervical muscles is a commonly-reported complication of chronic neck pain [CNP]. Measurement of muscle thickness is an acceptable way to evaluate muscle morphological structure. Therefore, this study aimed to measure cervical extensor muscles thickness in individuals with chronic nonspecific neck pain and healthy controls using ultrasonography so as to evaluate structural differences between the 2 groups. Materials and Methods: A total of 30 female volunteers [15 individuals with nonspecific CNP and 15 controls] participated in this casual comparative study. Thickness of cervical extensor muscles, including multifidus, semispinalis cervicis, semispinalis capitis, splenius capitis, and upper trapezius at the level of the fourth cervical vertebrae were measured using ultrasonography in resting position. Independent t-test was performed to analyze the data by using the spss 20 software. Results: The thicknesses of cervical multifidus and semispinalis cervicis muscles in patients with CNP were smaller than those of controls with P=0.03 and P=0.01, respectively. There were no significant differences between two groups regarding the thicknesses of semispinalis capitis, splenius capitis, and upper trapezius muscles [P>0.05]. Conclusion: Reduced multifidus and semispinalis cervicis thickness seen in the present study indicates deep neck extensor muscles atrophy and weakness in patients with neck pain. However, there were no differences between two groups with regard to superficial muscles thicknesses. Accordingly, exercise therapy for deep muscles should be considered in the management of patients with nonspecific CNP.

Neoplasms

epidemiology

Cancer incidence and mortality in the kingdom of Bahrain statistics and trends.

Al Awadhi, Mohammed Amin; Abulfateh, Najat Mohammed; Abu Hassan, Fatema; Fikree, Majida Ahmed; Janahi, Eman; Carlo, Reshma

[E-mail:NAli5@health.gov.bh](mailto:NAli5@health.gov.bh)

Ministry of Health

Bahrain Medical Bulletin 2016; 38 (1): 30-34

Keywords: Neoplasms-prevention and control; Incidence; Neoplasms-diagnosis; Neoplasms-mortality; Data Interpretation, Statistical

Abstract: Background: The availability of baseline data for cancer incidence and trends could help policy makers in implementing evidence-based strategies for cancer prevention, early detection and management Objective: To evaluate the epidemiology of cancer among the Bahraini population from 1998-2011. Design: A Retrospective Study Setting: Cancer Registry, Ministry of Health, Bahrain. Method: All cancer cases in the

Bahrain Cancer Registry from 1 January 1998 to 31 December 2011 were reviewed Result: Between January 1998 to December 2011, 5, 966 newly diagnosed cases of cancer were documented, an annual average of 426 cases; 2, 815 [47.2%] were males, and 3, 151 [52.8%] were females. The average annual crude incidence cancer rate was 86.3/100, 000 Bahraini males and 97.5/100, 000 Bahraini females. The average annual world ASRs were 136.4 and 135.8/100, 000 Bahraini males and females, respectively. During the 14-year period, the world ASRs for the Bahraini population appear to have declined in both sexes. The decline was more marked among males, as rates dropped from 160.9 in 1998 to 111.2/100, 000 in 2011. The average annual agespecific incidence rates were observed to increase dramatically with advancing age in both genders. Conclusion: During the 14-year period, the average annual world ASRs were 136.4 and 135.8 per 100, 000 Bahraini males and females respectively, which is higher than GCC states and lower than Australia/New Zealand.

Neurilemmoma

diagnosis

Nasopalpebral schwannomas and human immunodeficiency virus infection.

Handra Luca, Adriana; Haddar, Djamel; Morin, Anne Sophie
 E-mail:adriana.handra-luca@hotmail.com

Medical Principles and Practice 2016; 25 (1): 96-98

Keywords: Nose; Eyelids; HIV; HIV Infections; Sarcoma, Kaposi; Magnetic Resonance Imaging

Abstract: Objective: To report a case of a schwannoma of nasopalpebral location, occurring in a human immunodeficiency virus [HIV]-positive patient. Clinical Presentation and Intervention: A 55-year-old man presented with a nasopalpebral painless tumefaction, pneumopathy and HIV-related immunodepression after stopping combination antiretroviral therapy. Magnetic resonance imaging showed subcutaneous masses, with contrast enhancement of the left nose pyramid, internal cantus and inferior palpebral area, suspicious of Kaposi sarcoma. The resected specimen showed schwannoma histology, with tumor cells expressing S100 protein and WT1. Conclusion: The features of a rare case of facial schwannoma of nasopalpebral location in an HIV-positive patient are reported. The diagnosis may be difficult before microscopic examination, with imaging features suggesting a Kaposi sarcoma.

Neurofeedback

Neurofeedback: a comprehensive review on system design, methodology and clinical applications.

Marzbani, Hengameh; Marateb, Hamid Reza; Mansourian, Marjan
 University of Isfahan - Faculty of Engineering - Department of Biomedical Engineering

Basic and Clinical Neuroscience 2016; 7 (2): 143-158

Keywords: Brain Diseases; Electroencephalography; Complementary Therapies; Brain Waves

Abstract: Neurofeedback is a kind of biofeedback, which teaches self-control of brain functions to subjects by measuring brain waves and providing a feedback signal. Neurofeedback usually provides the audio and or video feedback. Positive or negative feedback is produced for desirable or undesirable brain activities, respectively. In this review, we provided clinical and technical information about the following issues: [1] Various neurofeedback treatment protocols i.e. alpha, beta, alpha/theta, delta, gamma, and theta; [2] Different EEG electrode placements i.e. standard recording channels in the frontal, temporal, central, and occipital lobes; [3] Electrode montages [unipolar, bipolar]; [4] Types of neurofeedback i.e. frequency, power, slow cortical potential, functional magnetic resonance imaging, and so on; [5] Clinical applications of neurofeedback i.e. treatment of attention deficit hyperactivity disorder, anxiety, depression, epilepsy, insomnia, drug addiction, schizophrenia, learning disabilities, dyslexia and dyscalculia, autistic spectrum disorders and so on as well as other applications such as pain management, and the improvement of musical and athletic performance; and [6] Neurofeedback softwares. To date, many studies have been conducted on the neurofeedback therapy and its effectiveness on the treatment of many diseases. Neurofeedback, like other treatments, has its own pros and cons. Although it is a non-invasive procedure, its validity has been questioned in terms of conclusive scientific evidence. For example, it is expensive, time-consuming and its benefits are not long-lasting. Also, it might take months to show the desired improvements. Nevertheless, neurofeedback is known as a complementary and alternative treatment of many brain dysfunctions. However, current research does not support conclusive results about its efficacy.

Nigella sativa

chemistry

In vivo and in vitro efficacy of Nigella sativa aqueous extract on blastocystis hominis.

Eida, Omima M.; El Shafei, Hanaa A.; Nomeir, Youssa A.; El Safhi, Mohammed B.

E-mail: amanyaida2@hotmail.com

Suez Canal University - Faculty of Pharmacy - Department of Pharmaceutics

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 27-34

Keywords: Plant Extracts-pharmacology; Metronidazole-pharmacology; Antiprotozoal Agents; Blastocystis Infections; Mice; Antiprotozoal Agents

Abstract: Metronidazole [MTZ] was the most widely accepted treatment for Blastocystis hominis [B. hominis] with high treatment failure rate, resistance and potential mutagenic and carcinogenic effects so there is urgent need to find out new, effective and safe treatment against B. hominis. The present research aimed to evaluate the therapeutic effect of the aqueous extract of Nigella sativa [NS] at different doses on B. hominis in vitro and in vivo in comparison to MTZ as a control drug. Isolates of B. hominis were obtained from patients complaining of diarrhea and abdominal pain. Isolates were cultured in egg diphasic medium [LE] for in vitro study and to adjust proper inoculating dose for in vivo study. The aqueous extract of NS at concentrations of 100 and 500?g/ml showed a potent lethal effect on B. hominis isolates in vitro. Caecal tissue of experimentally infected and treated mice with two different doses of NS [250 and 500mg/kg/d] were examined histopathologically and compared with that of mice infected and treated by two doses of MTZ [62 and 125 mg/kg/d] as control drug and Infected untreated mice as negative control group. Histopathological examination of infected untreated group showed all pathological degrees in the caecal tissue while infected treated one showed remission of pathological changes especially with higher dose [500mg/kg]. Present study proved that N. sativa had inhibitory effect on B. hominis in vitro and prevented cytopathic effect in infected mice inoculated orally with B. hominis.

Nursing Care

Gap analysis between perceptions and expectations of medical-surgical patients in a public hospital in Saudi Arabia.

Al Momani, Mohammed Mahmoud

E-mail: malmomani@ksu.edu.sa

King Saud University - College of Applied Medical Sciences - Department of Community Health Sciences

Medical Principles and Practice 2016; 25 (1): 79-84

Keywords: Patient Satisfaction; Perception; Quality of Health Care; Hospitals, Public; Cross-Sectional Studies; Nursing Care

Abstract: Objectives: To investigate patients' satisfaction with nursing care by measuring the gap between patients' expectations of care and perceptions of the actual care provided and to identify the areas of nursing care that need improvement. Subjects and Methods: A cross-sectional survey was conducted among patients who were admitted to the Departments of Medicine and Surgery at King Saud Medical City, Riyadh, Saudi Arabia. A modified Service Quality [SERVQUAL] instrument was adapted to collect information from a convenience sample of 432 patients from November 25, 2012, to February 3, 2013. The instrument comprised 22 pairs of questions assessing 5 dimensions of the nursing care provided to patients during hospitalizations. The mean patient expectations and perceptions as well as the gap score values for each dimension of nursing service were tested for differences between the mean scores of the sample at a level of significance of 0.05 using a t test. Results: The gap score for all of the 5 dimensions of nursing services were: responsiveness, -1.71; reliability, -1.48; tangibles, -1.36; assurance, -1.26, and empathy, -0.96. Service quality across the dimensions of responsiveness and reliability was statistically significant [p < 0.05]. This result indicated that patients were not satisfied with the nursing service quality in relation to all dimensions. Conclusion: Our study showed negative gaps for the 5 nursing service quality dimensions evaluated. This could provide nurses with information about the aspects of nursing care that promote more positive patient outcomes and satisfaction.

Obesity

Knowledge, perceptions, and attitudes of dental students towards obesity.

Awan, K.H.; Khan, S.; Abadeen, Z.; Khalid, T.

E-mail: kamranhabibawan@gmail.com

King Saud University - College of Dentistry - Department of Oral Medicine and Diagnostic Sciences

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 44-48

Keywords: Oral Health; Students, Dental; Knowledge; Perception; Surveys and Questionnaires; Cross-Sectional Studies; Attitude

Abstract: Objective: Obesity is a chronic medical condition associated with various oral health problems. The aim of this study was to assess the knowledge, perceptions, and attitudes of dental students towards obesity. Methods: Second-, third-, and fourth-year dental students completed a self-administered questionnaire. An ethics committee approved the study. Participants were asked questions focused on three areas: [i] knowledge, [ii] perceptions, and [iii] attitudes about obesity. Data analyses were carried out using SPSS version 20. Results: Among the dental students, 78.9% received 0-1 h of formal education about obesity. The mean score of the total time allocated for obesity-related education was 1.31 +/- 0.23 h. Eighty-nine percent of the dental students agreed that obesity is a chronic medical condition, 30% agreed that they would modify their equipment and office furniture to accommodate obese patients, and 46.8% were interested in learning more about obesity in dental school. Conclusions: Obesity-related education should be implemented as a formal component of dental student training. Oral health practitioners should also provide their patients with information about how weight loss is beneficial to both general and oral health.

Oncolytic Virotherapy

Interleukin-12-expressing oncolytic virus: a promising strategy for cancer immunotherapy.

Alkayyal, Almohanad A.; Mahmoud, Ahmad B.; Auer, Rebecca C.

University of Tabuk - Department of Medical Laboratory Technology

Journal of Taibah University Medical Sciences 2016; 11 (3): 187-193

Keywords: Oncolytic Viruses; Antineoplastic Agents; Immunotherapy; Interleukin-12

Abstract: Oncolytic viruses [OVs] are an emerging class of novel anti-cancer therapeutic agents that selectively infect and destroy cancerous tissues without damaging normal cells. With the recent US Food and Drug Administration [FDA] approval of Herpes Virus [T-VEC] for the treatment of advanced melanoma, oncolytic virotherapy has gained more attention for further development as a novel form of immunotherapy. A viable approach to maximize the efficacy of OVs involves arming them with immune-enhancing cytokines that are capable of boosting the host's immune response to effectively attack tumour cells. Interleukin-12 [IL-12] is a powerful cytokine with potent antitumour activities that activates both innate and adaptive anti-tumour responses. Several studies have demonstrated that IL-12-expressing OVs improve the therapeutic index in pre-clinical tumour models by activating and recruiting dendritic cells [DCs], cytotoxic natural killer [NK] cells and cytotoxic T cells, which subsequently improve tumour clearance. In this review, the immunological mechanisms of IL-12-expressing viruses are discussed.

Orthodontic Appliance Design

Comparison of wear resistance of Hawley and vacuum formed retainers: an in-vitro study.

Moshkelgosha, V.; Shomali, M.; Momeni, M.

Shiraz University of Medical Sciences - Orthodontic Research Center - Department of Orthodontics

JDB-Journal of Dental Biomaterials 2016; 3 (2): 248-253

Keywords: Orthodontic Retainers; Dental Materials; Materials Testing; Vacuum

Abstract: Statement of Problem: As a physical property, wear resistance of the materials used in the fabrication of orthodontic retainers play a significant role in the stability and long term use of the appliances. Objectives: To evaluate the wear resistance of two commonly used materials for orthodontic retainers: Acropars OP, i.e. a polymethyl methacrylate based material, and 3A-GS060, i.e. a polyethylene based material. Materials and Methods: For each material, 30 orthodontic retainers were made according to the manufacturers' instructions and a 30x30x2 mm block was cut out from the mid-palatal area of each retainer. Each specimen underwent 1000 cycles of wear stimulation in a pin on disc machine. The depth of wear of each specimen was measured using a Nano Wizard II atomic force microscope in 3 random points of each specimen's wear trough. The average of these three measurements was calculated and considered as mean value wear depth of each specimen [micro m]. Results: The mean wear depth was 6.10 micro m and 2.15 micro m for 3A-GS060 and Acropars OP groups respectively. Independent t-test showed a significant difference between the two groups [p < 0.001]. The results show Polymethyl methacrylate base [Acropars] is more wear resistance than the polyethylene based material [3A-GS060]. Conclusions: As the higher wear resistance of the fabrication material can improve the retainers' survival time and its cost-effectiveness, VFRs should be avoided in situations that the appliance needs high wear resistance such as bite blocks opposing occlusal forces.

Osteoarthritis, Knee

Knee osteoarthritis in type 2 diabetes mellitus: does insulin therapy retard osteophyte formation?

Al Jarallah, Khaled; Shehab, Diaa; Abdella, Nabila; Al Mohamedy, Hisham; Abraham, Mini

E-mail: aljarallah@hsc.edu.kw

Kuwait University - Faculty of Medicine - Department of Medicine

Medical Principles and Practice 2016; 25 (1): 12-17**Keywords:** Diabetes Mellitus, Type 2; Insulin; Cross-Sectional Studies; Osteophyte; Logistic Models

Abstract: Objective: The aim of this study was to investigate whether or not radiographic changes observed in knee osteoarthritis [OA] in type 2 diabetes mellitus [T2DM] patients on insulin therapy differed from those not on insulin. Material and Methods: A cross-sectional study was performed in 311 subjects: 211 T2DM patients and 100 without diabetes [controls] in Mubarak Hospital, Kuwait. Patients were categorized into 3 groups: T2DM patients not on insulin [G1, n = 99], T2DM patients on insulin [G2, n = 112] and a nondiabetic control group [G3, n = 100]. Plain X-ray of both knees was used to assess the changes of knee OA and graded using the Kellgren-Lawrence scale [0-4] and the Osteoarthritis Research Society International Atlas grading scale [0-3]. A total of 622 knee X-rays were evaluated. SPSS version 21.0 was used for data analysis. Results: A highly significant association [$p < 0.0001$] was observed for joint space narrowing [JSN] as well as for osteophyte formation between the three groups. Comparing G2 and G3, a highly significant association [$p < 0.0001$] was retained for JSN [201 [89.7%] vs. 199 [99.5%]] and for osteophyte formation [26 [11.7%] vs. 72 [36.0%]]. Comparing G1 and G2, significantly less osteophyte formation was noted in G2 patients compared to G1 patients [26 [11.7%] vs. 39 [19.7%], $p = 0.02$]. Multivariate logistic regression analysis showed that the G2 group had less chance of osteophyte formation than either the G1 group or G3 control group [OR = 0.294, $p = 0.008$ and OR = 0.098, $p < 0.001$, respectively]. Conclusion: Our findings show that T2DM patients with OA knees on insulin therapy have less radiographic osteophytes compared to T2DM patients not on insulin.

Osteogenesis

drug effects**Effects of a combination therapy of sclerostin antibody III and raloxifene on bone formation markers in ovariectomized rats.**

Allam, Hayam Ibrahim Gad

E-mail:hayam_gad@hotmail.com

King Saud University - College of Medicine - Physiology Department

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 46-50**Keywords:** Genetic Markers; Bone Morphogenetic Proteins; Antibodies, Monoclonal; Raloxifene Hydrochloride; Ovariectomy; Rats

Abstract: Objective: To determine the systemic effect of sclerostin monoclonal antibody [Scl-AbIII] administration on markers of bone formation and compare it with a combination of sclerostin antibody and raloxifene. Study Design: Experimental study. Place and Duration of Study: Medical College Animal House at King Khalid University Hospital, Riyadh, Saudi Arabia, from January to November 2014. Methodology: Forty-five female rats were divided into 5 groups equally; 1 control group and 4 groups of ovariectomized [OVX] rats: control OVX rats and OVX rats treated by Scl-AbIII, raloxifene or Scl-AbIII+raloxifene one month after ovariectomy, continued for 4 weeks. At the end of treatment, serum levels of Bone Specific Alkaline Phosphatase [BSAP], alkaline phosphatase, osteocalcin, Insulin-like Growth Factor-1 [IGF-1], Parathyroid Hormone [PTH], Ca[2+] and phosphorus were measured. Uterus was weighed and body weight change was calculated. Results: Scl-AbIII or raloxifene treatment produced significant increase of serum BSAP, osteocalcin, IGF-1, PTH and Ca[2+] levels. Raloxifene, either alone or combined with Scl-AbIII attenuated the decrease in uterus wet weight, and the increase in body weight seen in OVX rats. Combination therapy of Scl-AbIII, and raloxifene produced significant increase of serum alkaline phosphatase, osteocalcin and IGF-1 levels than treatment with either Scl-AbIII or raloxifene alone. Conclusion: Combination therapy of Scl-AbIII and raloxifene is an attractive strategy to enhance bone formation and can offer better gain over treatment with either one of them alone. Confirmation of these preliminary observations must await careful long-term studies.

Osteogenesis Imperfecta

Cardiological assessment of a cohort of Egyptian patients with osteogenesis imperfecta type III.

El Abd, Heba Salah A.; Moghazy, Mohamed

E-mail:hsalahabd@yahoo.com

Ain Shams University - Faculty of Medicine - Department of Pediatric

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 197-200**Keywords:** Heart Defects, Congenital-ultrasonography; Heart Ventricles-pathology; Ventricular Function; Echocardiography; Retrospective Studies; Cohort Effect

Abstract: Background: Osteogenesis imperfecta is a genetic disorder of bones, which has different types. Type III is characterized by recurrent fractures, progressive bone deformities. Cardiac manifestation is one of the important extraskeletal manifestations. Aim of the study: To assess the ECHO cardiographic findings in Egyptian osteogenesis imperfecta patients type III [OI III]. Patients and Methods: This retrospective study included 35 OI III patients. Their age ranged from 2 months to 18 years with a mean of 6.34 +/- 4.85. Standard echocardiography was performed, and heart valves were examined. The dimensions of the left ventricle, and

ejection fraction were measured. Results: Abnormal ECHO findings were found in 8 patients [22.9%]. Atrial septal defect [ASD], and patent ductus arteriosus [PDA] were the commonest cardiac findings with 5.7% each. Trivial tricuspid regurgitation was found in 9 patients, this was considered normal finding. There was no significant difference in ECHO findings between males and females with OI. Conclusion and recommendation: The presence of cardiac abnormalities is documented in OI patients whether congenital or valvular, and so ECHO cardiography should be routine in all patients with OI.

Osteoporosis

Critical need of osteoporosis risk assessment tool for Pakistan.

Jafri, Lena; Iqbal, Romaina; Khan, Aysha Habib

The Aga Khan University - Department of Pathology and Laboratory Medicine

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 80-80

Keywords: Risk Assessment; Health Services Needs and Demand

Ovarian Neoplasms

Ovarian malignant mixed germ cell tumor: a case of unusual presentation as molar pregnancy.

Aminimoghaddam, Soheila; Mohseni, Iman; Afzalzadeh, Azadeh; Esmaeeli, Shooka

E-mail: Dr_aminimoghaddam@yahoo.com

Iran University of Medical Sciences - Gynecology Oncology Department

Journal of Reproduction and Infertility 2016; 17 (2): 133-136

Keywords: Neoplasms, Germ Cell and Embryonal; Hydatidiform Mole; Uterine Neoplasms; Biomarkers, Tumor; Pregnancy

Abstract: Background: This research was conducted to introduce a patient with rare ovarian mixed germ cell tumor, presented as molar pregnancy. Case Presentation: The patient was a 16 year old woman admitted with diagnosis of molar pregnancy. Abdominal enlargement was the only complaint. She had a large pelvic mass in physical examination. The first diagnosis was molar pregnancy due to previous ultrasonic reports and positive beta HCG. Urine pregnancy test was positive. As suction curettage was performed for her, surprisingly, the size of uterus was normal and no molar tissue was found in pathologic examination. At intraoperative ultrasound exam, an extra-uterine heterogeneous mass was found. Extra-uterine mass was confirmed by CT and MRI done after suction curettage. Mixed germ cell tumor was confirmed by histological examination after laparotomy and removing tumoral mass. Finally, she received Bleomycin, Etoposide and Cisplatin [BEP] regimen in four courses and Vincristine, Actinomycin D [Dactinomycin] and Cyclophosphamide [VAC] regimen in two courses and Diphereline for saving the other ovary. Conclusion: Some young patients misinterpret the early symptoms of an ovarian neoplasm as those of pregnancy which can lead to a delay in the diagnosis.

Panax

Role of ginseng as hepatoprotective, antioxidant and anti-inflammatory against methotrexate induced liver injury in rats.

Youssef, Gehan A.

Al-Azhar University - Faculty of Medicine [Girls] - Department of Physiology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 105-108

Keywords: Anti-Inflammatory Agents; Antioxidants; Drug-Induced Liver Injury; Biomarkers; Methotrexate-toxicity; Rats

Abstract: Background Ginseng, an ancient and famous medicinal herb in the Orient, has been used as a valuable tonic and for the treatment of various diseases including hepatic disorders. Ginseng extracts and individual ginsenosides have shown a wide array of beneficial role in the regulation of regular liver functions and the treatment of liver disorders. Objective: This study tries to determine the hepatoprotective, antioxidant and anti-inflammatory effects of ginseng on Methotrexate [MTX]-induced hepatotoxicity. Materials and Methods: forty rats [weigh 150-180 g] were used. The rats were kept in animal house for one week and had access to water and food. Temperature was kept at 37 [degree sign]C. After one week, the rats were randomly divided into four equal groups: Group [A] [control] received normal saline; group [B] received Ginseng [1.8 ml/kg/day] orally; group [C] received MTX [100 micro g/kg] intraperitoneally and group [D] received MTX [100 micro g/kg] intraperitoneally with ginseng [1.8 ml/kg/day] orally. After six weeks, the rats were decapitated and evaluation of liver function was done. Results: Ginseng treatment markedly suppressed the serum alanine aminotransferase [ALT], aspartate aminotransferase [AST] and serum gamma glutamyl transpeptidase [GGT] activities. Ginseng was attributed to stimulate anti-oxidant protein contents, such as glutathione peroxidase [GPX]. The marked increase of proinflammatory cytokines [TNF alpha] in MTX treated rats group was additionally attenuated by ginseng. Conclusion: Ginseng effectively prevent liver injury, mainly through down regulation of oxidative stress and inflammatory response.

Panniculitis, Peritoneal

diagnosis

Sclerosing mesenteritis presenting as a pseudotumor of the greater omentum.

Masulovic, Dragan; Jovanovic, Miodrag; Ivanovic, Aleksandar; Stojakov, Dejan; Micev, Marjan; Stevic, Ruza; Filipovic, Aleksandar; Galun, Danijel
University of Belgrade - Faculty of Medicine

Medical Principles and Practice 2016; 25 (1): 93-95

Keywords: Granuloma, Plasma Cell; Omentum; Liposarcoma; Tomography, X-Ray Computed; Intestine, Small

Abstract: Objective: The aim was to demonstrate a diagnostic challenge of sclerosing mesenteritis initially considered as liposarcoma. Clinical Presentation and Intervention: A 45-year-old man was admitted with a painful abdominal mass. Abdominal computed tomography demonstrated a well-demarcated tumor in his left hemiabdomen, with a large fat component and areas of soft tissue attenuation suggestive of liposarcoma. Intraoperative findings showed a tumor arising from the greater omentum. The tumor was completely removed, and histopathology confirmed a pseudotumorous type of sclerosing mesenteritis with dominant mesenteric lipodystrophy. Conclusion: This case showed that a pseudotumorous type of sclerosing mesenteritis should be considered in the differential diagnosis of the mesenteric tumors.

Pantothenate Kinase-Associated Neurodegeneration

Hallervorden-spatz syndrome with seizures.

Gothwal, Sunil; Nayan, Swati

[E-mail:dr.sunilgothwal@gmail.com](mailto:dr.sunilgothwal@gmail.com)

All India Institute of Medical Sciences - Department of Pediatrics

Basic and Clinical Neuroscience 2016; 7 (2): 165-166

Keywords: Seizures; Mutation

Abstract: Hallervorden-Spatz syndrome is a disorder characterized by dystonia, parkinsonism, and iron accumulation in the brain. The disease is caused by mutations in gene encoding pantothenate kinase 2 [PANK2] and patients have pantothenate kinase-associated neurodegeneration. We present an 8-year-old boy with progressive muscle dystonia, neuroregression, frequent fall and multiple injury marks of different stages. Seizures are rare with PANK2. This child had seizure onset at 4 years of age and seizure free on valproate and levetiracetam. The CT scan showed tiger eye appearance and mutations on PANK2 gene.

Parathyroid Glands

pathology

Proliferative lesions of parathyroid glands: an update for practicing pathologists.

Shakeel, Shaheera; Mubarak, Muhammed

Sindh Institute of Urology and Transplantation [SIUT] - Department of Histopathology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 51-59

Keywords: Hyperparathyroidism; Immunohistochemistry; Parathyroid Neoplasms; Hyperplasia; Molecular Biology

Abstract: Pathological lesions of parathyroid glands encompass a wide range of lesions ranging from developmental anomalies to inflammatory disorders to neoplastic processes. Proliferative lesions of parathyroid glands represent the commonest causes of hyperparathyroidism in clinical practice. However, the parathyroid specimens represent only a tiny fraction of the workload received in a non-specialist histopathology laboratory. As a result, the familiarity of the pathologists with the spectrum of parathyroid lesions is generally limited. An accurate diagnosis of the parathyroid lesions is challenging and a daunting task for both the clinicians and the pathologists. The traditional morphological approaches have limitations. Ancillary techniques of immunohistochemistry and molecular biology are being increasingly employed to resolve the diagnostic dilemmas. This review briefly describes the proliferative pathological lesions affecting the parathyroid glands and provides some useful tips on accurately diagnosing these lesions.

Patellofemoral Pain Syndrome

[Effect of knee isokinetic extension training with maximum lateral tibial rotation on vastus amplitudes in patellofemoral pain syndrome patients]

Hosseini, SeyyedHosseini; Anbarian, Mehrdad; Farahmand, Farzam; Ansari, Majid

[E-mail:hoseini.papers@gmail.com](mailto:hoseini.papers@gmail.com)

University of Guilan - Faculty of Physical Education and Sport Sciences - Department of Physical Education and Sport Sciences

Journal of Rehabilitation 2016; 16 (4): 312-323

Keywords: Knee; Quadriceps Muscle; Tibia

Abstract: Objective: Patellofemoral pain syndrome [PFPS] is one of the most common knee chronic disorders especially among females that is closely related to forces imbalance of vastus medial is oblique [VMO] and vastus lateral is [VL] muscles. The purpose of study was to examine the effect of knee isokinetic extension in maximum lateral tibia rotation on VMO and VL amplitudes in PFPS patients. Materials and Methods: Thirty-six women with PFPS participated voluntarily in this study and were randomly placed in one of three groups included the VMO selective isokinetic strengthening exercise, quadriceps general strengthening and control groups. Each exercise was performed for 8 weeks. Muscle RMS of VMO and VL and VMO/VL RMS ratio were recorded and calculated before and after training using of an 8-channels electromyography system. Data analysis was made by analyses of variance with repeated measures. Results: In baseline, VMO amplitude was less than VL in all groups [$P \leq 0.05$], but after interventions, it was more than VL in selective group [$P = 0.01$] and less than VL in general [$P = 0.001$] and control [$P = 0.036$] groups. Before interventions, there was no difference between groups in muscles amplitude [$P > 0.05$]. Yet, after interventions, VMO amplitude and VMO/VL amplitude ratio were more in selective group than in general and control groups [$P \leq 0.001$], and VL amplitude was more in general group than in selective and control groups [$P \leq 0.01$]. Conclusion: According to the study results, isokinetic extension training with maximum lateral tibia rotation and in close to knee full extension can be recommended as an appropriate training for improving VMO/VL electrical activity ratio and decreasing imbalance between lateral and medial vastus muscles amplitudes in patients with PFPS.

Pelvis

Determining the incidence of gynecoid pelvis using three-dimensional computed tomography in nonpregnant multiparous women.

Salk, Ismail; Cetin, Meral; Salk, Sultan; Cetin, Ali

[E-mail:ismailsalk@gmail.com](mailto:ismailsalk@gmail.com)

Cumhuriyet University - Faculty of Medicine - Department of Radiology

Medical Principles and Practice 2016; 25 (1):40-48

Keywords: Incidence; Tomography, X-Ray Computed; Parity; Cephalopelvic Disproportion; Retrospective Studies; Pelvimetry

Abstract: Objectives: To determine the incidence of gynecoid pelvis by using classical criteria and measured parameters obtained from three-dimensional computed tomography [3D CT] pelvimetry in nonpregnant multiparous women who delivered vaginally. Subjects and Methods: Our hospital's picture archiving and communication system was reviewed retrospectively. All adult women who had undergone CT examination with routine abdominal protocols were identified. In the pelvic inlet, midpelvis, and pelvic outlet, classical criteria and measured parameters, both alone and in combination, were used to determine the presence of gynecoid pelvis. Results: 3D CT pelvimetry was performed on 226 women aged 23-65 years without any history of cephalopelvic disproportion and who had at least one delivery of an average fetal size [$> 2,500$ g]. The median parity was 4, and the mean \pm [SD] birth weight was $3,700 \pm 498$ g. Compared to the classical criteria, measured parameters and their combined use with the classical criteria significantly reduced the frequency of gynecoid pelvis [51.3 and 47.8%, respectively, vs. 71.6%; $p = 0.001$]; however, there was no significant difference between the measured parameters and their combined use with classical criteria with regard to the frequencies of gynecoid pelvis [$p > 0.05$]. Conclusions: With the use of measured parameters of 3D CT pelvimetry, the incidence of gynecoid pelvis reduces to a more acceptable level [51.3%] in accordance with obstetric knowledge. Since there is no considerable decrease with the addition of classical criteria, 3D CT pelvimetry alone has merit for determining a woman's pelvic capacity for obstetric needs after the improvement and standardization of measured parameters.

Periodontal Diseases

Association between periodontal diseases and systemic illnesses: a survey among internal medicine residents in Nigeria.

Umeizudike, Kehinde A.; Iwuala, Sandra O.; Ozoh, Obianuju B.; Ayanbadejoa, Patricia O.; Fasanmade, Olufemi A.

[E-mail:kumeiz09@gmail.com](mailto:kumeiz09@gmail.com)

University of Lagos - Faculty of Dental Sciences - Department of Preventive Dentistry

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 24-30

Keywords: Internal Medicine; Knowledge; Surveys and Questionnaires; Cross-Sectional Studies; Internship and Residency; Attitude

Abstract: Objective: To assess internal medicine residents' knowledge of associations between periodontal disease and systemic illnesses, and attitudes toward patients' periodontal health. Methods: A cross-sectional survey using a self-administered questionnaire was conducted among internal medicine residents attending the Faculty of Internal Medicine 2014 Update Course organized by the National Postgraduate Medical College of Nigeria. Participants came from all over the country. Data on respondents' demographic characteristics, periodontal disease knowledge, knowledge of associations between periodontal disease and systemic illnesses, and attitudes toward patients' periodontal health were collected. Data were analyzed using Epi INFO software. The Pearson chi square test was used to measure significant association between categorical variables such as the knowledge of periodontal disease and gender, age group and designation of the participants [$p \leq 0.05$]. Results: Of 150 questionnaires distributed, 123 were returned [82% response rate]; 109 questionnaires were completed properly and included in the analysis. The most common source of residents' information on oral health was television [59.4%]. Only 11.2% of respondents were aware that gingival bleeding was the earliest sign of periodontal disease. Respondents correctly identified periodontal disease as a risk factor for coronary heart disease [45.9%], stroke [43.5%], hospital-acquired pneumonia [53.2%], diabetes mellitus [13.8%], and preterm birth [11%]. Increased age [$p = 0.032$] and male gender [$p = 0.022$] were associated significantly with knowledge of periodontal disease as a risk factor for stroke. Higher designation [$p = 0.002$] and longer duration in residency training [$p = 0.004$] were associated significantly with knowledge of periodontal disease as risk factor for peripheral arterial disease. The majority [90.9%] of respondents had positive attitudes toward the referral of their patients for regular periodontal care. Conclusions: Knowledge of periodontal disease as a risk factor for systemic illnesses among medical residents in Nigeria is inadequate. These relationships should be emphasized in continuing medical education courses.

Peripheral Arterial Disease

An interview-based survey to assess the knowledge of peripheral arterial disease among medical students.

Al Hamzah, Musaad H.; Hussain, Mohamad A.; Bin Ayeed, Saad A.; Al Omran, Mohammed A.

King Saud University - Department of Surgery

Journal of Taibah University Medical Sciences 2016; 11 (3): 230-235

Keywords: Surveys and Questionnaires; Cross-Sectional Studies; Students, Medical; Education, Medical; Health Knowledge, Attitudes, Practice

Abstract: Objectives: Physicians have poor knowledge of peripheral arterial disease [PAD]. Inadequate exposure to PAD in medical school curricula may be a contributing factor. The objective of this study was to explore the awareness and knowledge of PAD among medical students. Methods: We conducted a descriptive cross-sectional study using an interview-based survey of the medical students in the college of medicine of King Saud University Riyadh, KSA. Results: Of 350 students, 244 students agreed that they had some knowledge about PAD. More students in their clinical years [3-5] had heard about PAD compared to students in their basic science years [1-2; 76.5% versus 65.4%, respectively]; however, the overall scores were low for both groups for recognition of PAD symptoms [mean scores, 2.83 out of 7 for students in years 3-5 versus 1.81 for students in years 1-2; $p < 0.001$]. The scores of the knowledge of risk factors were 4.86 and 2.77 out of 7 for students in years 3-5 and 1-2, respectively [$p < 0.001$]; the scores of preventive measures were 4.28 and 3.13 out of 6 for students in years 3-5 and 1-2 years, respectively [$p < 0.001$]; and the scores of treatments and complications were 4.41 and 3.57 out of 6 for students in years 3-5 and 1-2 years, respectively [$p < 0.001$]. Conclusion: This study has identified an alarmingly low level of PAD knowledge among medical students. Interventions are needed to address this gap in medical schools' curricula to improve care for patients with PAD in future doctors.

Pharmaceutical Preparations

For dentists and doctors: The neglected concepts about the factors influencing the effects of drugs.

Ghanemi, Abdel Aziz

[E-mail:ghanemiabdelaziz@hotmail.com](mailto:ghanemiabdelaziz@hotmail.com)

University of Chinese Academy of Sciences - Kunming Institute of Zoology - Key Laboratory of Animal Models and Human Disease Mechanisms of Chinese Academy of Sciences and Yunnan Province

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 1-2

Keywords: Dentists; Drug Interactions

Pharmacy Service, Hospital

standards

An audit evaluating anticoagulation clinic managed by clinical pharmacists in Jordan.

Al Omari, Nadia A.; Al Momany, Nairooz H.; Ayesh, Ruba B.; Al Sarayreh, Hana A.; Al Haqesh, Hiam S.; Ibrahim, Diana A.

[E-mail:alomari.nadia@yahoo.com](mailto:alomari.nadia@yahoo.com)

Queen Alia Heart Institute - Department of Clinical Pharmacy

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 89-94

Keywords: Warfarin; Clinical Audit; Anticoagulants; Pharmacists; International Normalized Ratio; Atrial Fibrillation; Thrombosis

Abstract: Background and Objectives: Warfarin is the most widely prescribed oral anticoagulant; it is highly effective for the treatment and prevention of venous and arterial thrombosis. The beneficial outcomes of warfarin therapy are dependent upon achieving and maintaining an optimal international normalized ratio [INR] therapeutic range. The aim of this study was to evaluate the impact of our newly established clinic at Queen Alia Heart Institute [QAH] in the Royal Medical Services [RMS], Jordan. Patients and Methods: An observational prospective study was carried out in a newly established anticoagulation clinic managed by two clinical pharmacists and one nutritionist in QAH since September 2013 until June 2014. The patients [n= 250] who were on warfarin for at least two months referred to the clinic were included in our study. All patients or their care givers received a 45 minutes educational session and a warfarin booklet. Then they were followed up regularly for achieving and maintaining the target INR and developing any adverse events related either too high or low INR [>4.5 or <1.5 , respectively]. Results: The age range of this group of the patients who were referred to the clinic was wide, 5-81 years. 65% of them were males, with the most common indications for Warfarin were aortic and mitral valves replacement, and atrial fibrillation. 72% of the patients were not achieving therapeutic [T] INR 43% of them achieve the TINR within the first week, 28% within the second week, 17% within the third, 4% within the fourth and 8% exceeded 4 weeks. The proportion of time within TINR for all the patients during the whole period was 75%. Only 7% of the patients had low INR, <1.5 and 5% had high INR, >4.5 for one visit. No major thromboembolic or hemorrhagic events were reported. Conclusion: The newly established clinic had achieved a considerable encouraging results and feedbacks in the short period of time since it had been established.

Plant Extracts

therapeutic use

The biochemical effects of lime concentrate 'Aporo' and Mucuna pruriens seeds extract on Alloxan-induced diabetic rats.

Owa, Stephen O.; Taiwo, Adeolu A.; Okosun, Jenifer A.; Othoinoyi, David A.; Akujobi, Yvonne O.; Oyewale, Damilola G.; Ibraheem, Ormodele; Edewor Ikupoyi, Theresa I.; Adeyemi, Oluyomi S.

Landmark University - Biochemistry Unit

Journal of Taibah University Medical Sciences 2016; 11 (3): 260-267

Keywords: Mucuna; Diabetes Mellitus, Experimental-drug therapy; Alloxan; Rats, Wistar

Abstract: Objectives: This study evaluated the biochemical properties of a local lime concentrate preparation called Aporo and an ethanolic extract of seeds of Mucuna pruriens. Methods: Six groups of male Wistar rats, each containing five rats, were selected. Diabetes was induced in all rats, except the negative control group, by a single intraperitoneal injection of 150 mg/kg Alloxan. The induced rats, apart from the diabetic control group, were treated by daily oral administration of 5 mg/kg Glibenclamide, 100 mg/kg of Aporo decoction, an ethanolic extract of M. pruriens seed, and a combination of both in equal doses. Results: After 15 days of treatment, the blood glucose level of rats in the positive control group was found to be significantly lower than that of the other rats. However, Aporo extract exhibited a significantly higher ability to reduce blood glucose than the standard hypoglycaemic drug Glibenclamide. Aporo also increased high-density lipoprotein [HDL] levels and decreased

triglyceride levels. The results showed that Aporo exhibited significant antioxidant, antidiabetic and antidiyslipidaemic properties when used alone rather than in combination with Mucuna seed extracts. Conclusion: This study endorses the folk use of Aporo in the treatment of diabetes. However, further experimental studies are required to complement the results of the current study.

In vitro antioxidant activities of African birch [*Anogeissus leiocarpus*] leaf and its effect on the alpha-amylase and alpha-glucosidase inhibitory properties of acarbose.

Adefegha, Stephen A.; Oboh, Ganiyu; Omojokun, Olasunkanmi S.; Jimoh, Tajudeen O.; Oyeleye, Sunday I. Federal University of Technology - Functional Foods and Nutraceuticals Unit

Journal of Taibah University Medical Sciences 2016; 11 (3): 236-242

Keywords: Plants, Medicinal; Acarbose; Antioxidants; alpha-Glucosidases; alpha-Amylases; Diabetes Mellitus, Type 2

Abstract: Objective: This study sought to determine the antioxidant activities of African birch leaf, to assess its interaction with key enzymes relevant to type 2 diabetes [amylase and alpha-glucosidase] and to evaluate its effect on acarbose in vitro. Methods: One milligram per milliliter of aqueous extract of African birch and acarbose were separately prepared. At the same time, both the African extract and acarbose solution [50:50 v/v] were thoroughly mixed until homogeneity was attained. The phenolic phytoconstituents and antioxidant properties of African birch leaf were subsequently determined. Finally, the effects of African birch extract, acarbose solution and a mixture of acarbose and African birch extract on alpha-amylase and alpha-glucosidase activities were assessed in vitro. Results: The results showed that African birch extract demonstrated a remarkable antioxidant effect, as exemplified by its radical scavenging abilities, Fe²⁺ chelating ability and prevention of lipid peroxidation. Acarbose had significantly [$p < 0.05$] higher alpha-amylase [IC₅₀ = 11.77 mg/ml] and alpha-glucosidase [IC₅₀ = 9.05 mg/ml] activities compared to African birch extract [alpha-amylase [IC₅₀ = 242.17 mg/ml]; aglucosidase [IC₅₀ = 196.35 mg/ml]]. However, the combination of acarbose and African birch extract showed an additive effect on alpha-amylase inhibition, while a resultant synergistic action was observed against alpha-glucosidase inhibition.

Plant Oils

Behavioral and biochemical evidences for antidepressant-like activity of *Celastrus paniculatus* seed oil in mice.

Valecha, Rekha; Dhingra, Dinesh
E-mail:valecha_123@yahoo.co.in

Guru Jambheshwar University of Science and Technology - College of Pharmacy - Department of Pharmaceutical Sciences

Basic and Clinical Neuroscience 2016; 7 (1): 49-56

Keywords: *Celastrus*; Antidepressive Agents; Depression; Mice; Seeds

Abstract: Introduction: *Celastrus paniculatus* seed oil, commonly known as Malkangni or Jyotishmati, was in use from time immemorial to treat brain related disorders. *Celastrus paniculatus* seed oil has significant antidepressant-like activity in chronic unpredictable stressed mice. The present study was undertaken to evaluate the antidepressant-like effect of *Celastrus paniculatus* seed oil in unstressed mice and to explore its mechanism of action. Methods: The seed oil [50, 100, and 200 mg/kg, PO] and fluoxetine per se were administered for 14 successive days to Swiss young albino mice. On the 14th day, 60 min after drug administration, animals were subjected to Tail Suspension Test [TST] and Forced Swim Test [FST]. The mechanism of action was also studied. Results: The oil significantly decreased immobility period of mice in both tail suspension test and forced swim test, indicating its significant antidepressant-like activity. The efficacy was found to be comparable to fluoxetine [$P < 0.0001$]. ED₅₀ value of *celastrus* seed oil using FST and TST were 17.38 and 31.62 mg/kg, respectively. The oil did not show any significant effect on locomotor activity. It significantly inhibited brain MAO-A activity and decreased plasma corticosterone levels. Sulpiride [selective D₂-receptor antagonist], p-CPA [tryptophan hydroxylase inhibitor], and baclofen [GABAB agonist] significantly attenuated the oil-induced antidepressant-like effect, when assessed during TST. Discussion: *Celastrus paniculatus* seed oil produced significant antidepressant-like effect in mice possibly through interaction with dopamine D₂, serotonergic, and GABAB receptors; as well as inhibition of MAO-A activity and decrease in plasma corticosterone levels.

Polycystic Ovary Syndrome

Body mass index below obesity threshold implies similar cardiovascular risk among various polycystic ovary syndrome phenotypes.

Bagir, Gulay Simsek; Bakiner, Okan S.; Bozkirli, Emre; Cavlak, Gulhan; Serinsoz, Hulya; Ertorer, M. Eda
E-mail:gulaysimsekbagir@yahoo.com

Baskent University - Faculty of Medicine - Division of Endocrinology

Medical Principles and Practice 2016; 25 (1): 61-66

Keywords: Body Mass Index; Obesity; Cardiovascular System; Phenotype; Risk Factors; Cross-Sectional Studies

Abstract: Objective: The aim of this study was to determine the cardiometabolic risk factors in different polycystic ovary syndrome [PCOS] phenotypes. Subjects and Methods: This cross-sectional study was performed between 2010 and 2011. Eighty-nine patients with PCOS and 25 age- and weight-matched healthy controls were included in the study. Patients were grouped using the Rotterdam 2003 criteria as: group 1, oligomenorrhea and/or anovulation [ANOV] and hyperandrogenemia [HA] and/or hyperandrogenism [n = 23]; group 2, ANOV and polycystic ovaries [PCO; n = 22]; group 3, HA and PCO [n = 22]; group 4, ANOV, HA and PCO [n = 22]; group 5, controls [n = 25]. Laboratory blood tests for diagnosis and cardiometabolic risk assessments were performed. Insulin resistance [IR] was calculated in all patients with the homeostasis model assessment of IR [HOMA-IR] formula. An euglycemic hyperinsulinemic clamp test was performed on 5 randomly selected cases in each subgroup, making 25 cases in total, and indicated as the 'M' value [mg/kg/min], which is the total body glucose disposal rate. Results: The mean BMI values of the groups were: group 1, 26.1 +/- 5.3; group 2, 27.9 +/- 5.2; group 3, 24.3 +/- 4.2; group 4, 27.9 +/- 7.5; group 5, 24.7 +/- 5.2 [p > 0.05]. There were no differences in the lipid profile, plasma glucose, HOMA-IR, insulin and M values between the groups [p > 0.05]. Phenotypes with oligomenorrhea/anovulation [groups 1, 2 and 4] were more obese than group 3 [p = 0.039]. Conclusions: The cardiometabolic risk profile was similar among the PCOS subgroups. This finding could be attributed to the mean BMI values, which, being below 30, were not within the obesity range. Obesity appeared to be an important determinant of high cardiovascular risk in PCOS.

Low birth weight may increase body fat mass in adult women with polycystic ovarian syndrome.

Minooee, Sonia; Tehrani, Fahimeh Ramezani; Mirmiran, Parvin; Azizi, Fereidoun
Shahid Beheshti University of Medical Sciences - Reproductive Endocrinology Research Center
IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 335-340

Keywords: Infant, Low Birth Weight; Adipose Tissue; Body Mass Index; Obesity; Case-Control Studies

Abstract: Background: Women engaged with polycystic ovarian syndrome [PCOS], as the commonest endocrine disorder, are known to have a specific type of adiposity. Birth weight is among different contributors reported to be responsible for this diversity. Objective: We aimed to compare the relation between birth weight and body fat mass [BFM]/ body lean mass [BLM] in PCOS and their age and body mass index [BMI] matched normal controls. Materials and Methods: In this case-control study, a total number of 70 reproductive aged women, diagnosed with PCOS and 70 age- BMI matched healthy women without hirsutism and/or ovulatory dysfunction were recruited., control group had no polycystic ovaries in ultrasonographic scans. A detailed history of birth weight was taken and was divided into the following categories: <2, 500 [low birth weight, LBW] and 2, 500-4, 000 [normal birth weight; NBW]. Results: Results showed that LBW prevalence was higher in women with PCOS than in controls [19.3% [27] vs. 15.7% [22]]. Also body fat and lean mass [BFM, BLM] have increased in adult women with PCOS who were born underweight compared to their normal [19.8+/-9.05 vs. 12.9+/-4.5, p=0.001 and 48.9+/-6.9 vs. 43.2+/-5.8, p=0.004 respectively]. Conclusion: Fetal birth weight influences on the adulthood obesity, BFM and BLM. This impact is different among women with and without PCOS.

Pre-Eclampsia

Bilateral exudative retinal detachment in pre-eclampsia.

Abunajma, Muneera; Abdulla, Haitham; Alkhalifa, Saad
E-mail:muneera.abunajma@gmail.com
Bahrain Defense Force Royal Medical Services - Department of Ophthalmology
Bahrain Medical Bulletin 2016; 38 (1): 46-47

Keywords: Retinal Detachment-diagnosis; Hypertension-complications; Pregnant Women; Retinal Detachment-etiology; Pregnancy

Abstract: Exudative retinal detachment [ERD] is a rare cause of visual loss in pre-eclampsia with only few reported cases in the medical literature. We report a case of a nineteen-year-old primigravida with pre-eclampsia who developed bilateral exudative retinal detachments following delivery. Spontaneous resorption of the subretinal fluid and complete resolution of the exudative detachment occurred after a few weeks of observation.

Premature Birth

prevention and control

Vaginal progesterone on the prevention of preterm birth and neonatal complications in high risk women: a randomized placebo-controlled double-blind study.

Azargoon, Azam; Ghorbani, Raheb; Aslebahar, Fereshteh
E-mail:azarmona2003@yahoo.com
Semnan University of Medical Sciences - Abnormal Uterine Bleeding Research Center - Department of Infertility
IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 309-316

Keywords: Administration, Intravaginal; Progesterone-therapeutic use; Infant, Newborn, Diseases-prevention and control; Risk Factors; Placebo Effect; Double-Blind Method

Abstract: Background: Preterm birth is the major cause of neonatal mortality and morbidity. Objective: The aim of this study was to evaluate the effect of prophylactic vaginal progesterone on decreasing preterm birth rate and neonatal complications in a high-risk population. Materials and Methods: A randomized, double-blind, placebo-controlled study was performed on 100 high-risk singleton pregnancies. Vaginal suppository progesterone [400 mg] or placebo was administered daily between 16-22 wks to 36 wks of gestation. Progesterone [n=50] and placebo [n=50] groups were compared for incidence of preterm delivery and neonatal complications. Results: The preterm birth rate was 52%. Preterm birth rate before the 37 wks of gestation [68% vs. 36%: RR=1.89, 95% CI: 1.25-2.86] and also before the 34 wks of gestation [42% vs. 18%: RR=2.33, 95% CI: 1.19-4.58] in placebo group was significantly higher than progesterone group. Our study also showed that the administration of vaginal progesterone was associated with a significant reduction in the risk of birth weight \leq 2500 gr, the rates of respiratory distress syndrome [RDS] and admission to the Neonatal Intensive Care Unit [NICU] in the progesterone group when compared with the placebo group. However, there was no significant difference between the two groups in terms of neonatal death, days of admission in NICU, intraventricular hemorrhage and necrotizing enterocolitis. Conclusion: Prophylactic vaginal progesterone reduced the rate of preterm delivery, the risk of a birth weight \leq 2500 gr, the rates of RDS and admission to NICU in women who were at risk of preterm delivery.

Prostatic Neoplasms

genetics

Partial association of restriction polymorphism of the ligand binding domain of human androgen receptor in prostate cancer.

Hessien, Mohamed; ElBarbary, Ahmed; ElGendy, Saad; Nabil, Amira

E-mail: Mohamed.hessien@tulbrightmail.org

Tanta University - Faculty of Science - Department of Chemistry

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 223-228

Keywords: Prostatic Hyperplasia-genetics; Polymorphism, Restriction Fragment Length; Receptors, Androgen; Binding Sites; Ligands

Abstract: Background: Human androgen receptor [AR] functions as a steroid-hormone activated transcription factor. The receptor binds to its ligand [testosterone or dihydrotestosterone] and is translocated to the nucleus to stimulate the transcription of androgen responsive genes. Mutations in the ligand binding domain [LBD] impair the receptor activity and play a crucial role in the development and progression of prostate cancer [PCa]. Materials and Methods: This work was designated to investigate the restriction integrity of the LBD and its association with benign prostatic hyperplasia [BPH] and prostate cancer. Exons of this domain [exons: 4-8] were amplified from prostate tissue of BPH and PCa patients and the restriction polymorphism was investigated by SmlI, HphI and Tsp45I restriction enzymes in both BPH and PCa groups. Results: Data revealed the integrity of exons 4-6 in both BPH and PCa patients. Exons 7 and 8, however have kept their constitutional pattern only in BPH patients. Hph1 site showed an abnormal restriction pattern in 40% and 26.7% of PCa patients. Also, Tsp45I demonstrated restriction polymorphism in 20% and 13% of PCa patients. Conclusion: Our results indicate that the loss of the restriction integrity in the C-terminal part [exons: 7 and 8] of the LBD is associated with the progression of benign prostatic hyperplasia to prostate cancer.

Role of MTHFR A1298C gene polymorphism in the etiology of prostate cancer: a systematic review and updated meta-analysis.

Yadav, Upendra; Kumar, Pradeep; Rai, Vandana

VBS Purvanchal University - Human Molecular Genetics Laboratory - Department of Biotechnology

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 141-148

Keywords: Methylene tetrahydrofolate Reductase [NADPH2]-genetics; Meta-Analysis; Case-Control Studies

Abstract: Methylene tetrahydrofolate reductase [MTHFR] is an important enzyme of folate/homocysteine pathway and is essential for synthesis, repair and methylation of DNA. Various studies have performed to evaluate the role of MTHFR A1298C gene polymorphism to the risk of prostate cancer and the results were inconclusive and inconsistent. A meta-analysis of published case-control studies, up to December 2014, was performed to investigate the association between MTHFR A1298C gene polymorphism and the susceptibility of prostate cancer. PubMed, Science direct, Springer link and Google scholar databases were searched for case-control studies and crude odds ratios [ORs] with 95% confidence intervals [CIs] were calculated to estimate the strength of association. The analyses were conducted with Open Meta-Analyst and MIX softwares. Total thirteen case-control studies with 4673 prostate cancer patients and 6982 controls were included in this meta-analysis. No associations were observed between MTHFR A1298C gene polymorphism and prostate cancer in any genetic model [allele contrast [C vs. A]: OR = 1.01; 95% CI: 0.91-1.13; p= 0.73; dominant model [CC + AC vs. AA]: OR= 0.98, 95% CI= 0.91-1.06, p= 0.73; homozygote model [CC vs. AA]: OR = 0.96, 95% CI= 0.83-1.10, p= 0.55; co-dominant model [AC vs. AA]: OR= 0.98, 95% CI= 0.91-1.07, p= 0.76; and recessive model [CC vs. AC + AA]: OR =0.96, 95% CI= 0.84-1.10, p= 0.61]. Moreover, when the data were stratified on the basis of ethnicity no significant associations were observed. The results of the present meta-analysis suggest that the MTHFR A1298C gene polymorphism has no effect on the etiology of prostate cancer.

Psychometrics

[Validity and reliability of WHOQOL-DIS questionnaire in Iranian older people with disability]

Chehelamirani, Nasrin; Sahaf, Robab; Rassafiani, Mehdi; Bakhshi, Enayatollah
University of Social Welfare and Rehabilitation Sciences - Department of Occupational Therapy
Journal of Rehabilitation 2016; 16 (4): 334-345

Keywords: Disability Evaluation; Surveys and Questionnaires; Reproducibility of Results; Quality of Life

Abstract: Objective: The main purpose of the present study was to evaluate psychometric properties of Persian version of WHOQOL-DIS questionnaire in elderly people with disability. Materials and Methods: A classical psychometric method was used to evaluate validity and reliability of WHOQOL-DIS questionnaire in elderly people with disability. Lawshe, and Waltz and Bausell methods were used for assessing content validity. During convenient sampling, 205 elderly, whose score in WHOQOL-DIS questionnaire was more than 4, completed the SF-12 questionnaire in order to assess convergent validity and criterion validity [using known group's comparison]. Reliability was estimated using internal consistency and test-retest reliability was determined by means of Intraclass Correlation Coefficients [ICC]. Results: According to Lawshe, and Waltz and Bausell methods of content validity, acceptable scores were obtained for all items. Correlation between the WHOQOL-DIS questionnaire and the SF-12 scales was satisfactory except for social domain [P=0.13]. The Intraclass Correlation Coefficients for score of questionnaire dimensions and total score was higher than 0.70. Cronbach's alpha for investigating Intraclass Correlation was higher than 0.70 except for social domain. Comparing known groups revealed distinctions in sex and health and disability status between elderly people [P<0.001]. Conclusion: In general, the findings suggested that the WHOQOL-DIS questionnaire is a reliable and valid measure of health related quality of life among elderly people with disabilities. Therefore, the questionnaire can be used in the investigation on the quality of life of elderly people.

Quinolines

Role of pitavastatin in prevention of osteopenic changes in ovariectomized rats.

Qadir, Farida; Alam, Syed Mahboob; Zehra, Tabassum; Mehmood, Ahmar; Siddiqi, Abeer Qamar
E-mail: faridaqa100@hotmail.com

Jinnah Postgraduate Medical Centre - Basic Medical Science Institute - Department of Pharmacology
JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 41-45

Keywords: Bone Diseases, Metabolic-prevention and control; Ovariectomy; Rats, Sprague-Dawley; Bone Density; Tomography, X-Ray Computed

Abstract: Objective: To determine the effect of pitavastatin, a third generation statin, on development of osteopenia in ovariectomized rats. Study Design: Experimental study. Place and Duration of Study: Department of Pharmacology, Basic Medical Sciences Institute, Jinnah Postgraduate Medical Center, Karachi, from January to July 2013. Methodology: Forty female Sprague Dawley rats were divided into ovariectomized [OVX], Sham OVX and OVX given pitavastatin 0.4 mg/kg/day, 0.8 mg/kg/day, for 8 weeks. Bone density measurements using CT scan and Archimedes' principle were made on femora and tibiae. Blood samples were analyzed for acid phosphatase [ACP] and alkaline phosphatase [ALP] levels. Results: Ovariectomy-induced osteopenic changes were indicated by significant decrease in bone densities and Hounsfield [HU] index of distal femoral and proximal tibial metaphyses and elevation of ACP and ALP levels. 0.4 mg/kg pitavastatin did not significantly alter the evaluated parameters. 0.8 mg/kg produced a restoration of HU of lower femur and femoral density comparable to Sham. HU of upper tibia and tibial density following 0.8 mg/kg was significantly higher than OVX but was not approximate to Sham. ALP and ACP with 0.8 mg/kg were comparable to Sham. Conclusion: Supra-therapeutic dose of pitavastatin was effective in preventing estrogen deficiency-induced decrease in bone density of ovariectomized rates, over an 8-week period.

Rectovaginal Fistula

diagnosis

Rectovaginal fistula as a result of coital injury.

Hussain, Khalid; Ibrahim, Taseer; Khan, Misbah; Masood, Jovaria
E-mail: khalid2170@gmail.com

Combined Military Hospital - Department of General Surgery
JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 66-67

Keywords: Coitus; Colostomy; Social Support

Abstract: Rectovaginal fistula following sexual intercourse is rarely reported. It is a social stigma; and without adequate treatment and social support, the patient may end-up in isolation. A thorough knowledge of the problem and management is essential for successful outcome. We report a case of low rectovaginal fistula in a newly married female managed trans-vaginally with prior defunctioning colostomy.

Recurrent Laryngeal Nerve Injuries

Outcomes of recurrent laryngeal nerve injury following congenital heart surgery: a contemporary experience.

Alfares, Fahad A.; Hynes, Conor F.; Ansari, Ghedak; Chounoune, Reginald; Ramadan, Manelle; Shaughnessy, Conner; Reilly, Brian K.; Zurakowski, David; Jonas, Richard A.; Nath, Dilip S.

Children's National Health System - Division of Cardiovascular Surgery

Journal of the Saudi Heart Association 2016; 28 (1): 1-6

Keywords: Thoracic Surgery; Retrospective Studies; Vocal Cord Paralysis; Gastrostomy; Heart Defects, Congenital-surgery; Patient Outcome Assessment

Abstract: Objective: Injury to the recurrent laryngeal nerve can lead to significant morbidity during congenital cardiac surgery. The objective is to expand on the limited understanding of the severity and recovery of this iatrogenic condition. Design: A six-year retrospective review of all congenital heart operations at a single institution from January 1, 2008 to December 31, 2013 was performed. All patients with documented vocal cord paralysis on laryngoscopic examination comprised the study cohort. Evaluation of time to vocal cord recovery and need for further surgical intervention was the primary focus. Results: The incidence of post-operative vocal cord paralysis was 1.1% [32 out of 3036 patients; 95% confidence interval: 0.7-1.5%]. The majority were left-sided injuries [71%]. Overall rate of recovery was 61% with a median time of 10 months in those who recovered, and a total follow up of 46 months. Due to feeding complications, 45% of patients required gastrostomy tube after the injury, and these patients were found to have longer duration of post-operative days of intubation [median 10 vs. 5 days, $p = 0.03$], ICU length of stay [50 vs. 8 days, $p = 0.002$], and hospital length of stay [92 vs. 41 days, $p = 0.01$]. No pre-operative variables were identified as predictive of recovery or need for gastrostomy placement. Conclusion: Recurrent laryngeal nerve injury is a serious complication of congenital heart surgery that impacts post-operative morbidity, in some cases leading to a need for further intervention, in particular, gastrostomy tube placement. A prospective, multi-center study is needed to fully evaluate factors that influence severity and time to recovery.

Reperfusion Injury

Protection of hippocampal CA1 neurons against ischemia/reperfusion injury by exercise preconditioning via modulation of Bax/ Bcl-2 ratio and prevention of caspase-3 activation.

Aboutaleb, Nahid; Shamsaei, Nabi; Rajabi, Hamid; Khaksari, Mehdi; Erfani, Sohaila; Nikbakht, Farnaz; Motamedi, Pezhman; Shahbazi, Ali

Iran University of Medical Sciences - Faculty of Medicine - Department of Physiology

Basic and Clinical Neuroscience 2016; 7 (1): 21-30

Keywords: CA1 Region, Hippocampal; Hippocampus; Brain Ischemia; Exercise; bcl-2-Associated X Protein; Caspase 3; Rats, Wistar

Abstract: Introduction: Ischemia leads to loss of neurons by apoptosis in specific brain regions, especially in the hippocampus. The purpose of this study was investigating the effects of exercise preconditioning on expression of Bax, Bcl-2, and caspase-3 proteins in hippocampal CA1 neurons after induction of cerebral ischemia. Methods: Male rats weighing 260-300 g were randomly allocated into three groups [sham, exercise, and ischemia]. The rats in exercise group were trained to run on a treadmill 5 days a week for 4 weeks. Ischemia was induced by the occlusion of both common carotid arteries [CCAs] for 20 min. Levels of expression of Bax, Bcl-2, and caspase-3 proteins in CA1 area of hippocampus were determined by immunohistochemical staining. Results: The number of active caspase-3-positive neurons in CA1 area were significantly increased in ischemia group, compared to sham-operated group [$P < 0.001$], and exercise preconditioning significantly reduced the ischemia/reperfusion-induced caspase-3 activation, compared to the ischemia group [$P < 0.05$]. Also, results indicated a significant increase in Bax/Bcl-2 ratio in ischemia group, compared to sham-operated group [$P < 0.001$]. Discussion: This study indicated that exercise has a neuroprotective effects against cerebral ischemia when used as preconditioning stimuli.

Research Personnel

education

Institutionalized training of research editors.

Sohail, Saba; Akhtar, Jamshed

E-mail: drsabasohail@hotmail.com

Dow Medical College Hospital - Department of Radiology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 2-3

Keywords: Research-education; Biomedical Research

Retinal Detachment

surgery

Comparison of 1000-centistoke versus 5000-centistoke silicone oil in complex retinal detachment surgery.

Zafar, Shakir; Shakir, Munira; Mahmood, Syed Asaad; Amin, Saima; Iqbal, Zafar
LRBT Free Base Eye Hospital - Department of Ophthalmology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 36-40

Keywords: Silicone Oils; Vitrectomy; Visual Acuity; Cataract; Vitreous Hemorrhage

Abstract: Objective: To compare the efficacy and complications of using 1000-centistoke versus 5000-centistoke silicone oil for complex retinal detachment repair. Study Design: Case series. Place and Duration of Study: LRBT Tertiary Eye Hospital, Karachi, from January 2007 to June 2013. Methodology: Eighty-five eyes [85 patients] presenting with superior rhegmatogenous retinal detachments associated with PVR grades B and C [involving not more than 3 clock hours] were randomized to either 1000 centistokes [n=44] or 5000 centistokes [n=41] silicone oil group. All patients underwent 23-gauge pars plana vitrectomy surgery with silicone oil intraocular tamponade. Patient data was analysed at 18 months post-operatively. IBM SPSS 21 was used for data analysis. Results: There were 52 male and 33 female patients aged between 22 and 70 years [45.2 +/- 16.2]. After the first surgery, successful reattachment of the retina was achieved in 67 eyes [78.8%]; of which 35 eyes were in 1000-centistoke and 32 eyes in 5000-centistoke groups. Mean pre-operative Best Corrected Visual Acuity [BCVA] was 1.63 +/- 0.54 which was improved to a mean post-operative BCVA of 1.46 +/- 0.78 [1.42 +/- 0.74 in 1000-centistoke group; 1.49 +/- 0.78 in 5000 centistoke group]. The 1000-centistoke group had a significantly higher frequency of oil emulsification which necessitated early removal of silicone oil. There were 66 eyes [77%] with at least one complication [34 eyes in 1000-centistoke group; 32 eyes in 5000-centistoke group] including cataract, corneal abnormalities, raised IOP, hypotony, vitreous haemorrhage and retinal redetachment. Conclusion: Although visual and anatomical outcomes were comparable between the two groups, the 1000-centistoke silicone oil group developed early oil emulsification necessitating its early removal.

Retinitis Pigmentosa

diagnosis

Coexistence of posterior staphyloma, retinitis pigmentosa and moderate myopia.

Ilhan, Abdullah; Yolcu, Umit; Diner, Oktay; Uzun, Salih; Gundogan, Fatih Cakir

E-mail: dzilhan@hotmail.com

Erzurum Military Hospital - Department of Ophthalmology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 70-71

Keywords: Sclera-pathology; Myopia-diagnosis; Visual Acuity; Slit Lamp; Retinal Degeneration

Abstract: The authors report a 22-year patient presented with night-blindness and progressive visual loss. Ophthalmologic examination included slit lamp biomicroscopy, best-corrected distance visual acuity, cycloplegic refraction, A-mode and B-mode ultrasonography, and full-field flash electroretinogram [ERG]. Cycloplegic refractions were -6.00 [-1.25 x 175] dpt in the right eye and -7.00 [-1.50 x 165] dpt in the left eye. Slit lamp examination showed normal anterior segment. Fundoscopic examination revealed bone-spicule pigmentations, waxy optic disc, arteriolar narrowing and posterior staphyloma, with 5 optic disc in diameter in the right eye and 4 optic disc diameter in the left. Ocular ultrasonography confirmed staphyloma. Full-field ERG showed evidence of a generalized retinal dysfunction involving both rod and cone responses, supported the diagnosis of retinitis pigmentosa.

Ring Chromosomes

Chromosome structural alteration an unusual abnormality characterizing human neoplasia.

Movafagh, Abolfazl; Hashemi, Mehrdad; Pour, Atefeh Heidary; Zare Abdollahi, Davood; Emamalzadeh, Babak; Shahvaiszadeh, Farhad; Mansouri, Neda; Heidari, MohammadHassan; Tonekaboni, Seyed Hassan

E-mail: Movafagh.a@sbmu.ac.ir

Shahid Beheshti University of Medical Sciences - Mofid Hospital - Department of Medical Genetics

Novelty in Biomedicine 2016; 4 (2): 77-83

Keywords: Neoplasms; Hematologic Neoplasms

Abstract: Background and Aim: Ring chromosomes are rare cytogenetic abnormalities that occur in less than 10% of hematopoietic malignancies. They are rare in blood disorder. The present review has focused on the ring chromosome associated with oncology malignancies. Materials and Methods: By reviewing the web-based search for all English scientific peer review articles published, was initiated using Medline/PubMed, Mitelman database [<http://cgap.nci.nih.gov/Chromosomes/Mitelman>], and other pertinent references on websites about ring chromosomes in Oncology. The software program as End Note was used to handle the proper references

for instruction to author. Karyotype descriptions were cited according to ISCN. Conclusion: Ring chromosomes are rare chromosomal aberrations, almost many times are of de novo origin, presenting a different phenotype regarding the loss of genetic material. The karyotype represents the main analysis for detection of ring chromosomes, but other molecular technics are necessary for complete characterization. The information of this review article adds to the spectrum of both morphology and genetic rearrangements in the field of oncology malignancies.

Root Canal Therapy

instrumentation

Retrieval of multiple separated endodontic instruments using ultrasonic vibration: Case report.

Madarati, Ahmad A.

[E-mail:amadarati@taibahu.edu.sa](mailto:amadarati@taibahu.edu.sa)

Taibah University - College of Dentistry - Department of Restorative Dental Sciences

Journal of Taibah University Medical Sciences 2016; 11 (3): 268-273

Keywords: Retreatment-instrumentation; Clinical Protocols; Equipment Failure; Ultrasonic Waves; Rotation; Dental Instruments; Root Canal Therapy-adverse effects

Abstract: This report describes the management of a complicated clinical case with three instruments fractured in one tooth. A 32-year-old patient presented with three Pro- Taper rotary files fractured in the upper right second molar [S2 and F2 in the disto-buccal canal and S1 in the mesio-buccal canal]. A staging platform was prepared in the distal canal coronal to the fragments. Under dental microscope magnification, an Endo-4 ultrasonic tip was activated to dislodge the more coronal fragment [S2] by trephining dentine around the coronal aspect of the fragment. After 11 min, the fragment became loose and was removed. Following the same protocol and using an Endo-5 ultrasonic tip, the second fragment [F2] was removed in approximately 17 min. The first attempt to remove the S1 fragment from the mesio-buccal canal was not successful. An attempt to bypass this fragment using a K-file also failed. A second attempt using the ultrasonic technique resulted in a secondary fracture of the coronal aspect of the fragment. An Endo-5 ultrasonic tip was used to dislodge the fragment, which was successfully removed in 7 min. This report concludes that once a fractured file is bypassed, the instrumentation of a root canal is best completed with hand files. Clinicians should identify their limitations and consider referring cases that are beyond their abilities. Good experience and an appropriate armamentarium enable successful management of complicated cases. Ultrasonic vibration and dental microscope magnification contribute to successful removal of fractured instruments.

Scalp Dermatoses

epidemiology

Hair and scalp disorders in a Tuscan pediatric dermatological outpatient clinic: a clinical and epidemiological evaluation.

Conti, Rossana; Colucci, Roberta; Arunachalam, Meena; Berti, Samantha; Fabroni, Caterina; De Martino, Maurizio; Dragoni, Federica; Lazzari, Linda; Pisaneschi, Lisa; Moretti, Silvia

[E-mail:rossanaconti@hotmail.it](mailto:rossanaconti@hotmail.it)

University of Florence - Department of Surgery and Translational Medicine

Medical Principles and Practice 2016; 25 (1): 67-71

Keywords: Scalp; Hair Diseases-epidemiology; Pediatrics; Child; Ambulatory Care Facilities; Retrospective Studies

Abstract: Objectives: The aim of this study was to evaluate the clinical and epidemiological profile of hair and scalp disorders in children referred to the Pediatric Dermatology Outpatient Clinic. Materials and Methods: We performed a retrospective study of children with hair loss problems or scalp diseases who turned to the Pediatric Dermatology Service, Anna Meyer Pediatric Hospital, Florence, Italy, from January 1, 2009, to December 31, 2009. Demographics, personal and familial medical history, laboratory tests, clinical examination, final diagnosis and therapeutic interventions were obtained from the manual chart review. Results: Of the 2,640 children who had access to the Pediatric Dermatology Service, 190 [7.19%] had a hair or scalp disorder. Among the 190 children, 60 [31.57%] presented with non-scarring alopecia, 56 [29.47%] had benign neoplasias, hamartomas or vascular malformations of the scalp, 51 [26.84%] had scalp inflammatory diseases, 14 [7.36%] had scarring alopecia, 5 [2.63%] had infections and 2 [1.05%] had infestation of the scalp. A case of constitutional hypertrichosis [0.52%] and also a case [0.52%] of lamellar ichthyosis were diagnosed. Conclusions: Our results underline that hair and scalp diseases represent an important percentage of admittances to a dermatological pediatric outpatient clinic. The variety and complexity of the diseases observed in this study included diseases commonly found also in adulthood.

Schistosomiasis mansoni

diagnosis

Comparative study on immunoblot versus PCR in diagnosis of schistosomiasis mansoni in experimental infected mice.

Ismail, Mousa A.M.; Mousa, Wahed Mohammed Ali; Abu Sarea, Enas Yahia; Basyouni, Maha M.A.; Mohammed, Samah Sayed

Cairo University - Faculty of Medicine - Department of Medical Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 101-108

Keywords: Polymerase Chain Reaction; Blotting, Western; Mice; Antigens, Helminth; DNA, Helminth

Abstract: This study compared PCR and Western blot techniques in diagnosis of schistosomiasis mansoni. Forty Swiss albino mice were used, thirty two mice were infected with cercariae of *S. mansoni* and eight mice were kept uninfected which were used as a control. Blood was obtained from four infected mice weekly beginning from the 1st week to the 8th week post infection. The study found that PCR was positive from the first week post infection, while Western blot technique was positive from the second week post infection. Thus, PCR diagnosed schistosomiasis mansoni earlier than Western blot technique, but both were able to diagnose.

Scoliosis

[Effect of group exercising and adjusting the brace at shorter intervals on Cobb angle and quality of life of patients with idiopathic scoliosis].

Hedayati, Zahra; Kamyab, Mojtaba; Ahmadi, Amir; Babaei, Taher; Nejad, Zahra Reihani; Ganjavian, Mohammad Saleh

Iran University of Medical Sciences - School of Rehabilitation Sciences - Department of Orthosis and Prosthesis

Journal of Rehabilitation 2016; 16 (4): 294-303

Keywords: Ophthalmoplegia, Chronic Progressive External; Exercise Therapy; Braces; Quality of Life; Surveys and Questionnaires

Abstract: Objective: Bracing along with exercising is the most effective protocol in patients with idiopathic scoliosis which have Cobb angles of 25 to 45 degrees. However, since the psychological aspects of scoliosis treatment may affect the quality of life, and the exact time for adjusting the pads of Milwaukee brace is unknown; Therefore the aim of this study was evaluating the effect of exercising in a group, with adjusting the brace in shorter intervals, in compare to routine protocol, in the treatment of idiopathic scoliosis. Materials and Methods: Thirty-four patients with idiopathic scoliosis which had Cobb angles of 50 to 15 degrees were included in this study and were divided into experimental and control groups. The patients of two groups participated in an eleven-week treatment program, differ between the two groups. Quality of life scores of both groups were evaluated before and after intervention using SRS-22 questionnaire, as well as scoliosis angles before and after the intervention according to the primary and secondary radiographic X-rays. Results: Statistical analysis was performed using Paired T-Test in each group and Independent T-Test between the two groups before and after treatment. The severity of scoliosis curvature and satisfaction domain of the experimental group was reduced significantly in compared with the control group, after intervention [P=0.04]. Moreover in the case of the quality of life in patients with Cobb angles less than 30 degrees, compared with patients with Cobb angles greater than 31 degrees, in the domains of selfimage, satisfaction, and total score, the difference was significant [P<0.05]. Conclusion: Adjusting the brace at shorter intervals along with exercising as a group, during the eleven weeks of treatment, has increased satisfaction and reduced the scoliosis Cobb angles of patients.

Seizures

Neuroimaging evaluation for first attack of unprovoked nonfebrile seizure in pediatrics: when to order?

Sadeq, Hussain; Karim, Jumanah; Marwan, Yousef; AlSaleem, Talal

E-mail: drhsadeq@icloud.com

Al Adan Hospital - Department of Pediatrics

Medical Principles and Practice 2016; 25 (1): 56-60

Keywords: Moyamoya Disease; Neuroimaging; Pediatrics; Retrospective Studies; Magnetic Resonance Imaging; Cone-Beam Computed Tomography

Abstract: Objective: To assess the value of neuroimaging studies in evaluating pediatric patients presenting with a first attack of nonfebrile seizure. Method: We reviewed the medical records of pediatric patients aged 28 days to 12 years who were admitted between 1 January and 31 December 2013 with a first attack of unprovoked, afebrile seizure. These patients had undergone neuroimaging studies. The exclusion criterion was patients with known predisposing conditions for seizure. The computed tomography [CT] scan and magnetic resonance imaging [MRI] results were either normal or abnormal, and the abnormal ones were further classified into clinically insignificant or significant. Descriptive analysis was performed to summarize the data. Result: Fifty

children were identified with a mean age of 5.2 +/- 3.8 years. Of the 50 subjects, 29 [58.0%] were males and 21 [42.0%] were females. Sixteen patients [32.0%] had abnormal neuroimaging studies [CT scan, MRI or both]; however, only 1 was considered to have a clinically significant abnormality, later diagnosed as Moyamoya disease. Conclusion: In this study, the neuroimaging studies were found not to be useful in evaluating pediatric patients presenting with a first attack of unprovoked, nonfebrile seizures.

Sepsis

mortality

Endocrine and metabolic alterations may underlie mortality of severe sepsis and septic shock patients admitted to ICU.

Ameen, AbdelBadee; Abdel Rehim, Marwa; Shaaban, Yasser Hassan
Al-Azhar University - Faculty of Medicine - Departments of Anesthesia and ICU

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 109-116

Keywords: Shock, Septic-mortality; Intensive Care Units-statistics and numerical data; Biomarkers; Lactates-blood; Macrophage Migration-Inhibitory Factors; Hydrocortisone; Glycopeptides-blood

Abstract: The study evaluated endocrinal and metabolic response to sepsis and its applicability for the prediction of outcome of septic patients. Patients were 39 adult with severe infections and with- in 24 h after onset of suspected clinical tissue hypoperfusion. At enrollment patients were evaluated for acute physiology and chronic health evaluation II score [APACHE II] and Glasgow Coma Scale [GCS]. Global hemodynamic parameters including systolic blood pressure [SBP], heart rate [HR] and central venous pressure [CVP] were recorded and monitored. All patients were managed at ICU due to Surviving Sepsis Campaign guidelines. ELISA estimated serum copeptin, macrophage migration inhibitory factor [MIF] and total cortisol [TC] and blood lactate levels. Study outcome was survival rate via 28 days [28-D SR] and best predictor for it. The results showed that 22 patients passed total hospital stay uneventfully for a total survival rate of 56.4%. Seventeen patients died; 10 during ICU stay and 7 during word stay. At admission serum markers levels were significantly higher in survivors and nonsurvivors compared to controls and in non-survivors compared to survivors. Survival showed negative significant correlation with age, high blood lactate and serum copeptin, TC and MIF levels. Survival showed positive significant correlation with SBP, CVP and urine output. ROC curve and Regression analyses defined high at admission serum copeptin and blood lactate levels as significant predictors for mortality of septic patients.

Serum Albumin

A comparative analysis of serum albumin from different species to determine a natural source of albumin that might be useful for human therapy.

Nurdiansyah, Rizky; Rifa'i, Muhaimin; Widodo
Brawijaya University - Faculty of Mathematics and Natural Sciences - Biology Department

Journal of Taibah University Medical Sciences 2016; 11 (3): 243-249

Keywords: Computer Simulation; Molecular Structure; Blood Substitutes

Abstract: Objectives: Serum albumin [SA] is one of the most abundant proteins in human plasma and performs functions for protein transport, scavenges for free radicals, and regulates osmotic pressure. SA has been used for therapy in humans with several diseases including hypovolemia, hypoalbuminemia, and chronic liver disease. However, the most appropriate source of albumin for medical applications remains unclear, especially in the case of viral infections, which complicates finding viable donors. Substitution of human serum albumin [HSA] with albumin from other natural sources is a viable alternative. Therefore, we elucidated the similarity in character, structure and evolutionary relationship among serum albumin isolated from seven different species. Methods: We compared the sequence, structure, and properties of SA from different species using an in-silico approach. Results: These data suggested that SA has sequence polymorphism that clusters based on closely related species. However, these polymorphisms do not change the three-dimensional structure of the protein; this may serve to maintain its function as a transporter. The Gallus gallus albumin has the lowest number of the epitopes that closely resemble HSA. Conclusion: This study is crucial in providing explicit information about the structural similarity of albumin isolated from other species compared to HSA. The Gallus gallus SA might be used as a primary natural source of albumin where warranted for human therapy.

Sleep Apnea Syndromes

Evaluation of Berlin questionnaire validity for sleep apnea risk in sleep clinic populations.

Khaledi Paveh, Behnam; Khazaie, Habibolah; Nasouri, Marzie; Ghadami, Mohammad Rasoul; Tahmasian, Masoud

Kermanshah University of Medical Sciences - Sleep Disorders Research Center

Basic and Clinical Neuroscience 2016; 7 (1): 43-48

Keywords: Risk; Surveys and Questionnaires; Population; Sleep Apnea, Obstructive; Sleep; Polysomnography; Evaluation Studies as Topic

Abstract: Introduction: The Berlin questionnaire [BQ] is a common tool to screen for Obstructive Sleep Apnea [OSA] in the general population, but its application in the clinical sleep setting is still challenging. The aim of this study was to determine the specificity and sensitivity of the BQ compared to the apnea-hypopnea index obtained from polysomnography recordings obtained from a sleep clinic in Iran. Methods: We recruited 100 patients who were referred to the Sleep Disorders Research Center of Kermanshah University of Medical Sciences for the evaluation of suspected sleep-disorder breathing difficulties. Patients completed a Persian version of BQ and underwent one night of PSG. For each patient, Apnea-Hypopnea Index [AHI] was calculated to assess the diagnosis and severity of OSA. Severity of OSA was categorized as mild when AHI was between 5 and 15, moderate when it was between 15 and 30, and severe when it was more than 30. Results: BQ results categorized 65% of our patients as high risk and 35% as low risk for OSA. The sensitivity and the specificity of BQ for OSA diagnosis with AHI>5 were 77.3% and 23.1%, respectively. Positive predictive value was 68.0% and negative predictive value was 22.0%. Moreover, the area under curve was 0.53 [95% CI: 0.49 - 0.67, P=0.38]. Discussion: Our findings suggested that BQ, despite its advantages in the general population, is not a precise tool to determine the risk of sleep apnea in the clinical setting, particularly in the sleep clinic population.

Spider Bites

Intervention program for nursing staff regarding approach to a patient with spider phobia and/or bite.

Al Agroudi, Mahfouz Ahmad; Ahmed, Salwa Abdalla Mohammad; Morsy, Tosson

Military Medical Academy

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 167-178

Keywords: Spider Venoms; Spiders-classification; Nursing Staff-education; Phobic Disorders

Abstract: Spider bites are uncommon medical events, since there are limited number of spiders worldwide with fangs strong enough to pierce human skin, and most spiders bite humans only as a final defense when being crushed between skin and another object. Thus, most lesions attributed to spider bites are caused by some other etiology. The spiders that can cause medically significant bites include widow and false widow spiders [worldwide], recluse spiders [mostly North and South America], Australian funnel web spiders [eastern coastal Australia] and Phoneutria spiders [Brazil]. Acute spider bites most commonly result in a solitary papule, pustule, or wheal. Systemic symptoms can accompany envenomation of widow, funnel web, and Phoneutria spiders, and less often, those of recluse spiders.

Spiramycin

pharmacology

Immunotherapeutic effect of spiramycin in experimental giardiasis.

Ismail, Howaida I.H.; Sheir, Hassan T.

Tanta University - Faculty of Medicine - Department of Parasitology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 19-25

Keywords: Anti-Bacterial Agents-harmacology; Giardiasis; Giardia lamblia; Intestine, Small-pathology; Immunotherapy

Abstract: Giardiasis is a major global cause of water borne diarrheal disease, which contributes greatly to the burden of malnutrition and malabsorption especially in children. There is a great demand for a new effective therapeutic agent against giardiasis that can be used safely during pregnancy, lactation and in infants. In the present study, the therapeutic effect of spiramycin as well as its immunomodulatory mechanism of action in giardiasis had been investigated. 90 Swiss albino mice were used in this study and classified into 3 groups: GI: 40 mice infected with Giardia lamblia cysts, GII: 40 infected mice that received spiramycin treatment in a daily oral dose of 1000 IU/gm body weight for one week starting one week post infection and GIII: 10 control uninfected untreated mice. 20 mice from each infected group were sacrificed 2 weeks post infection [p.i.] and the remaining mice were sacrificed 4 weeks p.i. Mice of the control groups were sacrificed at one time. The anti-giardial therapeutic efficacy of spiramycin was assessed 2 and 4 weeks p.i. by counting of Giardia cysts in stool of mice and studying the histopathological changes and disaccharidase activity in small intestine of mice of

different groups. Significant reduction in cysts number shedded in stool of treated animals reached 95.73%. The histopathological changes were mild in all infected groups 2 weeks p.i., while 4 weeks p.i. There was also a significant increase in the number of IELs in treated groups denoting the stimulatory effect of spiramycin on lymphocytic proliferation. On studying the disaccharidase activity, there was significant increase in both sucrose and maltase activities in the treated groups as compared with the nontreated groups. The possible immunomodulatory mechanism of action of spiramycin was studied by measuring the local IgA deposition in small intestinal mucosa by PAP technique 4 weeks p.i. The levels of IgA in small intestine were higher in SP-treated group as compared with the non-treated group. The present results suggested that spiramycin has high efficacy as anti-giardial agent possibly by stimulation of local IgA production.

Stomach Neoplasms

genetics

Study of regulatory promoter polymorphism [-248 GA] of Bax gene in patients with gastric cancer in the northern provinces of Iran.

Mirmajidi, SeyedehHabibeh; Najafi, Mojtaba; Mirmajidi, Seyedeh Tahereh; Nasrabadi, Nafiseh Nasri
Sari Agricultural Sciences and Natural Resources University - College of Sciences

Gastroenterology and Hepatology from Bed to Bench 2016; 9 (1): 36-44

Keywords: Polymorphism, Genetic; bcl-2-Associated X Protein; Polymerase Chain Reaction

Abstract: Aim: The aim of this study is to evaluate the polymorphism in Bax gene and its association with some clinical pathology traits in gastric cancer. Background: Gastric cancer is considered as the fourth most common cancer in the north and northwest of Iran. Bcl2 family has a key role in regulation of apoptosis, and any changes in the expression of Bcl2 lead to cancer. Patients and Methods: Blood samples were collected from 100 cases and 89 controls in the northern provinces of Iran to evaluate promoter polymorphism [-248G<A] of Bax gene. Genotyping was carried out by PCR-RFLP method. Results: The result of this study demonstrated the existence of polymorphism in the above-mentioned region of Bax gene. Sixty-nine patients [%69] with genotype GG and 31 patients [%31] with genotype AG were observed in the case group. No mutant genotype was found among cases. Sixty-seven individuals [%75/28] with genotype GG, 21 individuals [%23/59] with genotype AG and only one mutant genotype [AA] were demonstrated in the control group. The bioinformatics analysis showed that this polymorphism removed the probable Sp1 motifs, which may affect its expression in the cells. Conclusion: Allele G was the most frequent between both patient and control samples. Polymorphism may be effective on Bax expression, but it requires further investigation. Our results showed significant effects between genotypes and features of gender and age, whereas no significant relation were observed between the genotypes and grade, stage as well as smoking traits.

Stomatitis

Honey on oral mucositis: a randomized controlled trial.

Jayalekshmi, J.L.; Lakshmi, R.; Mukerji, A.

JIPMER and Regional Cancer Center - College of Nursing

GJO-Gulf Journal of Oncology [The] 2016; (20): 30-37

Keywords: Honey; Radiotherapy; Head and Neck Neoplasms; Mouth Mucosa

Abstract: Background and objective: The main stream of management of head and neck cancer is by radiotherapy and surgery. During radiation therapy in head and neck cancers, oral cavity is directly exposed to high dose radiation which leads to several side effects - oral mucositis being the most distressing one. This study was intended to assess the effects of applying honey on oral mucositis during radiation therapy. Material and Methods: The research design used in this study was Randomized Control Trial with single blinding method in the Radiotherapy Unit of Regional Cancer Centre [RCC], at JIPMER. The study population included a total of 28 patients. Participants in experimental group were given 15ml natural honey for applying on oral mucosa and in control group 15ml plain water were given. Assessment of oral mucosa was done after every 5 doses of radiation therapy using RTOG scale and severity of oral mucositis was assessed. Results: There was a statistically significant difference in degree of oral mucositis between the experimental and control group in week 4, 5 and 6 [p<0.01]. During the whole course of study, 9 [64.28%] participants in control group developed grade III oral mucositis while only one participant [7.14%] in experimental group developed grade III oral mucositis. Conclusion: The study concluded that applying natural honey on oral mucositis was effective among head and neck cancers patients receiving external beam radiation therapy.

Streptococcus agalactiae

Frequency of group B streptococci in pregnant women in a tertiary care hospital.

Munir, Shamila Ijaz; Waheed, Khadija; Khanum, Amna; Iqbal, Riffat; Eusaph, Amna Zia; Hanif, Asif
E-mail: shamilaijaz@yahoo.com

King Edward Medical University [KEMU] - Department of Obstetrics and Gynaecology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 27-30

Keywords: Streptococcal Infections-epidemiology; Pregnant Women; Tertiary Care Centers; Risk Factors; Pregnancy Trimester, Third; Cross-Sectional Studies; Prospective Studies; Vaginal Discharge

Abstract: Objective: To determine the frequency and risk factors of Group B Streptococci [GBS] in pregnant patients in third trimester in a tertiary care hospital in Lahore. Study Design: Cross-sectional, prospective study. Place and Duration of Study: Lady Willingdon Hospital, Lahore, from October 2014 to March 2015. Methodology: Sterile lower vaginal swabs were taken from 200 women aged 20 years and over, in third trimester, with no history of vaginal bleeding, ruptured membrane, recent intake of antibiotics or chronic illness. These swabs were cultured for detection of GBS. The risk factors of GBS and its frequency were noted in the pregnant population. Quantitative and qualitative data was analyzed by SPSS version 20. Chi-square test was applied to see association between diagnosis of GBS and other categorical variables. P-value \leq 0.05 was considered as statistically significant. Results: In this study, the mean age of all the females was 26.36 +/- 4.32 years and mean duration of pregnancy was 35.54 +/- 2.65 weeks. Frequency of GBS in pregnant women was found as 14%. We observed significant association of GBS with parity and previous history of miscarriage [p-value = 0.033 and 0.010 respectively]. Moreover, significant association between vaginal discharge and GBS was also found [p = 0.027]. Conclusion: GBS is present in a small but significant number of pregnant women in our setting and it has association with multiparity, vaginal discharge during pregnancy, and previous history of miscarriage.

Stroke

Age and stroke severity: hazards for intravenous thrombolysis?

Long, Chuyan; Li, Min

Second Affiliated Hospital - Department of Neurology

Medical Principles and Practice 2016; 25 (1): 99-100

Keywords: Age Factors; Thrombolytic Therapy; Administration, Intravenous

Association of transforming growth factor beta-1 -509C/T gene polymorphism with ischemic stroke: a meta analysis.

Kumar, Pradeep; Kumar, Amit; Srivastava, Mukesh Kumar; Misra, Shubham; Pandit, Awadh Kishor; Prasad, Kameshwar

All India Institute of Medical Sciences - Department of Neurology

Basic and Clinical Neuroscience 2016; 7 (2): 91-96

Keywords: Transforming Growth Factors; Polymorphism, Genetic; Meta-Analysis as Topic

Abstract: Introduction: Transforming Growth Factor-Beta 1 [TGF-beta1] is a pleiotropic cytokine with potent anti-inflammatory property, which has been considered as an essential risk factor in the inflammatory process of Ischemic Stroke [IS], by involving in the pathophysiological progression of hypertension, atherosclerosis, and lipid metabolisms. -509C/T TGF-beta1 gene polymorphism has been found to be associated with the risk of IS. The aim of this meta-analysis was to provide a relatively comprehensive account of the relation between -509C/T gene polymorphisms of TGF-beta1 and susceptibility to IS. Methods: A review of literature for eligible genetic association Studies published before October 20, 2014 was conducted in the PubMed, EMBASE, Google Scholar and Trip database. The strength of association was calculated by pooled odds ratios [ORs] with 95% confidence intervals using RevMan 5.3 software. Heterogeneity was examined using Higgins I-squared, Tau-squared, and Chi-squared tests. Results: A total of 2 studies involving 614 cases and 617 controls were found. The overall estimates did not show any significant relation between TGF-beta1-509C/T polymorphism and risk of IS under dominant [CC+CT vs. TT: OR=1.01, 95%CI=0.31 to 3.26; P=0.99], recessive [CC vs. CT+TT: OR=0.94, 95%CI=0.47 to 1.90; P=0.87], and allelic models [T vs. C: OR=1.06, 95%CI=0.55 to 2.04; P=0.86]. Conclusion: This meta-analysis showed that TGF-beta1-509C/T gene polymorphism has no significant association with the susceptibility of IS. Further well-designed prospective studies with larger sample size are needed to confirm these findings.

Temporomandibular Joint Disorders

epidemiology

The effects of clinical wear on the incidence of temporomandibular disorders among patients with complete dentures.

Arafa, Khalid A.

E-mail: drkhalidarafa@yahoo.com

Albaha University - Faculty of Applied Medical Sciences - Department of Dental Health

Journal of Taibah University Medical Sciences 2016; 11 (3): 250-254

Keywords: Denture, Complete-adverse effects; Dental Restoration Wear; Dental Porcelain

Abstract: Objective: This study evaluates the effect of clinical wear on the incidence of temporomandibular disorders in patients with complete dentures. Methods: A randomized clinical trial was conducted on two groups; group 1 [30 patients] received complete upper and lower dentures with teeth made of heat-cured acrylic resin, and group 2 [29 patients] received complete upper and lower dentures with teeth fabricated of porcelain. The occurrence and clinical examination of temporomandibular disorders were evaluated using Helkimo anamnestic dysfunction index [Ai] and Helkimo clinical dysfunction index [Di], respectively. Clinical wear of denture teeth was estimated by the assessment of wear depth using the mean differences between tracing images of lingual cusps at each follow-up. The patients were followed up at 6, 12, 18 and 24 months for assessment of clinical wear and incidence of temporomandibular disorders. Results: The acrylic resin group was subjected to significantly higher wear than the porcelain group at 12, 18 and 24 months of follow-up. The incidence of temporomandibular disorders was also significantly higher in the acrylic resin group than in the porcelain group at 18 and 24 months of follow-up. Conclusion: There was higher incidence of temporomandibular disorders among patients who wore complete dentures with teeth made of acrylic resin than in patients who wore complete dentures with porcelain teeth.

Thyroid Diseases

pathology

Histopathological pattern of thyroid diseases among patients in Hadhramout-Yemen.

Aram, F.O.; Bahannan, A.A.; Bafakeer, S.S.

Hadramout University - College of Medicine and Health Science - Department of General Surgical Specialities

GJO-Gulf Journal of Oncology [The] 2016; (20): 45-50

Keywords: Goiter; Hashimoto Disease; Carcinoma, Papillary; Thyroid Neoplasms; Retrospective Studies; Carcinoma, Medullary

Abstract: Objective: To determine the histopathological pattern of thyroid diseases among patients in Hadhramout Province, Yemen. Methods: A descriptive retrospective study was conducted at Ibn Sina Central Teaching Hospital, in Mukalla city, Hadhramout, Yemen between January 2007 and December 2012. Eight hundred and seventeen patients with thyropathy were included in this study diagnosed histologically by experienced pathologists using fine needle aspiration cytology. This was followed-up by postoperative pathological thyroid specimen study. The patients in the study were treated medically and surgically by authors. Results: 817 patients with thyropathy were included in the study. There were 716 [87.6%] females and 101 [12.4%] males, with a female to male ratio of 7: 1. The age of the patients ranged from 5 to 80 years, with a mean age of 37.7 +/- 12.2 years. Median age was 35. More than half of the patients aged between 21-40 years. The majority of the thyroid lesions were non neoplastic = 703 [86%]. The most common lesion was simple colloid goiter = 578 [82%] followed by thyroid Hashimoto = 75 [10.7%]. The minority were granulomatous [subacute] thyroiditis, hyperplastic nodule and thyroglossal cyst, 5 [0.7%], 6 [0.9%], 8 [1.1%] respectively. 114 [14%] patients have neoplastic lesions. 61 [7.5%] patients have benign adenoma, 2 [1.75%] patients have Hurthel cell adenoma. 43 [5.3%] patients have papillary carcinoma while 3 [2.63%] patients have anaplastic carcinoma. The less common malignant neoplastic thyroid lesions were primary lymphoma, follicular and medullary carcinoma, and mucoepidermoid carcinoma, 2 [1.75%], 1 [0.9%], 1 [0.9%], and 1 [0.9%] respectively. Conclusion: The most common non-neoplastic thyroid disorder reported in this study is a simple colloid goiter. Adenoma was found to be the most common benign tumor while papillary carcinoma was found to be the most common malignant one. Most cancerous lesions were found within the age groups in the third and the fourth decade, mostly females.

Tooth Bleaching Agents

In-vitro comparative study of in-office and home bleaching agents on surface micro-morphology of enamel.

Fatima, Nazish

[E-mail:nazish_fawad@yahoo.com](mailto:nazish_fawad@yahoo.com)

Ziauddin University - Ziauddin College of Dentistry - Department of Dental Materials

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2016; 26 (1): 9-12

Keywords: Bleaching Agents; Peroxides; Urea-analogs and derivatives; Hydrogen Peroxide; Dental Enamel

Abstract: Objective: To evaluate the effect of home-use bleaching agent containing 16% Carbamide Peroxide [CP] and in-office bleaching agent with 38% Hydrogen Peroxide [HP] on surface micro-morphology of enamel. Study Design: An experimental study. Place and Duration of Study: The discs were prepared at Material Engineering Department of NED University of Engineering and Technology, Karachi, and surface morphology was analyzed at Centralized Science Laboratory of Karachi University, Pakistan. Duration of study was one year from January to December 2012. Methodology: Forty five sound human third molar crowns, extracted for periodontal reason, were included in the study. Longitudinal sections were made using diamond disks [0.2 mm] under water lubrication to obtain enamel slabs measuring [3 mm x 3 mm]. The slabs were embedded in polystyrene resin by using 2.0 cm diameter PVC molds, leaving the outer enamel surface uncovered by the resin. Ninety dental enamel slabs were prepared. The slabs were then randomly divided into 3 groups. Each group contained thirty specimens [n=30]. Group 1 was kept in artificial saliva at 37[degree]C in incubator [Memart, Germany] during whole experiment. Group 2 was treated with power whitening gel [White Smile 2011, Germany]. Group 3 was treated with tooth whitening pen [White Smile 2011, Germany]. The most central region or the region that was most representative of the entire surface area was used. The SEM [Jeol-Japan-JSM6380A, JAPAN] micrographs were examined to determine the type of surface presented. The enamel changes were classified as no or mild alteration, moderate alteration and severe altered surface. Results: Regarding micro-morphology, the enamel surface of control groups showed smooth surface in general with some scattered clear scratches due to the polishing procedure. The specimens bleached in group 2 and group 3, represented areas of mild erosion. Conclusion: Bleaching with 38% Hydrogen Peroxide [HP] and 16% Carbamide Peroxide [CP] resulted in mild changes in surface micro-morphology of enamel.

Tooth Eruption, Ectopic

complications

Epistaxis, nasal obstruction and unilateral facial pain due to an ectopic tooth.

Malas, Samer; Alreefy, Hiba; Al Bedawi, Fahad

[E-mail:malassamer@gmail.com](mailto:malassamer@gmail.com)

King Hamad University Hospital - Department of ENT

Bahrain Medical Bulletin 2016; 38 (1): 41-43

Keywords: Tooth Eruption, Ectopic-surgery; Epistaxis; Facial Pain; Nasal Obstruction; Molar

Abstract: Ectopic eruption of teeth within the dentate region of the jaws is frequently noticed in routine clinical practice. However, the ectopic eruption in a non-dentate region is rare, especially in the area of the maxillary sinus. Early surgical intervention for the removal of ectopic teeth along with enucleation of associated cyst, such as a dentigerous cyst, if present, is the preferred treatment. We report a case of a patient who was referred due to chronic mucopurulent discharge and epistaxis, nasal obstruction and unilateral facial pain due to an ectopic third molar. This condition was caused by an ectopic tooth near the sinus ostium; however, the patient had no dental complaints.

Tooth Root

drug effects

The effect of four commonly used root conditioner agents in different time periods applied on periodontally diseased and healthy teeth.

Torkzaban, P.; Seyedzadeh Sabounchi, S.

Hamadan University of Medical Sciences - Hamadan Dental Research Center - Department of Periodontology

JDB-Journal of Dental Biomaterials 2016; 3 (2): 241-247

Keywords: Acid Etching, Dental; Citric Acid-pharmacology; Doxycycline-pharmacology; Tetracycline-pharmacology; Dentin-drug effects; Periodontal Diseases-drug therapy; Smear Layer

Abstract: Statement of Problem: Root surface contamination or infection can potentially change the consequences of regenerative periodontal therapies and therefore the modification and disinfection of the

contaminated root surfaces are necessary. Objectives: This study aimed to compare the surface characteristics of the extracted human teeth after exposure to four root conditioners in different time periods. Materials and Methods: The study samples were prepared from 40 freshly extracted teeth including 20 affected teeth with periodontal diseases and 20 healthy teeth. After performing root planning, 240 dentinal block samples were prepared and each affected and healthy sample was randomly allocated to receive one of the following root conditioners; Ethylenediaminetetraacetic acid [EDTA], citric acid, doxycycline, and tetracycline or rinsed with normal saline as the control agent. The prepared specimens were evaluated using scanning electron microscope and the inter-group differences and changes in study indices; dentin , [%]tubular spaces , [%]and diameter of dentinal tubules [micro m[2]] were compared using one-way ANOVA test. Results: In the control group receiving normal saline, the changes in the indicators of dentin, tubular spaces, and diameter of dentinal tubules remained insignificant in all time periods. EDTA, citric acid, and tetracycline had chelating effects on the study indices; however, doxycycline led to gradual decrease of the tubular space and diameter as well as increase in dentin percentage. Conclusions: In different time intervals and when considering healthy or affected tooth surfaces, the effect of conditioning agents could be different. Amongst the four agents used, EDTA and tetracycline consistently increased the diameter of tubules and percentage of patent tubules in both healthy and diseased teeth.

Tooth, Nonvital

Fracture resistance of endodontically treated teeth restored with indirect composite inlay and onlay restorations - An in vitro study.

Alshiddi, Ibraheem F.; Aljinbaz, Amjad

[E-mail:ialshiddi@ksu.edu.sa](mailto:ialshiddi@ksu.edu.sa)

King Saud University - College of Dentistry - Department of Prosthetic Dental Sciences

SDJ-Saudi Dental Journal [The] 2016; 28 (1): 49-55

Keywords: Composite Resins; Inlays; In Vitro Techniques; Bicuspid; Endodontics

Abstract: Objective: The purpose of this in vitro study was to evaluate and compare the fracture resistance and fracture mode of extensive indirect inlay and onlay composite resin restorations performed for endodontically treated premolars. Materials and Methods: A total of 55 extracted maxillary premolars were randomly divided into four groups. The first group [n = 15] remained untreated to serve as a positive control; the second group [n = 15] was endodontically treated with inlay cavities prepared and restored with indirect composite inlay restorations; the third group [n = 15] was also endodontically treated with onlay cavities prepared and restored with indirect composite onlay restorations; and the fourth group [n = 10] was endodontically treated with mesio-occlusodistal [MOD] cavities prepared and left unrestored to serve as negative controls. Dual cure indirect composite resin was used to fabricate the inlay and onlay restorations performed for the second and third groups, respectively. All teeth were subjected to compressive axial loading test using a metal ball [6 mm in diameter] in a universal testing machine [Instron 1195] with a cross-head speed of 0.5 mm/min until a fracture occurred. Statistical analysis of fracture resistance and fracture mode were performed with analysis of variance [ANOVA] [alpha = 0.05] and Kruskal-Wallis [alpha = 0.05] tests, respectively. Results: For the four treatment groups, the mean fracture resistance values were 1326.9 N, 1500.1 N, 1006.1 N, and 702.7 N, respectively. Statistical analyses showed no significant differences between the mean fracture resistance of the intact tooth group and the inlay restoration group [p > 0.05], while significant differences were observed between the mean fracture resistance of all the other groups [p < 0.05]. The Kruskal-Wallis test showed statistically significant differences between the fracture modes of the four groups. Conclusions: Within the limitations of this study, endodontically treated teeth were successfully restored with indirect composite inlay and onlay restorations. However, the fractures that accompanied the inlay restorations were more severe and were unable to be restored.

Toxoplasma

Seroprevalence of Toxoplasma gondii among pregnant women in Almadinah Almunawwarah KSA.

Imam, Naglaa F.A.; Azzam, Esra'a A.A.; Attia, Ahmed A.

[E-mail:naglaa-fouad@hotmail.com](mailto:naglaa-fouad@hotmail.com)

Cairo University - Faculty of Medicine - Department of Medical Parasitology

Journal of Taibah University Medical Sciences 2016; 11 (3): 255-259

Keywords: Seroepidemiologic Studies; Toxoplasmosis, Congenital-epidemiology; Pregnant Women; Pregnancy Complications, Infectious-epidemiology; Reagent Kits, Diagnostic; Enzyme-Linked Immunosorbent Assay

Abstract: Objectives: Given its detrimental obstetric and congenital sequelae, the detection of primary toxoplasmosis is most critical during pregnancy. This study aims to detect the seroprevalence of Toxoplasma gondii [Toxoplasma gondii] among pregnant women who either have histories suggestive of toxoplasmosis or may be at risk. Methods: Serum samples of 150 pregnant women aged 18 -45 years were tested by the rapid Toxoplasma test [TOXO IgM/IgG test, InTec]. The results were further confirmed by the enzyme-linked immunosorbent assay [ELISA] technique for IgM and IgG. Results: Serological results of toxoplasmosis seropositivity were statistically analyzed in light of the available epidemiological data. Thirty-two cases [21.3%]

were IgG positive, and none was IgM positive, as shown by both tests. Conclusion: Significant relations were observed between seropositivity, maternal age and history of abortion, and probability of delivering a child with a congenital anomaly. Despite the lack of evidence of recent infection in this study, the high rates of *T. gondii* seropositivity among pregnant women signaled a threat of primary exposure during pregnancy.

genetics

Genetic polymorphism of *Toxoplasma gondii* from recently infected aborted Egyptian women.

Badr, Mohamed S.; Attia, Samar S.; El Sherbiny, Walid S.; El Ebdy, Abd Allah M.A.; Hefny, Hesham M.; Salem, Ahmed N.M.

Ain Shams University - Medical Research Center - Department of Molecular Biology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 49-55

Keywords: Abortion, Spontaneous; Pregnancy Complications, Parasitic; Toxoplasmosis; Pregnancy; Genotype; Polymorphism, Genetic

Abstract: Toxoplasmosis caused by *Toxoplasma gondii* is one of the most prevalent parasitic diseases in human beings. Human toxoplasmosis can be associated with serious clinical manifestations, particularly in developing fetus. The aim of the current study was to identify the possible lineage type of *Toxoplasma gondii*, molecularly detected in placental samples of women whose pregnancies were spontaneously terminated in the first trimester. Preliminary detection of *Toxoplasma* genomic materials was done by a SYBR green qPCR technology. Subsequent identification of *Toxoplasma* strain was done for the positive samples using PCR-restriction fragment length polymorphism [RFLP] at the SAG2 loci of *T. gondii* using restriction enzymes HhaI and Sau3AI. Out of 72 tested samples, *Toxoplasma* B1 gene was detected in 9 cases. *Toxoplasma* genotypes I and II in addition to unknown type were identified in 4, 3 and 2 cases respectively, while type III was not detected in our samples, hence excluded as a leading cause of abortion in humans in our preliminary study. Nevertheless, it remains uncertain to what extent the genotype of the parasite directly contributes to the clinical severity of human toxoplasmosis. Certainly, advanced molecular techniques targeting different *Toxoplasma* strains are crucial for better understanding of human toxoplasmosis. For more elucidation, additional studies are recommended intended for genetic characterization of such serious parasitic infection using larger number of samples.

Toxoplasmosis

diagnosis

Appraisal of prenatal anti-*Toxoplasma gondii* [IGG+IGM]-IHA/IGM-Elisa screening in single samples VIA IGG Avidity test.

El Bali, Mohammed; Zagloul, Dina A.M.; Khodari, Yousif A.W.; Al Harthi, Saeed A.

E-mail:maelbali@uqu.edu.sa

Umm Al-Qura University - Faculty of Medicine

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 201-208

Keywords: Prenatal Diagnosis; Antibody Affinity; Enzyme-Linked Immunosorbent Assay-methods; Antibodies, Protozoan-blood; Immunoglobulin G-blood; Immunoglobulin M-blood; Pregnancy Complications, Parasitic-diagnosis

Abstract: Congenital toxoplasmosis is associated with important morbidity and mortality. Since vertical transmission of *Toxoplasma gondii* can occur in acute cases, antenatal screening for recent infections is vital. Accurate determination of acute toxoplasmosis requires a combination of immunoassays, usually not routinely applied for screening purposes. This study evaluated the anti-*T. gondii* [IgG+IgM]/IgM prenatal screening procedure by IgG avidity assay. The routine prenatal screening for [IgG+IgM] anti-*T. gondii* by indirect hemagglutination [IHA] in serum samples was done of 2247 pregnant women who attended two hospitals between 2011 and 2013 revealed 487 [21.7%] positive samples. Examination of IHA-positive sera by IgM and IgG/IgG-avidity concurrent ELISA tests revealed 7 positive and 3 border-line IgM-ELISA titers during the initial check-up of 10 women, who were then followed up at 3-4 week-intervals. Among these, 4 [40%] showed simultaneous high avidity IgG antibodies, indicating distant infection by the parasite, and no anti-*T. gondii* specific IgG could be detected in follow-up sera of two cases [20%], indicating false IgM initial positive results. Only 4 [40%] women showed simultaneous IgM and low avidity IgG antibodies indicating active infections. Avoidance of an overdiagnosis of acute toxoplasmosis Anti-*T. gondii* [IgG+IgM]/IgM prenatal screening must be supplemented by a discriminative test like IgG avidity ELISA.

Tracheal Stenosis

Palliation of postintubation tracheal stenosis using insulation-tipped diathermic knife 2: a case report.

Yoon, Seon Bin; Park, Yong Won; Cheon, Mi Ju; Koh, Young Min; Park, Sanghoon; Kim, Se Joong; Lee, Seung Hyeun

KEPCO Medical Center - Department of Internal Medicine

Medical Principles and Practice 2016; 25 (1): 90-92

Keywords: Intubation, Intratracheal; Diathermy; Bronchoscopy; Tomography, X-Ray Computed

Abstract: Objective: To report the first case of using the insulation-tipped diathermic knife 2 [IT knife-2] for the treatment of postintubation tracheal stenosis. Clinical Presentation and Intervention: A 71-year-old female patient with a history of endotracheal intubation 3 years earlier presented with throat discomfort, gross wheezing and dyspnea. Chest imaging and bronchoscopy demonstrated a strand-like tracheal stenosis in the upper trachea. The IT knife-2 was used to treat the patient and the lesion was palliated without complication. Conclusion: This case was successfully treated with the IT knife-2 and thus implies a potential usefulness of the IT knife-2 as a new modality for bronchoscopic intervention.

Triple Negative Breast Neoplasms

Clinical characteristics and prognostic analysis of triple-negative breast cancer: single institute experience.

Maka, V.V.; Panchal, H.; Shukla, S.N.; Talati, S.S.; Shah, P.M.; Patel, K.M.; Anand, A.S.; Shah, S.A.; Patel, A.A.; Parikh, S.

[E-mail:vinayakvmaka@gmail.com](mailto:vinayakvmaka@gmail.com)

HCG MSR Cancer Centre - M S Ramaiah Medical College and Hospitals

GJO-Gulf Journal of Oncology [The] 2016; (20): 38-44

Keywords: Prognosis; Prospective Studies; Anthracyclines; Drug Therapy; Lymph Nodes; Carcinoma, Intraductal, Noninfiltrating

Abstract: Background: Triple-negative breast cancer [TNBC] is a poor prognostic subset of breast cancer that lacks the benefit of specific targeted therapy. Materials and Methods: A prospective study of the clinical profile of triple negative breast cancer cases at a tertiary referral centre. The duration of the study period was 26 months and the median follow up period was ten months. A total of 111 invasive breast cancer patients were evaluated from 1st August 2009 to 31st October 2011. We examined TNBC patients with respect to clinicopathological parameters, adjuvant chemotherapy regimens and relapse free survival. Results: In our study, patients were young [median age at presentation, 47 yrs], premenopausal [54%], tumour size was discordant with lymph node positivity, the histology was predominantly intraductal carcinoma [90%], histological grade higher than two [90%]. Relapses were early and preferential visceral [32%] and CNS metastasises [11.7%]. 91% of patients were eligible for adjuvant therapy but only 80% of the patients could complete full course of adjuvant chemotherapy. Anthracycline-based regimens [43%], sequential anthracycline and taxane-based regimen [24%] and other regimes like CMF [13%] were used as adjuvant chemotherapy in eligible TNBC patients. Median relapse free survival in patients following adjuvant chemotherapy was around 10 months at last follow-up. Conclusions: Patients with TNBC have aggressive clinicopathological characteristics with early and higher rate of disease relapse and therefore derive inadequate benefit from current adjuvant chemotherapy. So, new treatment strategies in adjuvant chemotherapy for TNBC are needed.

Trypanosoma

Surveillance of Trypanosoma SPP of rodents and studies in their transmission probability by fleas in some rural Egyptian areas.

Dahesh, Salwa M. A.; Mikhail, Micheal W.

[E-mail:Salwamohamed970@gmail.com](mailto:Salwamohamed970@gmail.com)

Al Gabal Al Gharby University - Faculty of Medical Technology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 157-166

Keywords: Trypanosomiasis; Rats; Rodent Diseases-parasitology; Flea Infestations; Insect Vectors; Zoonoses

Abstract: A new public health problem arises from animal trypanosomes that afflict human by a disease called atypical human trypanosomiasis. Although humans have an innate protection against most Trypanosoma species, nineteen cases of atypical human trypanosomiasis caused by the animal trypanosome as T. b. brucei, T. vivax, T. congolense, T. evansi and T. lewisi have been recorded. Some of these recorded cases were transient, six required trypanocidal treatments however two patients died. Rodent trypanosome, T. lewisi is transmitted via ingestion of fleas or their feces containing the infective stage, the metacyclic trypomastigote. Because of the high densities of various species of rodents and their distribution all over the country especially in rural areas, the present work aimed to evaluate the trypanosomiasis among rodents collected from November to March 2016 and study transmission probability by their fleas in some rural areas in Abu Alnomros Center, Giza.

The overall trypanosomiasis prevalence among the different rodent species was [21 rats] 24.7%. All the infected rats belonged to *Rattus r. spp* where the prevalence of infection with *Trypanosoma lewisi* among that species was very high 51.2% while none of rats belonged to *Rattus norvegicus* were infected. That may be attributed to the solid immunity gained by the *R. norvegicus* where most of the collected *norvegicus* were aged and weighed more than 200 grams. There was an inverse significant correlation between the densities of parasites and the weights of the hosts. The rat which recorded the highest parasite density [60, 000 parasites/ microliter] was a female *Rattus r. captured indoor [inside house]*. As to sex of *Rattus rattus spp* no significant difference was found between males and females in trypanosomiasis. Also there was no significant correlation between the densities of parasites and the number of white blood cells among *Rattus rattus spp*. All positive rats were collected indoors [from houses] and all the rats which were captured from outdoors [farms] were negative for *T. lewisi*. The difference between infections with trypanosomiasis among rats inhabited the houses and that found in farms was highly significant. Only two species of fleas were found on rats, *Xenopsylla cheopis* and *Leptopsylla segnis*. The oriental fleas, *X. cheopis*, were found mainly on *R. norvegicus* where 57.5% of *R. norvegicus* were positive for *X. cheopis* while only one rat was positive for *L. segnis*. On other hand the rat fleas, *L. segnis*, were found mainly on *Rattus rattus spp* where 39% of these rats were positive for *L. segnis*. The present work revealed a significant correlation between the infection with *T. lewisi* and the presence of *L. segnis* on the rats however that correlation regarding *X. cheopis* was not significant.

Twins, Dizygotic

Obstetrics and perinatal outcomes of dichorionic twin pregnancy following ART compared with spontaneous pregnancy.

Pourali, Leila; Ayati, Sedigheh; Jelodar, Shahrzad; Zarifian, Ahmadreza; Andalibi, Mohammad Sobhan Sheikh
Mashhad University of Medical Sciences - Women's Health Research Center - Department of Obstetrics and Gynecology

IJRM-Iranian Journal of Reproductive Medicine 2016; 14 (5): 317-322

Keywords: Pregnancy Outcome; Pregnancy, Twin; Pregnancy Complications-epidemiology; Infant, Newborn, Diseases-epidemiology; Reproductive Techniques, Assisted; Cross-Sectional Studies; Surveys and Questionnaires

Abstract: Introduction: Regarding to the recent advances in assisted reproductive techniques [ART], twin and multiple pregnancies have increased during past years. Objective: This study was performed to compare obstetrics and perinatal outcomes of dichorionic twin pregnancy following ART with spontaneous pregnancy. Materials and Methods: In this cross-sectional study which was performed in Ghaem Hospital, Mashhad University of Medical Sciences, 107 dichorionic twin pregnancy were enrolled in two groups: spontaneous group [n=96] and ART group [n=31]. Basic criteria and obstetrics and neonatal outcomes information including demographic data, gestational age, mode of delivery, pregnancy complications [preeclampsia, gestational diabetes, preterm labor, and intrauterine growth retardation [IUGR], postpartum hemorrhage], neonatal outcomes [weight, first and fifth minute P Apgar score, Neonatal Intensive Care Unit [NICU] admission, mortality, respiratory distress, and icterus] were recorded using a questionnaire. Results: Preterm labor, gestational diabetes, and preeclampsia were significantly higher in ART group compared to spontaneous pregnancy group. However, other factors such as anemia, IUGR, postpartum hemorrhage, and intrauterine fetal death [IUFD] were not significantly different between groups. There were no significant differences between groups in terms of neonatal outcomes [weight, 1PstP and 5PthP min Apgar score <7, NICU hospitalization, mortality, respiratory distress, and icterus]. Conclusion: With regard of significantly higher poor outcomes such as preeclampsia, gestational diabetes and preterm labor in ART group, the couples should be aware of these potential risks before choosing ART.

Upper Extremity Deformities, Congenital

epidemiology

[Investigating the prevalence of head and upper extremity deformities in students with special needs]

Farahbod, Mozghan; Ahmadi Kahjough, Mina; Sattari, Mahsa
Research Institute of Exceptional Children - Department of Sensory-Motor Disabilities

Journal of Rehabilitation 2016; 16 (4): 286-293

Keywords: Surveys and Questionnaires; Students; Cross-Sectional Studies; Prevalence; Health Services Needs and Demand; Head-abnormalities

Abstract: Objective: Musculoskeletal disorders are the most common childhood problems. The aim of the present study was to investigate the prevalence of head and upper extremity deformities in children with special needs. Materials and Methods: The present research is a descriptive cross-sectional study with stratified sampling method. Ten percent of students with mental retardation, hearing impairment and sight impairment in the academic year of 2012-13 were selected for this study. There were 1194 persons in Tehran, 1526 people in the cities of the Tehran Province and 559 students in Alborz Province. In total, 3279 people participated in the study. Demographic questionnaire and a plummet were used for data collection. Data was reported using

descriptive statistics. Results: The results of the study revealed that "dropped shoulder" in girls of Alborz province with visual impairment with 100% had the highest rate and this abnormality in boys with visual impairment in the Tehran had the least prevalence. In the deformities of the head, lateral head bending with 76.6% in girls with visual impairment in Tehran, and forward head posture with 83.3% in boys with visual impairment in cities of Tehran had the highest incidence in comparison with others. Conclusion: The prevalence of upper extremity deformities is high in students with special needs including mental retardation, hearing impairment and sight impairment. It is necessary to diagnose these deformities in time.

Upper Gastrointestinal Tract

pathology

Identification of underlying causes of chronic unspecific upper gastrointestinal-related symptoms in children, a pilot study.

Fouad, Hanan M.; Abdulla, Nour A.; El Naghy, Suzan; Hassan, Ehsan H.; Abd El Hamid, Amal

E-mail: hananminaped@gmail.com

National Hepatology and Tropical Medicine Research Institute [NHTMRI] - Department of Pediatrics

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 145-156

Keywords: Chronic Disease; Pilot Projects; Gastrointestinal Diseases-diagnosis; Prospective Studies

Abstract: Upper gastrointestinal tract [GIT] symptoms are not disease specific and of limited value in the differentiation of GIT disorders. The present study aimed to determine the etiology of chronic unspecific symptoms in children and to test the need for upper endoscopy in diagnosis. This is a prospective study for 30 Egyptian children presented with chronic upper GIT symptoms for at least 2 months. History regarding severity and frequency of GIT symptoms were asked for. Children with known disorder that explains presenting symptoms were excluded. Upper GIT endoscopy was performed and 5 biopsies were obtained for pathological examination and for H pylori testing. The results showed that children age ranged between 2.5-18 years with mean +/- SD of 13.6 +/- 3.4 and 63.3% were females. The main complaints were epigastric pain in 43.3%, hematemesis in 30% and vomiting in 26.7%. Motility disorders were diagnosed in 66.7% children; in the form of GERD in 63.3% and achalasia in one. Complication of GERD in the form of erosive esophagitis was present in 15.8% children, while Barrett's esophagus was not observed. H. pylori infection was diagnosed in 80% histologically. Eosinophilic esophagitis was not detected.

Urolithiasis

radiography

Urgent ureteroscopies in acute ureteric colic requiring intervention.

Osman, Elsayi; Bhatti, Tanweer; Elzoubair, Mohamed; Khashaba, Shehab; Yaqoob, Alaeddin; Khan, Ziauddin

E-mail: elsawi.osman@khuh.org.bh

King Hamad University Hospital - Department of Pathology

Bahrain Medical Bulletin 2016; 38 (1): 8-11

Keywords: Ureteroscopy-methods; Ureter; Acute Pain; Radiography, Interventional

Abstract: Background: Urolithiasis, in general, constitutes a significant volume of the daily clinical activities in our institution. Objective: To evaluate the outcome of ureteroscopies performed in patients admitted acutely with symptomatic ureteric calculi compared with elective ureteroscopies. Design: A retrospective review. Setting: Department of Urology, King Hamad University Hospital, Bahrain. Method: All ureteroscopy [URS] procedures performed for symptomatic ureteric calculi between 1 January 2013 to 31 December 2013 were reviewed. These procedures were divided into two groups: urgent URS and elective URS group. Both groups were comparable in personal and stone characteristics. Result: One hundred ninety-five procedures were performed on 167 patients. One hundred twenty-seven [65.1%] procedures were urgent and 68 [34.9%] were elective. The cohort included 131 males and 36 females with a mean age of 41.5 years, a range of 19 to 74. One hundred forty-nine [76.4%] procedures were performed on male patients, while 46 [23.5%] were performed on female patients. The mean stone size for patients undergoing urgent URS was 7.7 mm and 8.3 mm for elective procedures; approximately one-third of patients had more than one stone. Eighty-one stones in the urgent group were distally located; fifty-seven were in the elective group. The most common indication for urgent URS was pain refractory to injectable analgesia. LASER was used in 182 [93.3%] procedures, 179 [91.7%] procedures were urgent. Seventeen [8.7%] complications were documented for urgent URS and 8 [4.1%] for elective cases, no statistical significance, P value = 0.74. Conclusion: Urgent URS procedure is a safe and cost effective option compared with Elective URS. It should be the preferred option when resources and expertise are available.

Uterine Cervical Neoplasms

genetics

Cytokine gene polymorphisms and their association with cervical cancer: a north Indian study.

Gupta, Maneesh Kumar; Singh, Renu; Banerjee, Monisha
University of Lucknow - Molecular and Human Genetics Laboratory - Department of Zoology

Egyptian Journal of Medical Human Genetics [The] 2016; 17 (2): 155-163

Keywords: Cytokines; Polymorphism, Single Nucleotide; Interleukin-6; Interleukin-1beta; Tumor Necrosis Factor-alpha; Biomarkers

Abstract: Introduction: The production of cytokines, growth factors and adhesion molecules promotes tumor progression and involves inflammation, angiogenesis and thrombosis, thus providing optimal conditions for cancer development. Materials and Methods: The present study was undertaken to evaluate association of cytokine gene polymorphisms with cervical cancer in a north Indian population. Genotyping of single nucleotide polymorphisms [SNPs] viz. IL-6-597G/A [rs1800797], IL-1[beta]-511C/T [rs16944] and TNF-[alpha]-308G/A [rs1800629] was carried out in 100 each of cases and healthy age matched controls by polymerase chain reaction-restriction fragment length polymorphism [PCR-RFLP]. Genotype and allele frequencies were calculated by SPSS [ver.16] and gene-gene interaction was analyzed using SHEsis [ver. Online]. Results: Epidemiological studies showed that women >40 years have higher risk of cervical cancer due to early pregnancies. IL-6 and TNF-[alpha] promoter polymorphisms showed significant association [P < 0.001] while the SNP combinations G A T[Asterisk] and G G T[Asterisk] of IL-6-597A/G, TNF-[alpha]-308G/ A and IL-1[beta]-511C/T polymorphisms showed increased risk up to 9.0 and 3.30 times respectively. Conclusion: Therefore, the promoter polymorphisms in cytokine genes can be used as biomarkers to predict cervical cancer susceptibility in a north Indian population. However, such studies need to be carried out in different ethnic populations in order to discover the specific risk alleles, genotypes and combinations for disease prediction.

pathology

Risk factors associated with abnormal smear and histology result.

Al Khalifa, Haya Essa

[E-mail:haya-83@hotmail.com](mailto:haya-83@hotmail.com)

Bahrain Defense Force Hospital - Department of Obstetrics and Gynecology

Bahrain Medical Bulletin 2016; 38 (1): 12-14

Keywords: Papillomaviridae; Risk Factors; Papanicolaou Test

Abstract: Objective: To identify risk factors linked with high-grade histology, including human papillomavirus [HPV] changes found in Pap smears. Setting: Department of Obstetrics and Gynecology, Bahrain Defense Force Hospital. Design: A retrospective study. Result: One hundred forty-two females had colposcopy and cervical biopsy. Four [2.8%] females with risk factors had high-grade histology compared to 37 [26%] who had low-grade histology, P value = 0.2163. Seven [4.9%] of the LEEP group [23] had high-grade histology [Cervical Intraepithelial Neoplasia CIN 2 and worse], and 16 [11.3%] had low-grade histology. HPV changes in Pap smear test is a poor indicator for high-grade histology. HPV group was associated with low-grade histology, 82 [57.7%] and not high-grade histology, 17 [11.9%] only. Conclusion: The study was unable to predict the progression to high-grade histology by the available data. HPV changes found in Pap test is a poor indicator for high-grade histology. Nevertheless, it is related to low-grade histology. High-grade smear [moderate/severe dyskaryosis] is a good indicator for high-grade histology [CIN 2 or worse]. Only 7 [4.9%] of patients that underwent LEEP had high-grade histology.

Ventricular Dysfunction, Left

Concordance between Doppler and pulsed-wave Doppler tissue imaging in estimation of the degree of left ventricular dysfunction and correlating it to the degree of chronic obstructive pulmonary disease.

Eweda, Inas; Hamada, Ghada

[E-mail:ime_1940@yahoo.com](mailto:ime_1940@yahoo.com)

Ain Shams University - Ain Shams University Hospitals - Cardiology Department

Journal of the Saudi Heart Association 2016; 28 (1): 15-21

Keywords: Doppler Effect; Echocardiography, Doppler, Pulsed; Ultrasonography, Doppler; Echocardiography; Respiratory Function Tests; Pulmonary Disease, Chronic Obstructive

Abstract: Objective: As a consequence of leftward shift of the interventricular septum and of pericardial restraint, related to the degree of right ventricular dilation, alveolar hypoxia and related pulmonary vascular changes, left ventricular function is influenced by chronic obstructive pulmonary disease [COPD]. The aim of this study was to assess the prevalence of echocardiographic abnormalities by conventional echocardiography and

Doppler tissue imaging [DTI] in COPD patients according to the degree of disease severity. Methods: We enrolled forty consecutive patients with COPD and twenty matched control. Twenty of the patients were suffering from mild form of COPD, twenty were suffering from severe form of COPD as decided by pulmonary function test and arterial blood gases and twenty apparently healthy non COPD control persons were subjected to echocardiographic assessment to left ventricular diastolic and systolic functions by conventional echocardiography and DTI at the mitral annulus. Results: There were no significant statistical difference between the three groups as regards the age and the gender. There were significant differences between the patients and the control as regards the diastolic functions of the left ventricle. E and A waves obtained by conventional Doppler and by DTI showed significant statistical difference between mild, severe forms of COPD and control subjects. The degree of diastolic dysfunction increased significantly with increase of the severity of COPD. Conclusion: Left ventricular diastolic function is significantly affected in patients with COPD and the degree of affection is related to the severity of COPD.

Ventricular Premature Complexes

surgery

Radiofrequency catheter ablation of premature ventricular beats among Egyptians: predictors of success and recurrence.

Abdelmonaem, Mustafa Mohamed; Galal, Wagdy Abdelhamid; Eldamenhoury, Hayam Mohamed; Abdelhamid, Mohamed Amin; Ahmed, Rania Samir; Badran, Haltham AbdElFattah

E-mail: Mostafaabdelmonaem@yahoo.com

Ain Shams University - Faculty of Medicine - Department of Cardiology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 51-56

Keywords: Catheter Ablation; Recurrence; Electrophysiology; Heart Ventricles-physiopathology; Stroke Volume; Systole

Abstract: Background: Premature ventricular beats [PVBs] are early depolarization of the myocardium originating in the ventricle, the prognosis in patients with frequent PVBs and no obvious organic heart disease is usually very good. However, many patients are severely symptomatic with impaired quality of life. Aim of the study: We aimed at our study to assess the success of radiofrequency catheter ablation of monomorphic PVB and its impact on improvement of left ventricular [LV] systolic functions. Patients and Methods: The current study was conducted on 40 patients with frequent symptomatic monomorphic PVBs, candidate for PVB radiofrequency catheter ablation in cardiology department, Ain Shams University, between 2013 and 2015. All patients were subjected to thorough history taking, complete general and local examination, conventional 2D echocardiography and pre-procedural Holter ECG monitoring. Patients were divided to two groups [20 patients in each group] according to the presence or absence of structural heart disease. Electrophysiological mapping and ablation was done for all patients, and their clinical, electrophysiological and procedural aspects were analyzed. Follow up echocardiography and Holter ECG monitoring was done 3-6 months later to assess recurrence and impact on LV internal dimensions and systolic functions. Results: Acute success was achieved in 35 patients [87.5%], and long term success was achieved in 30 patients [75%], with elimination of PVBs and distressing symptoms among group of patients with procedural success. Presence of structural heart disease was not related statistically to procedural failure or long term recurrence. Magnitude of reduction of PVB burden had significant correlation with improvement of systolic functions [P=0.04]. Significant improvement of echocardiographic parameters was witnessed among group with baseline LV systolic dysfunction. Conclusions: Radiofrequency catheter ablation is an effective and safe therapeutic tool for frequent monomorphic PVBs and should be addressed as 1st line option for reversal of PVB induced LV systolic dysfunction.

Vitamin D

analogs and derivatives

Assessment of 25-hydroxyvitamin D levels in patients with resistant hypertension.

Belen, Erdal; Sahin, Irfan; Gungor, Baris; Ayca, Burak; Avci, Ilhan Ilker; Avsar, Murat; Yildiz, Suleyman Sezai; Akin, Fatih; Bozbeyoglu, Emrah; Okuyan, Ertugul

E-mail: belenerdal@gmail.com

Mugla Sıtkı Kocman University - School of Medicine - Department of Cardiology

Medical Principles and Practice 2016; 25 (1): 25-30

Keywords: Hypertension; Blood Pressure Monitoring, Ambulatory; Blood Pressure; Parathyroid Hormone; Cross-Sectional Studies; Prospective Studies

Abstract: Objective: To investigate the possible correlation between serum 25-hydroxyvitamin D levels and resistant hypertension [RH] Subjects and Methods: Patients who had undergone ambulatory blood pressure measurements [ABPM] during outpatient controls were enrolled. Fifty subjects with RH, 50 with controlled hypertension [CHT] and 50 normotensive subjects [NT] were included in the study. RH was defined as 'suboptimal blood pressure control despite using 3 antihypertensive agents including a diuretic or need for 4 or

more drugs to control blood pressure'. The 25-hydroxyvitamin D and parathormone levels were compared between the groups. Pearson's correlation coefficient test was applied to assess the correlation between 25-hydroxyvitamin D levels and office blood pressure [BP] and ABPM. Logistic regression analysis was used to determine the independent correlates of RH. Results: The 25-hydroxyvitamin D level was significantly lower in the RH group [17.02 +/- 5.4 ng/ml] compared to the CHT [24.9 +/- 4.8 ng/ml] and NT groups [28.0 +/- 5.7 ng/ml, $p < 0.001$]. In univariate correlation analysis, 25-hydroxyvitamin D levels had a significant negative correlation with office systolic BP [$r = -0.329$, $p < 0.001$], office diastolic BP [$r = -0.395$, $p < 0.001$], systolic ambulatory BP [$r = -0.844$, $p = 0.004$], and diastolic ambulatory BP [$r = -0.567$, $p = 0.005$]. ROC analysis revealed that 25-hydroxyvitamin D levels < 21.50 ng/ml predicted the presence of RH with a sensitivity of 78% and a specificity of 79% [AUC = 0.89, 95% CI 0.83-0.94]. In the multivariate logistic regression analysis, 25-hydroxyvitamin D level was independently correlated with the presence of RH [beta 0.660, 95% CI 0.572-0.760, $p < 0.001$]. Conclusion: There was an independent correlation between lower 25-hydroxyvitamin D levels and presence of RH.

Vitamin D Deficiency

Myocardial function in Saudi adolescents with vitamin D deficiency: Tissue Doppler imaging study.

Matter, Mohamed; El Sherbiny, Enas; Elmougy, Atef; Abass, Mohamed; Aldossary, Sahar; Abu Ali, Waleed

E-mail: mkmatter72@yahoo.com

Mansoura Faculty of Medicine - Mansoura University Children Hospital - Pediatric Department

Journal of the Saudi Heart Association 2016; 28 (1): 22-30

Keywords: Heart; Prospective Studies; Adolescent; Ultrasonography, Doppler; Echocardiography; Myocardium

Abstract: Vitamin D deficiency is a common health problem in Saudi Arabia especially in children and adolescents. Many studies have reported the relation between low 25-Hydroxyvitamin D [25(OH)D] levels with cardiovascular diseases risk factors as well as cardiovascular events, including stroke, myocardial infarction, and congestive heart failure. This study was conducted to evaluate the effect of 25(OH)D deficiency on the myocardial function and other echocardiographic variables in adolescent, using tissue Doppler imaging [TDI] and to correlate these parameters with 25(OH)D level. The study included 84 healthy adolescents, consecutively selected from adolescents attending the outpatient clinic of Saad Specialist Hospital, KSA between September 2013 and October 2014. The study population was classified into two groups; vitamin D deficient group with 25(OH)D level less than 20 ng/mL and normal vitamin D [control group] with 25(OH)D equal or more than 30 ng/mL. Both groups were subjected to measuring hemoglobin level, serum albumin, creatinine, total calcium, Phosphorous, intact parathyroid hormone [iPTH], B-type natriuretic peptide [BNP], and 25(OH)D levels. Both conventional and pulsed wave TDI were done for all participants. TDI measurements showed significant higher LV Tei Index and RV Tei index when compared to the control group [0.61 +/- 0.11 Vs 0.32 +/- 0.05 $p < 0.0001$], [0.54 +/- 0.14 Vs 0.40 +/- 0.06 $p < 0.0001$] respectively. Mitral and tricuspid annular systolic velocities were significantly lower in vitamin D deficient group [6.99 +/- 1.92 Vs 10.69 +/- 0.31 cm/sec $p < 0.0001$ and 12.30 +/- 2.14 Vs 13.89 +/- 0.29 $p < 0.0001$ respectively]. The mitral and tricuspid E/Em ratio was significantly higher in vitamin D deficient group than control group [$p < 0.0001$, $p 0.005$] respectively. Left ventricular internal diameter at end-diastole [LVIDd] was significantly higher in vitamin D deficient group [44.72 +/- 6.33 Vs 40.36 +/- 6.21 $p 0.003$]. Serum 25(OH)D level showed significant negative correlation with LV Tei index [$r = -0.668$, $p < 0.0001$], RV Tei index [$r = -0.421$, $p < 0.0001$]. Vitamin D deficiency is associated with subtle systolic and diastolic myocardial dysfunction in Saudi adolescents. TDI is a useful tool for detecting early changes in the myocardium in this particular group.

complications

Relation between serum levels of vitamin D and echocardiographic determinants of systolic and diastolic functions in patients with and without cardiorenal syndrome.

Khalil, Ahmed Ibrahim El-Desoky; El Mawardy, Ramzy Hamed; Mohammed, Haitham Galal; Abdel Rahman, Mohammed Ahmed; Mohamed, Tarek Rasheed

E-mail: desokyaalex@gmail.com

Ain Shams University - Faculty of Medicine - Department of Cardiology

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 37-50

Keywords: Vitamin D-blood; Echocardiography; Blood Pressure; Cardio-Renal Syndrome; Prospective Studies; Heart Failure, Systolic

Abstract: Background: vitamin D is a fat-soluble vitamin; it has skeletal and non-skeletal functions. The effect of Vitamin D on CV disease had several mechanisms including elevated PTH and Calcium-phosphate metabolism. It decreases the pro- remodeling of Angiotensin II on the cardiomyocytes. Objectives: To study relation between serum levels of vitamin D and echocardiographic determinants of systolic and diastolic functions in patients with and without cardio-renal syndrome. Patients and Methods: Prospective study was conducted on 90 patients of all age groups and both sexes, admitted to Ain-Shams University hospital. The study included 3 groups of patients: Group 1: systolic dysfunction and renal insufficiency [30 patients], Group 2: systolic dysfunction only [30 patients]. Group 3: renal insufficiency only [30 patients], in addition 10 healthy controls were taken as controls. Patients were subjected to full comprehensive echocardiography and KFT with

estimation of creatinine clearance, and Vitamin D level that was statistically studied against echocardiographic parameters of cardiac systolic and diastolic function. Results: Our study found that, compared to patients with normal vitamin D level, patients with vitamin D deficiency [defined as having vitamin D level <20 ng/ml] had significantly higher ventricular thickness [IVS, PW and mean wall thickness] [P value < 0.001], and higher LV mass which seems to be linked eventually to worse outcomes with no significant impact on worsening Diastolic dysfunction. A ROC curve was done revealing a sensitivity of 80% for the mean wall thickness (= >10 mm) to identify patients with vitamin D deficiency. Conclusion: Vitamin D deficiency was associated with ventricular hypertrophy with worsening outcomes with no impact on diastolic function.

Role of hypovitaminosis D in the incidence and complications of diabetes mellitus in rats.

El Sayed, Hanaa H.; El Adawy, Ayman E.; Yassin, Areej A.; Mostafa, Soad H.
National Nutrition Institute - Department of Biochemical Nutrition and Metabolism

Egyptian Journal of Hospital Medicine [The] 2016; 62 (January): 77-88

Keywords: Insulin Resistance; Glucose Intolerance; Diabetes Mellitus, Type 2; Diabetes Mellitus, Experimental; Alloxan; Rats, Sprague-Dawley

Abstract: Background: Diabetes mellitus continues to be a public health concern. Vitamin D had sparked widespread interest in the pathogenesis and prevention of diabetes. The aim of this study was to investigate the effect of vitamin D [deficiency and treatment] with alteration in fasting plasma glucose, insulin resistance in alloxan injected rat. Materials and Methods: The experiment was carried out using 40 male albino rats [Sprague Dawley] weighing 150+/-10g. Animals were randomly divided into three groups; first group fed standard diet as a negative control group. Diabetic group injected subcutaneously by alloxan, and fed on standard diet. The third group fed standard diet without vitamin D for two weeks. After that glucose and insulin were determined in each rat of all groups to insure alteration in fasting plasma glucose, insulin resistance, Homeostasis model assessment insulin resistance [HOMA-IR] was calculated. Then the third group was divided to two subgroups. The first subgroup fed basil diet with required vitamin D; while the second subgroup fed standard diet with double dose vitamin D. At the end experiment [4 weeks], glucose, insulin, lipid profile, liver and renal functions were determined in blood and serum, while [HOMA-IR] and LDL were calculated for normal, diabetic group and both treatment subgroups. Results: Vitamin D deficiency group had the nearest results to the diabetic group injected with alloxan group in: insulin, glucose and HOMA-IR. Other groups had lower level than the other two groups in the same parameter. Our data explained the improvement in glucose level after feeding with vitamin D. Diabetic group injected with alloxan had increased in liver enzymes, renal function and lipid profile compared with other groups and showed variable changes in histopathological examination. Conclusion: Vitamin D deficiency status is associated with a higher risk of type 2 diabetes. Vitamin D improves glucose tolerance and insulin sensitivity. Vitamin D has also been shown to reduce the risk of diabetes associated complications.

Volleyball

[Upper quarter functional stability in female volleyball players with and without anterior shoulder instability, with consideration of arm dominance]

Zandi, Shahrzad; Rajabi, Reza; Minoonejad, Hooman; Mohseni Bandpei, Mohammadali
E-mail:shzandi@ut.ac.ir

University of Tehran - Faculty of Physical Education and Sport Sciences - Department of Sport Medicine and Health

Journal of Rehabilitation 2016; 16 (4): 346-355

Keywords: Shoulder; Arm

Abstract: Objective: The aim of this study was the comparison of the functional stability of dominant and non-dominant shoulder in female volleyball players with and without anterior shoulder instability, using YBT-UQ. Materials and Methods: In this descriptive study, 28 female university volleyball players [age=20 to 25 years] were categorized into healthy [n=14] and anterior shoulder instability [n=14] group. Upper quarter y balance test [YBT-UQ] was used for measuring functional stability of both dominant and non-dominant shoulder. After checking the normal distribution of the results with 1-s Kolmogorov-Smirnov, paired sample t-test and independent sample t-test were used for comparing the dominant and non-dominant shoulder's functional stability and for comparing the results between groups, respectively. Results: Higher YBT-UQ composite score was observed in non-dominant shoulder and dominant shoulder of the healthy group and the non-dominant shoulder and dominant [injured] shoulder of shoulder instability group, respectively. No significant difference was observed between functional stability of both shoulders of the healthy group [P=0.144], while the functional stability of the non-dominant shoulders of the instability group was significantly higher than the dominant unstable shoulders [P=0.001]. The results of functional stability of the unstable shoulders of the injured group were significantly lower than the results of the dominant shoulders of the healthy group, while in non-dominant side, all directions but the Superolateral direction showed significant difference. Conclusion: Based on the results of this study, functional stability of the unstable shoulder of female university volleyball players is lower than the functional stability of their non-dominant side or the functional stability of the healthy subjects Therefore, we suggest that the upper extremity stabilization exercises, specially the closed kinetic chain exercises should be added to the shoulder rehabilitation programs.

Welding

Comparative evaluation of spectral transmittance of some welding glasses with ANSI Z87.1.

Rahmani, Saeed; Akbarzadeh Baghban, Alireza; Nazari, Mohammadreza; Ghassemi Broumand, Mohammad
E-mail:medicalopto@yahoo.com

Shahid Beheshti University of Medical Sciences - School of Rehabilitation - Department of Optometry

Novelty in Biomedicine 2016; 4 (2): 51-55

Keywords: Ultraviolet Rays; Infrared Rays; Safety Management; Eye Protective Devices

Abstract: Background: Welding emits harmful rays to the eyes. We evaluate and compare the UV, blue light and IR transmittance characteristics of some currently available welding safety protectors with ANSI Z87.1 criteria. Materials and Methods: Three type of welding safety protectors [three of each type] have been evaluated for spectral transmittance. One-sample T-test was performed to establish is there a statistically significant difference between the standard criteria and UV, blue and IR regions for the welding protectors [$\alpha=0.05$]. Results: In ultraviolet [UV] [far and near] region, two types of the tested protectors [P1, P2] transmitted lower than the maximum allowable value specified in the standard [$P<0.001$]. In infrared [IR] spectrum only one type [P3] transmitted lower than the maximum allowable value specified in the standard [$P<0.001$]. In blue light region, all of the tested protectors transmitted lower than the maximum allowable value specified in the standard [$P<0.001$]. Conclusion: Although all of the tested glasses could meet some parts of the criteria, but none of them could meet the complete spectral transmittance requirements of ANSI Z87.1.

Xenopsylla

drug effects

Efficacy of three insecticides on rat flea [*Xenopsylla cheopis*] infesting rodents in Giza Governorate, Egypt.

Mikhail, Micheal William; Abd El Halim, Azza S.; Soliman, Mohamed Ismail
Ministry of Health and Population - Research Institute of Medical Entomology

Journal of the Egyptian Society of Parasitology 2016; 46 (1): 131-134

Keywords: Flea Infestations; Insecticides; Rodent Diseases; Rats; Fenitrothion; Chlorpyrifos; Nitriles; Pyrethrins

Abstract: The extensive use of insecticides in public health and agriculture sectors is the main reason for development of resistance in fleas associated in domestic rodents. The present work was planned to investigate the insecticidal efficacy of Lambda-cyhalothrin, Chlorpyrifos and Fenitrothion against rat flea [*Xenopsylla cheopis*] infesting rodent species in Giza Governorate, Egypt. The lethal concentration LC[50] and Lc[90] of population percent were obtained from the established regression log concentrate-response lines. Data indicated that the values of lethal concentration [LC[50]] were 0.293, 1.725 and 2.328% for Lambda-cyhalothrin, chlorpyrifos and Fenitrothion, respectively. The values of lethal concentration [Lc[90]] were 0.467, 2.839 and 5.197% for Lambda-cyhalothrin, chlorpyrifos and Fenitrothion, respectively.

Appendix I

Author Index

- Abad, Masoumeh**
ELECTROMAGNETIC FIELDS (adverse effects)
- Abadeen, Z.**
OBESITY
- Abass, Mohamed**
VITAMIN D DEFICIENCY
- Abbas, Tanvir**
EYE INJURIES, PENETRATING (pathology)
- Abbasi, Ataollah**
CEREBELLAR ATAXIA
- Abbasi, Samira**
CEREBELLAR ATAXIA
- Abd Alkhalek, Heba Salah**
FRAGILE X SYNDROME (genetics)
- Abd El Halim, Azza S.**
XENOPSYLLA (drug effects)
- Abd El Hamid, Amal**
UPPER GASTROINTESTINAL TRACT (pathology)
- Abdalla, Ebtesam M.**
FRASER SYNDROME (genetics)
- Abdel Hakim, Karim**
CARDIAC OUTPUT
- Abdel Rahman, Mohammed Ahmed**
VITAMIN D DEFICIENCY (complications)
- Abdel Razek, Abdel Razek M. Ali**
ANTICOAGULANTS (history)
- Abdel Rehim, Marwa**
SEPSIS (mortality)
- Abdel Salam, E.**
LYMPHOMA
- Abdel Shafi, Iman R.**
ELEPHANTIASIS, FILARIAL (epidemiology)
- Abdelaziz, Wafaa**
ACTIVITIES OF DAILY LIVING
- Abdelhamid, Mohamed Amin**
VENTRICULAR PREMATURE COMPLEXES (surgery)
- Abdella, Nabila**
OSTEOARTHRITIS, KNEE
- Abdelmonaem, Mustafa Mohamed**
VENTRICULAR PREMATURE COMPLEXES (surgery)
- Abdelrazek, Ali**
ANTICOAGULANTS (history)
- Abdelsalam, Maha**
ACTIVITIES OF DAILY LIVING
- Abdi, Kianoosh**
LIFE CHANGE EVENTS
- Abdi, Saeed**
ESOPHAGEAL ACHALASIA (surgery)
- Abdulla, Haitham**
PRE-ECLAMPSIA
- Abdulla, Nour A.**
UPPER GASTROINTESTINAL TRACT (pathology)
- Abdulla, Rauda**
ANTICOAGULANTS (history)
- Abdullah, Ayman Mohammad**
MITOMYCIN (toxicity)
- Abo El Fath, Gamal**
DOWN SYNDROME (genetics)
- Abolghasemi, Sara**
BLOOD-BORNE PATHOGENS
- Abouel Nour, Mohamed F.**
CRYPTOSPORIDIUM PARVUM (drug effects)
- Aboutaleb, Nahid**
REPERFUSION INJURY
- Abraham, L.J.**
LYMPHOMA
- Abraham, Mini**
OSTEOARTHRITIS, KNEE
- Abu Ali, Waleed**
VITAMIN D DEFICIENCY
- Abu Hassan, Fatema**
NEOPLASMS (epidemiology)
- Abu Mandil, Mahmoud**
ANTICOAGULANTS (history)
- Abu Sarea, Enas Yahia**
SCHISTOSOMIASIS MANSONI (diagnosis)

- Abualsei, Abdulmenem**
BARIATRIC SURGERY (methods)
- Abudiab, Muaz M.**
CORONARY VESSEL ANOMALIES
- Abulfateh, Najat Mohammed**
NEOPLASMS (epidemiology)
- Abunajma, Muneera**
PRE-ECLAMPSIA
- Acar, Burak**
CORONARY ARTERY DISEASE
- Acikgoz, Eser**
CORONARY ARTERY DISEASE
- Acikgoz, Sadik Kadri**
CORONARY ARTERY DISEASE
- Adam, Samia Mohammad**
MALARIA, FALCIPARUM (epidemiology)
- Adefegha, Stephen A.**
PLANT EXTRACTS (therapeutic use)
- Adeyemi, Oluyomi S.**
PLANT EXTRACTS (therapeutic use)
- Aflakseir, Abdulaziz**
INFERTILITY, FEMALE
- Afroze, Bushra**
LYMPHOHISTIOCYTOSIS, HEMOPHAGOCYTIC
- Afzalzadeh, Azadeh**
OVARIAN NEOPLASMS
- Agarwal, G.R.**
GALLBLADDER NEOPLASMS
- Aghdaei, Hamid Asadzadeh**
COLITIS (chemically induced)
- Ahmad, Aftab**
DRUG EVALUATION, PRECLINICAL
- Ahmad, Farooq**
HYPOTRICHOSIS (genetics)
- Ahmad, Wasim**
HYPOTRICHOSIS (genetics)
- Ahmadi Kahjough, Mina**
UPPER EXTREMITY DEFORMITIES,
CONGENITAL (epidemiology)
- Ahmadi, Amir**
SCOLIOSIS
- Ahmadi, Amjad**
ABORTION, SPONTANEOUS
- Ahmed, El Mutasim**
ANTICOAGULANTS (history)
- Ahmed, Hussain**
DUODENAL OBSTRUCTION (diagnosis)
- Ahmed, Rania Samir**
VENTRICULAR PREMATURE COMPLEXES
(surgery)
- Ahmed, Salwa Abdalla Mohammad**
SPIDER BITES
- Aiman, A.**
GALLBLADDER NEOPLASMS (pathology)
- Akar, Nejat**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Akbarzadeh Baghban, Alireza**
WELDING
- Akhondi, Mohammad Mehdi**
INFERTILITY
- Akhtar, Jamshed**
RESEARCH PERSONNEL (education)
- Akin, Dilara Fatma**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Akin, Fatih**
VITAMIN D (analogs and derivatives)
- Akujobi, Yvonne O.**
PLANT EXTRACTS (therapeutic use)
- Al Agroudi, Mahfouz Ahmad**
SPIDER BITES
- Al Amoodi, Abdulla**
ANTICOAGULANTS (history)
- Al Ansari, Asim**
ACTIVITIES OF DAILY LIVING
- Al Aradi, Fatema Ali**
ANEMIA, SICKLE CELL (mortality)
- Al Attas, Rabab**
BONE MARROW TRANSPLANTATION
(standards)
- Al Awadhi, Mohammed Amin**
NEOPLASMS (epidemiology)
- Al Barakati, Rakhn G.**
DENTAL ARCH

- Al Bedawi, Fahad**
TOOTH ERUPTION, ECTOPIC (complications)
- Al Bshabshe, Ali A.**
FOREIGN BODIES
- Al Dulaimi, David**
GASTROINTESTINAL DISEASES
- Al Feky, Hala M.**
ECHINOCOCCOSIS (parasitology)
- Al Hajar, Mohammed**
ANTICOAGULANTS (history)
- Al Haqesh, Hiam S.**
PHARMACY SERVICE, HOSPITAL (standards)
- Al Harbi, Fahad**
ACTIVITIES OF DAILY LIVING
- Al Harbi, Hassan**
BONE MARROW TRANSPLANTATION (standards)
- Al Harthi, L.S.**
CAREGIVERS
- Al Harthi, Saeed A.**
MALARIA, FALCIPARUM (diagnosis)
TOXOPLASMOSIS (diagnosis)
- Al Jalaud, N. A.**
BENZHYDRYL COMPOUNDS (pharmacology)
- Al Jalaud, Nora Abdulaziz**
BREAST NEOPLASMS (drug therapy)
- Al Jarallah, Khaled**
OSTEOARTHRITIS, KNEE
- Al Jufairi, Zainab A.**
ANEMIA, SICKLE CELL (mortality)
- Al Kalbani, Naama M.S.**
ANTICOAGULANTS (history)
- Al Khaldi, Nawal Zewaid**
ASTHMA (prevention and control)
- Al Khalifa, Haya Essa**
UTERINE CERVICAL NEOPLASMS (pathology)
- Al Mohamedy, Hisham**
OSTEOARTHRITIS, KNEE
- Al Momani, Mohammed Mahmoud**
NURSING CARE
- Al Momany, Nairooz H.**
PHARMACY SERVICE, HOSPITAL (standards)
- Al Nuaimi, Saif**
ANTICOAGULANTS (history)
- Al Omari, Nadia A.**
PHARMACY SERVICE, HOSPITAL (standards)
- Al Omran, Mohammed A.**
PERIPHERAL ARTERIAL DISEASE
- Al Qahtani, K.**
CELL PHONES
- Al Riyami, I.A.**
CAREGIVERS
- Al Saad, Isa Yusuf**
DUODENAL OBSTRUCTION (diagnosis)
- Al Sakhawy, Eman Mahmoud Aly**
DIABETIC FOOT (therapy)
- Al Sarayreh, Hana A.**
PHARMACY SERVICE, HOSPITAL (standards)
- Al Shamsi, Ali**
ANTICOAGULANTS (history)
- Al Sheikh, Adel A.**
AEDES (drug effects)
- Al Sheikh, F. A.**
AEDES (drug effects)
- Al Suwaidi, Aeshal**
ANTICOAGULANTS (history)
- Al Tamie, Mona S.S.**
FUNGI
- Al Zahrani, M. H.**
AEDES (drug effects)
- Alam, Syed Mahboob**
QUINOLINES
- Alansari, Hassan**
FOREIGN BODIES (surgery)
- Alawadhi, Arwa**
FRONTAL SINUSITIS (therapy)
FOREIGN BODIES (surgery)
- Alazzouni, A. S.**
BENZHYDRYL COMPOUNDS (pharmacology)
- Albarakati, Sahar F.**
DENTAL ARCH
- Albuainain, Abdulrahman**
KERATITIS (diagnosis)

- Aldaghi, Mitra**
GASTRIC OUTLET OBSTRUCTION
- Aldossary, Sahar**
VITAMIN D DEFICIENCY
- Alebouyeh, Masoud**
ESCHERICHIA COLI (isolation and purification)
- Alfares, Fahad A.**
RECURRENT LARYNGEAL NERVE INJURIES
- Alghareeb, Ahmed Mohamed**
BARIATRIC SURGERY (methods)
- AlHamzah, Musaad H.**
PERIPHERAL ARTERIAL DISEASE
- Alhindi, Saeed**
ANEMIA, SICKLE CELL (surgery)
- Ali, Abdellah Hamed Khalil**
ASTHMA (genetics)
- Ali, Fatema**
ANEMIA, SICKLE CELL (surgery)
- Ali, Ghada Al Bin**
KERATITIS (diagnosis)
- Ali, Omnia E.**
HEPATITIS C, CHRONIC (drug therapy)
- Aligholi, Hadi**
CA1 REGION, HIPPOCAMPAL (pathology)
- Alipoor, Shiva**
ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY
- Aljinbaz, Amjad**
TOOTH, NONVITAL
- Alkayyal, Almohanad A.**
ONCOLYTIC VIROTHERAPY
- Alkhalid, Sahar Musarri**
ASTHMA (prevention and control)
- Alkhalifa, Saad**
PRE-ECLAMPSIA
- ALKofide, Eman A.**
DENTAL ARCH
- Allam, Hayam Ibrahim Gad**
OSTEOGENESIS (drug effects)
- Allithy, Amal Nor Edeen Ahmad**
ACETIC ACID (pharmacology)
- AlMadi, Abdulaziz**
DENTAL ARCH
- Alp, Yunus Emre**
ALVEOLAR BONE GRAFTING (methods)
- Alqahtani, Nasser D.**
DENTAL ARCH
- Alreefy, Hiba**
TOOTH RUPTION, ECTOPIC (complications)
FRONTAL SINUSITIS (therapy)
- Alsaad, Khulod**
LEUKEMIA (diagnosis)
- AlSaleem, Talal**
SEIZURES
- Alsheikh Ali, Alawi A.**
EMERGENCY MEDICAL SERVICES
- Alshiddi, Ibraheem F.**
TOOTH, NONVITAL
- Altekin, Refik Emre**
HEART FAILURE
- Ameen, Abdel Badee**
SEPSIS (mortality)
- Amer, Mounir S.**
DIPTERA (physiology)
- Amin, Asmaa K.**
FRASER SYNDROME (genetics)
- Amin, M. Umar**
BLOOD VESSELS (injuries)
- Amin, Saima**
RETINAL DETACHMENT (surgery)
- Aminimoghaddam, Soheila**
OVARIAN NEOPLASMS
- Amir, El Amir M.**
FASCIOLA HEPATICA (immunology)
- Anand, A.S.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Anandaraj, S.**
ENDODONTICS
- Anbarian, Mehrdad**
PATELLOFEMORAL PAIN SYNDROME
GAIT
- Andalibi, Mohammad Sobhan Sheikh**
TWINS, DIZYGOTIC

- Anissian, Ali**
COLITIS (chemically induced)
- Ansar, Muhammad**
HYPOTRICHOSIS (genetics)
- Ansari, Ghedak**
RECURRENT LARYNGEAL NERVE INJURIES
- Ansari, Majid**
PATELLOFEMORAL PAIN SYNDROME
- Arab Mazar, Zahra**
MENINGITIS
- Arabkhazaeli, Nadia**
ABORTION, HABITUAL (genetics)
- Arafa, Khalid A.**
TEMPOROMANDIBULAR JOINT DISORDERS (epidemiology)
- Aram, F.O.**
THYROID DISEASES (pathology)
- Aram, Hourieh**
HEPATITIS B (epidemiology)
- Arif, Muhammad Mustafa**
CLAVICLE (radiography)
- Armal, Afrouz**
LIFE CHANGE EVENTS
- Arroju, V.**
LYMPHOMA
- Arunachalam, Meena**
SCALP DERMATOSES (epidemiology)
- Asgari, Soheila**
ESTRADIOL (pharmacology)
- Ashraf, Tehreem**
CLAVICLE (radiography)
- Ashtari, Atiyeh**
LANGUAGE DISORDERS
- Asim, Sahar**
ANTICOAGULANTS (history)
- Aslebahar, Fereshteh**
PREMATURE BIRTH (prevention and control)
- Assar, Abada A.**
CULEX (drug effects)
- Ataee, Ramin**
ANTIOXIDANTS
- Ataie, Amin**
ANTIOXIDANTS
- Atashzar, Mohammad Reza**
DEPRESSIVE DISORDER
- Atil, Fethi**
ALVEOLAR BONE GRAFTING (methods)
- Attia, Ahmed A.**
TOXOPLASMA
- Attia, Samar S.**
TOXOPLASMA (genetics)
ELEPHANTIASIS, FILARIAL (epidemiology)
- Auer, Rebecca C.**
ONCOLYTIC VIROTHERAPY
- Avci, Ilhan Ilker**
VITAMIN D (analogues and derivatives)
- Avsar, Murat**
VITAMIN D (analogues and derivatives)
- Awan, K.H.**
OBESITY
- Awathi, N.P.**
GALLBLADDER NEOPLASMS
- Ayanbadejoa, Patricia O.**
PERIODONTAL DISEASES
- Ayati, Sedigheh**
TWINS, DIZYGOTIC
- Ayca, Burak**
VITAMIN D (analogues and derivatives)
- Aydin, Salehattin**
CORONARY ARTERY DISEASE
- Aydogdu, Sinan**
CORONARY ARTERY DISEASE
- Ayesh, Ruba B.**
PHARMACY SERVICE, HOSPITAL (standards)
- Azar, M.R.**
COMPOSITE RESINS
- Azargoon, Azam**
PREMATURE BIRTH (prevention and control)
- Azari, Nadia**
LANGUAGE DISORDERS
- Azimzadeh, Pedram**
COLITIS (chemically induced)

- Aziz, Arsalan**
ARGININE (pharmacology)
- Azizi, Fereidoun**
POLYCYSTIC OVARY SYNDROME
- Azmy, Magda**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Azzam, Esra'a A.A.**
TOXOPLASMA
- Babae, Taher**
SCOLIOSIS
- Babaei Balderlou, Farrin**
GHRELIN (pharmacology)
- Babar, Sadia**
BLOOD VESSELS (injuries)
- Badawy, Moushira**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Badr, Mohamed S.**
TOXOPLASMA (genetics)
- Badran, Haitham Abd El Fattah**
VENTRICULAR PREMATURE COMPLEXES
(surgery)
- Bafakeer, S.S.**
THYROID DISEASES (pathology)
- Bagheri, R.**
COMPOSITE RESINS
- Baghestani, Ahmadreza**
GASTROINTESTINAL NEOPLASMS
- Baghi, Raziye**
NECK PAIN
- Bagir, Gulay Simsek**
POLYCYSTIC OVARY SYNDROME
- Bahannan, A.A.**
THYROID DISEASES (pathology)
- Baharlou, Rasoul**
DEPRESSIVE DISORDER
- Bahce, Muhterem**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Bakhshi, Enayatollah**
PSYCHOMETRICS
- Bakhtiarian, Azam**
MORPHINE DEPENDENCE (complications)
- Bakiner, Okan S.**
POLYCYSTIC OVARY SYNDROME
- Balci, Mustafa Mucahit**
CORONARY ARTERY DISEASE
- Banerjee, Monisha**
UTERINE CERVICAL NEOPLASMS (genetics)
- Baradaran, Ramesh**
FERTILIZATION IN VITRO
- Baraka, Mohamed**
ANTICOAGULANTS (history)
- Barbouti, Alexandra**
HALLUX VALGUS
- Barmak, Mehrzad Jafari**
ARGININE (pharmacology)
- Barqawi, Yazan**
ANTICOAGULANTS (history)
- Bashir, N.**
GALLBLADDER NEOPLASMS (pathology)
- Bashir, S.**
GALLBLADDER NEOPLASMS (pathology)
- Basit, Sulman**
HYPOTRICHOSIS (genetics)
- Basyouni, Maha M.A.**
SCHISTOSOMIASIS MANSONI (diagnosis)
- Bayezid, Omer**
HEART FAILURE
- Bayrak, Murat**
HEART FAILURE
- Bayrak, Sule**
DENTAL CARIES
- Bazuhair, Abdulaziz**
FRONTAL SINUSITIS (therapy)
- Belen, Erdal**
VITAMIN D (analogs and derivatives)
- Belinga, Etienne**
INFERTILITY, FEMALE
- Berti, Samantha**
SCALP DERMATOSES (epidemiology)

Bhagavathula, Akshaya Srikanth
ANTICOAGULANTS (history)

Bhat, N.
GALLBLADDER NEOPLASMS (pathology)

Bhat, S.
GALLBLADDER NEOPLASMS (pathology)

Bhatty, Tanweer
UROLITHIASIS (radiography)

Bibi, Farzana
IMMUNOLOGIC SURVEILLANCE

Biglarian, Akbar
LIFE CHANGE EVENTS

Bin Ayeed, Saad A.
PERIPHERAL ARTERIAL DISEASE

Binsaeed, A. A.
AEDES (drug effects)

Boldt, Angelica Boldt
LACTASE (genetics)

Boschmann, Stefanie Epp
LACTASE (genetics)

Boukhris, Marouane
COLLATERAL CIRCULATION

Bozbeyoglu, Emrah
VITAMIN D (analogs and derivatives)

Bozkirli, Emre
POLYCYSTIC OVARY SYNDROME

Brohi, Shams Raza
BLOOD TRANSFUSION

Bruijns, Stevan
EMERGENCY MEDICAL SERVICES

Callachan, Edward L.
EMERGENCY MEDICAL SERVICES

Carlo, Reshma
NEOPLASMS (epidemiology)

Cavlak, Gulhan
POLYCYSTIC OVARY SYNDROME

Cekmez, Yasemin
CERVIX UTERI (pathology)

Cetin, Ali
PELVIS

Cetin, Meral
PELVIS

Channa, Naseem A.
HYPOTRICHOSIS (genetics)

Charak, A.
GALLBLADDER NEOPLASMS (pathology)

Charkhkar, Saeed
ESCHERICHIA COLI (isolation and purification)

Chehelamirani, Nasrin
PSYCHOMETRICS

Cheng, Yu Jen
LIDOCAINE (therapeutic use)

Cheon, Mi Ju
TRACHEAL STENOSIS

Chicka, Michael
LYMPHOHISTIOCYTOSIS, HEMOPHAGOCYTIC

Choopani, Samira
ETHIDIUM

Chounoune, Reginald
RECURRENT LARYNGEAL NERVE INJURIES

Cicerone, Clelia
HEMOSTASIS

Colucci, Roberta
SCALP DERMATOSES (epidemiology)

Conti, Rossana
SCALP DERMATOSES (epidemiology)

Corbally, Martin
GLOBAL HEALTH (education)
DUODENAL OBSTRUCTION (diagnosis)

Dada Khalandar, B.B.
ADAPTATION, PHYSIOLOGICAL (drug effects)

Daffalla, O. M.
AEDES (drug effects)

Dagur, Gautam
GENITAL DISEASES, MALE (radiography)

Dahesh, Salwa M. A.
TRYPANOSOMA

Dalvand, Hamid
CEREBRAL PALSY

Darouei, Akbar
LANGUAGE DISORDERS

- Davami, Mohammad Hasan**
DEPRESSIVE DISORDER
- Davar, Robab**
ESTRADIOL (pharmacology)
- Davoodbeglou, Foad**
HEPATITIS B (epidemiology)
- De Martino, Maurizio**
SCALP DERMATOSES (epidemiology)
- De Souza, Iliada Rainha**
LACTASE (genetics)
- Dehghani, Seyed Mohsen**
GASTRIC OUTLET OBSTRUCTION
- Deilami, Mostafa**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY
- Delaviz, Hamdollah**
ARGININE (pharmacology)
- Deljoo, Z.**
COMPOSITE RESINS
- Devaraju, D.**
CHRONIC PERIODONTITIS
- Dezhkam, Iman**
DEPRESSIVE DISORDER
- Dhingra, Dinesh**
PLANT OILS
- Dilber, Muzamil**
BLOOD TRANSFUSION
- Diner, Oktay**
RETINITIS PIGMENTOSA (diagnosis)
- Dogan, Burcu**
DIABETES MELLITUS (blood)
- Doregiraee, Fatemeh**
ESCHERICHIA COLI (isolation and purification)
- Doustdar, Farahnoosh**
ANTIMICROBIAL CATIONIC PEPTIDES
- Dragoni, Federica**
SCALP DERMATOSES (epidemiology)
- Dunne, Kevin Patrick**
DUODENAL OBSTRUCTION (diagnosis)
- Durrani, Sana**
LYMPHOHISTIOCYTOSIS, HEMOPHAGOCYTIC
- Ebadi, Shahram**
INTESTINAL POLYPOSIS (diagnosis)
- Ebrahimifard, Farzaneh**
MASTECTOMY, MODIFIED RADICAL
- Edewor Ikupoyi, Theresa I.**
PLANT EXTRACTS (therapeutic use)
- Edmardash, Yusuf**
ELEPHANTIASIS, FILARIAL (epidemiology)
- Eftekhar, Maryam**
FERTILIZATION IN VITRO
- Eftekhari, Sanaz**
EPILEPSY, TEMPORAL LOBE
- Ehtiati, Ara**
GASTRITIS, ATROPHIC
- Eida, Omima M.**
NIGELLA SATIVA (chemistry)
- Eidi, Akram**
ALZHEIMER DISEASE
- Ekhlesi, Golnaz**
CELIAC DISEASE
- El Abd, Heba Salah A.**
OSTEOGENESIS IMPERFECTA
- El Adawy, Ayman E.**
VITAMIN D DEFICIENCY (complications)
- El Agawy, Waleed Ahmed**
HEPATITIS C, CHRONIC (drug therapy)
- El Alfy, Nagla Zaky Ibrahim**
MITOMYCIN (toxicity)
- El Badrawy, A.**
LYMPHOMA
- El Badry, Ayman A.**
ELEPHANTIASIS, FILARIAL (epidemiology)
- El Bahnasawy, Mamdouh M. M.**
MENINGOENCEPHALITIS
- El Bali, Mohammed**
TOXOPLASMOSIS (diagnosis)
- El Barbary, Ahmed**
PROSTATIC NEOPLASMS (genetics)
- El Ebidi, Abd Allah M.A.**
TOXOPLASMA (genetics)

- Ei Etriby, Shehab Adel**
ACUTE CORONARY SYNDROME (surgery)
- Ei Feky, Mohammad Reda**
MENINGOENCEPHALITIS
- Ei Garawani, Islam M.**
BREAST NEOPLASMS (drug therapy)
- Ei Gendy, Saad**
PROSTATIC NEOPLASMS (genetics)
- Ei Ghareeb, Azza S.**
ECHINOCOCCOSIS (parasitology)
- Ei Hadaad, H.**
LYMPHOMA
- Ei Mahmoudy, Ahmed Mohamed**
ACUTE CORONARY SYNDROME (surgery)
- Ei Margoushy, Nesriene**
ASTHMA (prevention and control)
- Ei Mawardy, Ramzy Hamed**
VITAMIN D DEFICIENCY (complications)
- Ei Missiry, Ahmed Mohamed**
ACUTE CORONARY SYNDROME (surgery)
- Ei Nady, Ghada H.**
FRAGILE X SYNDROME (genetics)
- Ei Naghy, Suzan**
UPPER GASTROINTESTINAL TRACT
(pathology)
- Ei Nashar, Nihad**
ASTHMA (prevention and control)
- Ei Safhi, Mohammed B.**
NIGELLA SATIVA (chemistry)
- Ei Said, Manal**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Ei Sayed, Hanaa H.**
VITAMIN D DEFICIENCY (complications)
- Ei Sayed, Salah Mohamed**
ACETIC ACID (pharmacology)
- Ei Shafei, Hanaa A.**
NIGELLA SATIVA (chemistry)
- Ei Sherbiny, Enas**
VITAMIN D DEFICIENCY
- Ei Sherbiny, Walid S.**
TOXOPLASMA (genetics)
- Ei Shewehey, Dina Magdy**
CRYPTOSPORIDIUM PARVUM (drug effects)
- Ei Sobky, Mona M.**
CULEX (drug effects)
- Ei Tantawi, Maha M.**
ACTIVITIES OF DAILY LIVING
- Ei Tawdy, Ahmed Hassan Fawzi**
DIABETIC FOOT (therapy)
- Eldamenhoury, Hayam Mohamed**
VENTRICULAR PREMATURE COMPLEXES
(surgery)
- Elmougy, Atef**
VITAMIN D DEFICIENCY
- Elnour, Asim Ahmed**
ANTICOAGULANTS (history)
- ElRefae, Ismail**
ACTIVITIES OF DAILY LIVING
- Eltayeb, Ahmed Eltayeb Yousif Ahmed**
ANTICOAGULANTS (history)
- Elzoubair, Mohamed**
UROLITHIASIS (radiography)
- Emamalizadeh, Babak**
RING CHROMOSOMES
- Enant, Elham**
ARGININE (pharmacology)
- Er, Okan**
CORONARY ARTERY DISEASE
- Erfani, Sohaila**
REPERFUSION INJURY
- Erkekoglu, Pinar**
ANTICOAGULANTS (history)
- Ertorer, M. Eda**
POLYCYSTIC OVARY SYNDROME
- Eslamizade, Mohammad Javad**
CA1 REGION, HIPPOCAMPAL (pathology)
- Esmaeeli, Shooka**
OVARIAN NEOPLASMS
- Eusaph, Amna Zia**
STREPTOCOCCUS AGALACTIAE
- Eweda, Inas**
VENTRICULAR DYSFUNCTION, LEFT

- Ezer, Ustun**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Fabroni, Caterina**
SCALP DERMATOSES (epidemiology)
- Fakour, Yousef**
ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY
- Farahani, Roya Kishani**
GASTRITIS, ATROPHIC
- Farahbod, Mozghan**
UPPER EXTREMITY DEFORMITIES, CONGENITAL (epidemiology)
- Farahmand, Farzam**
PATELLOFEMORAL PAIN SYNDROME
- Farahmand, Kamelia**
APOLIPOPROTEINS E (genetics)
- Farazi, Mortaza**
LANGUAGE DISORDERS
- Farazmandfar, Touraj**
ABORTION, HABITUAL (genetics)
- Farbood, Yaghoob**
ALZHEIMER DISEASE
- Farhadifar, Fariba**
ABORTION, SPONTANEOUS
- Farhangi, Niloofar**
ABORTION, SPONTANEOUS
- Farid, Saadia**
HEPATITIS C, CHRONIC (genetics)
- Farouk, O.**
LYMPHOMA
- Fasaei, Bahar Nayeri**
ESCHERICHIA COLI (isolation and purification)
- Fasanmade, Olufemi A.**
PERIODONTAL DISEASES
- Fatima, Nazish**
TOOTH BLEACHING AGENTS
- Fayyaz**
ANESTHESIA, DENTAL (methods)
- Fazelnia, Shokoufeh**
ABORTION, HABITUAL (genetics)
- Ferooz, M.**
DENTAL RESTORATION, PERMANENT (standards)
- Feroz, S.M.A.**
INFLAMMATION
- Fikree, Majida Ahmed**
NEOPLASMS (epidemiology)
- Filipovic, Aleksandar**
PANNICULITIS, PERITONEAL (diagnosis)
- Filippini, Angelo**
HEMOSTASIS
- Forotan, Mojgan**
ESOPHAGEAL ACHALASIA (surgery)
- Fortuin, David F.**
CORONARY VESSEL ANOMALIES
- Fouad, Hanan M.**
UPPER GASTROINTESTINAL TRACT (pathology)
- Gaber, A.A.**
MULTIPLE MYELOMA
- Gaber, Elham**
DOWN SYNDROME (genetics)
- Galal, Wagdy Abdelhamid**
VENTRICULAR PREMATURE COMPLEXES (surgery)
- Galassi, Alfredo R.**
COLLATERAL CIRCULATION
- Galun, Danijel**
PANNICULITIS, PERITONEAL (diagnosis)
- Ganjavian, Mohammad Saleh**
SCOLIOSIS
- Gekas, Christos**
HALLUX VALGUS
- George, Sageena**
ENDODONTICS
- Ghadami, Mohammad Rasoul**
SLEEP APNEA SYNDROMES
- Ghaderi, Ebrahim**
ABORTION, SPONTANEOUS
- Ghamsari, Farhad**
ETHIDIUM

- Ghanaat, Kasra**
ABORTION, HABITUAL (genetics)
- Ghanemi, Abdel Aziz**
PHARMACEUTICAL PREPARATIONS
- Ghanizadeh, Ahmad**
DEPRESSIVE DISORDER
- Ghassemi Broumand, Mohammad**
WELDING
- Gholizadeh, Sepideh**
GASTROINTESTINAL NEOPLASMS
- Ghorbani, Raheb**
PREMATURE BIRTH (prevention and control)
- Giraud, Cristina Sanches**
ANTICOAGULANTS (history)
- Giusto, Michela**
HEMOSTASIS
- Gocmen, Ahmet**
CERVIX UTERI (pathology)
- Gohar, Hamida**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Goosheh, Babak**
MYOCARDIAL INFARCTION
- Gothwal, Sunil**
PANTOTHENATE KINASE-ASSOCIATED
NEURODEGENERATION
- Goudarzi, Hossein**
HEPATITIS B (epidemiology)
- Goudarzvand, Mahdi**
ETHIDIUM
- Govind, B.K.**
LYMPHOMA
- Gundogan, Fatih Cakir**
RETINITIS PIGMENTOSA (diagnosis)
- Gungor, Baris**
VITAMIN D (analogues and derivatives)
- Gupta, Maneesh Kumar**
UTERINE CERVICAL NEOPLASMS (genetics)
- Gupta, Pallavi**
INFERTILITY, FEMALE
- Gurushankara, H.P.**
ADAPTATION, PHYSIOLOGICAL (drug effects)
- Haddar, Djamel**
NEURILEMMOMA (diagnosis)
- Hadi, R.**
GALLBLADDER NEOPLASMS
- Hadie, Siti N.H.**
EDUCATIONAL MEASUREMENT (methods)
- Hadjighassem, Mahmoud Reza**
EPILEPSY, TEMPORAL LOBE
- Hafeez, Muhammad**
CELIAC DISEASE (therapy)
- Haghnegahdar, A.Z.**
DENTAL IMPLANTS (standards)
- Haghparast, Abbas**
ETHIDIUM
- Haji Maghsoudi, Mitra**
ANKLE INJURIES
- Hajipour, Somayeh**
ALZHEIMER DISEASE
- Hajizadeh, Nastaran**
GASTROINTESTINAL NEOPLASMS
- Hakim, Fayaz A.**
CORONARY VESSEL ANOMALIES
- Halaweh, Hadeel**
ACCIDENTAL FALLS
- Hamad, Farah**
ANTICOAGULANTS (history)
- Hamada, Ghada**
VENTRICULAR DYSFUNCTION, LEFT
- Hamada, Shadia F.**
CRYPTOSPORIDIUM PARVUM (drug effects)
- Hamed, M.**
GINGIVAL RETRACTION TECHNIQUES
- Hammad, Kotb M.**
DIPTERA (physiology)
- Handra Luca, Adriana**
NEURILEMMOMA (diagnosis)
- Hanif, Asif**
STREPTOCOCCUS AGALACTIAE
- Harris, Anoop**
ENDODONTICS

- Hashemi Soteh, Mohammad Bagher**
ABORTION, HABITUAL (genetics)
- Hashemi Soteh, Seyed Mohammad Bagher**
ABORTION, HABITUAL (genetics)
- Hashemi, Mehrdad**
RING CHROMOSOMES
- Hashemnia, Seyyed Mohammad Reza**
IMATINIB MESYLATE (pharmacology)
- Hassan, B. N.**
BENZHYDRYL COMPOUNDS (pharmacology)
- Hassan, Ehsan H.**
UPPER GASTROINTESTINAL TRACT (pathology)
- Hassan, Mostafa I.**
DIPTERA (physiology)
- Hassan, Qudsia**
CLAVICLE (radiography)
- Hatamizadeh, Nikta**
LANGUAGE DISORDERS
- Hatipoglu, Hasan**
MULTIPLE SCLEROSIS
- Hatipoglu, Mujgan Gungor**
MULTIPLE SCLEROSIS
- Hawash, Yousry A.**
FASCIOLA HEPATICA (immunology)
- Hedayati, Zahra**
SCOLIOSIS
- Hefny, Hesham M.**
TOXOPLASMA (genetics)
- Heidari, Mohammad Hassan**
RING CHROMOSOMES
- Heidari, Rosemarie Noot**
ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY
- Helal, Eman G. E.**
BREAST NEOPLASMS (drug therapy)
- Hessien, Mohamed**
PROSTATIC NEOPLASMS (genetics)
- Hobani, K.J.**
AEDES (drug effects)
- Hoseini Ghavam, F.**
GINGIVAL RETRACTION TECHNIQUES
- Hoseinifar, Ra.**
ACIDULATED PHOSPHATE FLUORIDE (pharmacology)
- Hoseinifar, Re.**
ACIDULATED PHOSPHATE FLUORIDE (pharmacology)
- Hosseini, Peyman**
ANTIMICROBIAL CATIONIC PEPTIDES
- Hosseini, Seyyed Hossein**
PATELLOFEMORAL PAIN SYNDROME
- Hosseinisadat, Robabe**
FERTILIZATION IN VITRO
- Husain, Asif**
DRUG EVALUATION, PRECLINICAL
- Husain, N.**
GALLBLADDER NEOPLASMS
- Hussain, Khalid**
RECTOVAGINAL FISTULA (diagnosis)
- Hussain, Mohamad A.**
PERIPHERAL ARTERIAL DISEASE
- Hussain, S.**
GALLBLADDER NEOPLASMS (pathology)
- Hussain, Zainab**
ENDOMETRIAL NEOPLASMS (diagnosis)
- Hynes, Conor F.**
RECURRENT LARYNGEAL NERVE INJURIES
- Ibraheem, Omodeo**
PLANT EXTRACTS (therapeutic use)
- Ibrahim, Abeer Mohammad Abdallah**
MALARIA, FALCIPARUM (epidemiology)
- Ibrahim, Diana A.**
PHARMACY SERVICE, HOSPITAL (standards)
- Ibrahim, Eissa Abdel Hamed**
DIABETIC FOOT (therapy)
- Ibrahim, Taseer**
RECTOVAGINAL FISTULA (diagnosis)
- Idrees, Muhammad Khalid**
KIDNEY FAILURE, CHRONIC
- Ilhan, Abdullah**
RETINITIS PIGMENTOSA (diagnosis)
- Iliou, Kalliopi**
HALLUX VALGUS

Imam, Naglaa F.A.
TOXOPLASMA

Iqbal, Ali Shan
CLAVICLE (radiography)

Iqbal, Riffat
STREPTOCOCCUS AGALACTIAE

Iqbal, Romaina
OSTEOPOROSIS

Iqbal, Zafar
RETINAL DETACHMENT (surgery)

Ismail, Howaida I. H.
CULEX (drug effects)

Ismail, Howaida I.H.
SPIRAMYCIN (pharmacology)

Ismail, Mousa A.M.
SCHISTOSOMIASIS MANSONI (diagnosis)

Ismail, Mousa, A.M.
MENINGOENCEPHALITIS

Issa, Noha M.
FRASER SYNDROME (genetics)

Issac, Jyoti S.
ENDODONTICS

Ivanovic, Aleksandar
PANNICULITIS, PERITONEAL (diagnosis)

Iwuala, Sandra O.
PERIODONTAL DISEASES

Jafari, K.
DENTAL IMPLANTS (standards)

Jafri, Lena
OSTEOPOROSIS

Jahandideh, Asghar
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY

Jahani Sherafat, Somayeh
ESOPHAGEAL ACHALASIA (surgery)

Jain, M.
INFLAMMATION

Jalali, Shohreh
ANKLE INJURIES

Janahi, Eman
NEOPLASMS (epidemiology)

Janahmadi, Mahyar
CA1 REGION, HIPPOCAMPAL (pathology)

Janati, Sima
ESTRADIOL (pharmacology)

Javaherizadeh, Hazhir
GASTRIC OUTLET OBSTRUCTION

Javan, Mohammad
ETHIDIUM

Jayalekshmi, J.L.
STOMATITIS

Jelodar, Shahrazad
TWINNS, DIZYGOTIC

Jimoh, Tajudeen O.
PLANT EXTRACTS (therapeutic use)

Joghataei, Mohammad Taghi
EPILEPSY, TEMPORAL LOBE

John, Sheen A.
ENDODONTICS

Jonas, Richard A.
RECURRENT LARYNGEAL NERVE INJURIES

Jovanovic, Miodrag
PANNICULITIS, PERITONEAL (diagnosis)

Kabay, Sibel Canbaz
MULTIPLE SCLEROSIS

Kabbani, Mohamad S.
HEART BLOCK

Kahwash, Anwaar Alkamel
BREAST NEOPLASMS (drug therapy)

Kalantari, Ebrahim
CELIAC DISEASE

Kalantari, Hamid
APOLIPOPROTEINS E (genetics)

Kamal, Ahmed
BLOOD VESSELS (injuries)

Kamal, Tarek M.
FRAGILE X SYNDROME (genetics)

Kamali, Koorosh
INFERTILITY

Kamyab, Mojtaba
SCOLIOSIS

- Kanavaros, Panagiotis**
HALLUX VALGUS
- Karakas, Mustafa Serkan**
HEART FAILURE
- Karim, Jumanah**
SEIZURES
- Karimi, Nouredin**
NECK PAIN
- Karimzadeh, Fariba**
EPILEPSY, TEMPORAL LOBE
- Kasia, Jean Marie**
INFERTILITY, FEMALE
- Katebi, Majid**
EPILEPSY, TEMPORAL LOBE
- Kauts, Vipin**
CARDIAC OUTPUT
- Kazemnejad, Yousef**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY
- Keshtkar, Mitra**
DEPRESSIVE DISORDER
- Khabazkhoob, Mehdi**
ESTRADIOL (pharmacology)
- Khajehpour, S.**
DENTAL IMPLANTS (standards)
- Khaksari, Mehdi**
REPERFUSION INJURY
- Khaksarian, Mojtaba**
EPILEPSY, TEMPORAL LOBE
- Khalandar, B.B.D.**
ADAPTATION, PHYSIOLOGICAL (drug effects)
- Khaledi Paveh, Behnam**
SLEEP APNEA SYNDROMES
- Khalid, T.**
OBESITY
- Khalil, Ahmed Ibrahim El-Desoky**
VITAMIN D DEFICIENCY (complications)
- Khalil, Inayat ur Rehman**
CLAVICLE (radiography)
- Khan, Asad Aslam**
EYE INJURIES, PENETRATING (pathology)
- Khan, Aysa Habib**
OSTEOPOROSIS
- Khan, Bushra**
HYPOTRICHOSIS (genetics)
- Khan, Misbah**
RECTOVAGINAL FISTULA (diagnosis)
- Khan, Muhammad Shabbir**
KERATITIS (diagnosis)
- Khan, S.**
OBESITY
INFLAMMATION
- Khan, Sardar A.**
GENITAL DISEASES, MALE (radiography)
- Khan, Shah A.**
DRUG EVALUATION, PRECLINICAL
- Khan, Ziauddin**
UROLITHIASIS (radiography)
- Khanum, Amna**
STREPTOCOCCUS AGALACTIAE
- Khashaba, Shehab**
UROLITHIASIS (radiography)
- Khattak, Shakeel Ur Rehman**
ANESTHESIA, DENTAL (methods)
- Khazaie, Habibolah**
SLEEP APNEA SYNDROMES
- Khazali, Homayoun**
GHRELIN (pharmacology)
- Khazali, Shaheen**
ENDOMETRIOSIS (classification)
- Kheradmand, Fatemeh**
IMATINIB MESYLATE (pharmacology)
- Khodabandehloo, Mazaher**
ABORTION, SPONTANEOUS
- Khodaii, Zohreh**
ETHIDIUM
- Khodari, Yousif A.W.**
TOXOPLASMOSIS (diagnosis)
- Khodaveisi, Hamideh**
GAIT
- Khodaveisi, Maryam**
GAIT

- Khoei, Effat Merghati**
ELECTROMAGNETIC FIELDS (adverse effects)
- Khosravi, Asghar**
CELIAC DISEASE
- Khurana, R.**
GALLBLADDER NEOPLASMS
- Kim, Joo Yong**
FEMORAL NECK FRACTURES
- Kim, Se Joong**
TRACHEAL STENOSIS
- Kishor, K.**
GLIOBLASTOMA (therapy)
- Kitsoulis, Panagiotis**
HALLUX VALGUS
- Kocyigit, Ismail Doruk**
ALVEOLAR BONE GRAFTING (methods)
- Koh, Young Min**
TRACHEAL STENOSIS
- Koksel, Umut**
HEART FAILURE
- Kong, Gyu Min**
FEMORAL NECK FRACTURES
- Kumar, Amit**
STROKE
- Kumar, Pradeep**
PROSTATIC NEOPLASMS (genetics)
STROKE
- Kurekci, Emin**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Lakshmaiah, K.C.**
LYMPHOMA
- Lakshmi, R.**
STOMATITIS
- Lashkari, Ali**
MORPHINE DEPENDENCE (complications)
- Lashkari, Faranak Mohammadpour**
APOLIPOPROTEINS E (genetics)
- Lazzeri, Linda**
SCALP DERMATOSES (epidemiology)
- Lee, Seung Hyeun**
TRACHEAL STENOSIS
- Li, Min**
STROKE
- Lokanatha, D.**
LYMPHOMA
- Lokesh, K.N.**
LYMPHOMA
- Long, Chuyan**
STROKE
- Madany, Nadia**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Madarati, Ahmad A.**
ROOT CANAL THERAPY (instrumentation)
- Maddah, Ghodrattollah**
MENINGIOMA
- Madjd, Zahra**
CA1 REGION, HIPPOCAMPAL (pathology)
- Mahdiyar, Mansoureh**
INFERTILITY, FEMALE
- Mahmood, Alaa AbdulAziz**
ANTICOAGULANTS (history)
- Mahmood, Syed Asaad**
RETINAL DETACHMENT (surgery)
- Mahmoud, Ahmad B.**
ONCOLYTIC VIROTHERAPY
- Mahmoud, Aida Abdeen**
ASTHMA (genetics)
- Mahmoud, Hemdan I.**
DIOXANES (toxicity)
- Mahmoud, Mahmoud Fathy**
MITOMYCIN (toxicity)
- Mahmoud, W.**
LYMPHOMA
- Mahmoudi, Reza**
ARGININE (pharmacology)
- Majed, Kameela Sayed Juma Fadhl**
LEUKEMIA (diagnosis)
- Maka, V.V.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Makhdoomi, R.**
GALLBLADDER NEOPLASMS (pathology)

- Malas, Samer**
TOOTH ERUPTION, ECTOPIC (complications)
- Malekafazali, Hossein**
ELECTROMAGNETIC FIELDS (adverse effects)
- Manjunath, V.**
CHRONIC PERIODONTITIS
- Mansouri, Masoume**
CELIAC DISEASE
- Mansouri, Neda**
RING CHROMOSOMES
- Mansouri, Zahra**
APOLIPOPROTEINS E (genetics)
- Mansourian, Marjan**
NEUROFEEDBACK
- Mansy, Soheir**
METHICILLIN-RESISTANT STAPHYLOCOCCUS
AUREUS (drug effects)
- Marateb, Hamid Reza**
NEUROFEEDBACK
- Marsh, Michael N.**
CELIAC DISEASE
- Marwan, Yousef**
SEIZURES
- Marzbani, Hengameh**
NEUROFEEDBACK
- Mashayekhi, Reza**
GASTRITIS, ATROPHIC
- Masood, Jovaria**
RECTOVAGINAL FISTULA (diagnosis)
- Masood, Nosheen**
IMMUNOLOGIC SURVEILLANCE
- Masood, S.**
GALLBLADDER NEOPLASMS
- Masroor, Imrana**
ENDOMETRIAL NEOPLASMS (diagnosis)
- Massloom, Hasan S.**
MIDDLE LOBE SYNDROME (etiology)
- Masulovic, Dragan**
PANNICULITIS, PERITONEAL (diagnosis)
- Materacki, Luke**
GASTROINTESTINAL DISEASES
- Mathur, V.**
INFLAMMATION
- Matter, Mohamed**
VITAMIN D DEFICIENCY
- Medou, Alexis**
INFERTILITY, FEMALE
- Mehdipour, Nayereh**
LANGUAGE DISORDERS
- Mehdzadeh, Mehdi**
CA1 REGION, HIPPOCAMPAL (pathology)
- Mehmood, Ahmar**
QUINOLINES
- Mehrabi, Soraya**
EPILEPSY, TEMPORAL LOBE
- Mehrnejad, Faramarz**
ANTIMICROBIAL CATIONIC PEPTIDES
- Memon, M. Umer**
CLAVICLE (radiography)
- Merli, Manuela**
HEMOSTASIS
- Mesdaghi, Mehrnaz**
HEPATITIS B (epidemiology)
- Mesned, Abdu Rahman**
HEART BLOCK
- Messias Reason, Lara Jose**
LACTASE (genetics)
- Meybodi, Anahita Mohseni**
APOLIPOPROTEINS E (genetics)
- Miao, Jian Qing**
HERNIORRHAPHY (methods)
- Micev, Marjan**
PANNICULITIS, PERITONEAL (diagnosis)
- Mikhail, Micheal W.**
TRYPANOSOMA
- Mikhail, Micheal William**
XENOPSYLLA (drug effects)
- Mimboe, Yolande Salome**
INFERTILITY, FEMALE
- Minaa, Said**
DIOXANES (toxicity)

Minooe, Sonia
POLYCYSTIC OVARY SYNDROME

Minoonejad, Hooman
VOLLEYBALL

Mirmajidi, Seyedeh Habibeh
STOMACH NEOPLASMS (genetics)

Mirmajidi, Seyedeh Tahereh
STOMACH NEOPLASMS (genetics)

Mirmiran, Parvin
POLYCYSTIC OVARY SYNDROME

Mirsattari, Dariush
GASTRITIS, ATROPHIC

Misra, Shubham
STROKE

Mobarak, Lamiaa
LIVER CIRRHOSIS (blood)

Moed, Berton R.
ACETABULUM (pathology)

Moghazy, Mohamed
OSTEOGENESIS IMPERFECTA

Moghtader Mojhdehi, Amirhossein
MENINGITIS

Mohamad, Tagelden
HEART BLOCK

Mohamed, Amal A.
HEPATITIS C, CHRONIC (drug therapy)

Mohamed, Tarek Rasheed
VITAMIN D DEFICIENCY (complications)

Mohammad, Kazem
INFERTILITY

Mohammadi, N.
DENTAL RESTORATION, PERMANENT
(standards)

Mohammed, Haitham Galal
VITAMIN D DEFICIENCY (complications)

Mohammed, Samah Sayed
SCHISTOSOMIASIS MANSONI (diagnosis)

Mohammed, W.S.
AEDES (drug effects)

Mohseni Bandpei, Mohammadali
VOLLEYBALL

Mohseni, Fereshteh
ESTRADIOL (pharmacology)

Mohseni, Iman
OVARIAN NEOPLASMS

Mokhtarinia, Hamidreza
LIFE CHANGE EVENTS

Mokoena, Taole
LUNG INJURY (surgery)

Molaei, Mahsa
GASTRITIS, ATROPHIC
COLITIS (chemically induced)

Momeni, M.
ORTHODONTIC APPLIANCE DESIGN

Moretti, Silvia
SCALP DERMATOSES (epidemiology)

Morin, Anne Sophie
NEURILEMMOMA (diagnosis)

Morsy, Ayman T.A.
MENINGOENCEPHALITIS

Morsy, Tosson
SPIDER BITES

Morsy, Tosson A.
MALARIA, FALCIPARUM (epidemiology)
MENINGOENCEPHALITIS
CRYPTOSPORIDIUM PARVUM (drug effects)
DIABETIC FOOT (therapy)

Mortazavi, Pejman
ALZHEIMER DISEASE

Mosaavi, Hassan Seyed
ELECTROMAGNETIC FIELDS (adverse effects)

Mosaffa, Nariman
COLITIS (chemically induced)

Mosavi, Seyed Aliasghar
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY

Moshkelgosha, V.
ORTHODONTIC APPLIANCE DESIGN

Mostafa, Soad H.
VITAMIN D DEFICIENCY (complications)

Motamedi, Pezhman
REPERFUSION INJURY

Mousa, Wahed Mohammed Ali
SCHISTOSOMIASIS MANSONI (diagnosis)

- Moustafa, Maha**
DOWN SYNDROME (genetics)
- Moustfa, Zainab**
HEPATITIS C, CHRONIC (drug therapy)
- Movafagh, Abolfazl**
RING CHROMOSOMES
- Mubarak, Muhammed**
PARATHYROID GLANDS (pathology)
- Muhammad, Dost**
HYPOTRICHOSIS (genetics)
- Mukerji, A.**
STOMATITIS
- Mukhtar, Iman**
ANTICOAGULANTS (history)
- Mumcuoglu, Mine**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Munir, Shamila Ijaz**
STREPTOCOCCUS AGALACTIAE
- Mustafa, F.**
GALLBLADDER NEOPLASMS (pathology)
- Nabil, Amira**
PROSTATIC NEOPLASMS (genetics)
- Naderan, Mohammad**
MORPHINE DEPENDENCE (complications)
- Naghdi, Naser**
ETHIDIUM
- Naghshineh, Elham**
FERTILIZATION IN VITRO
- Najafi, Mojtaba**
STOMACH NEOPLASMS (genetics)
- Naseri, Nasrin**
ANKLE INJURIES
- Nasouri, Marzie**
SLEEP APNEA SYNDROMES
- Nasrabadi, Nafiseh Nasri**
STOMACH NEOPLASMS (genetics)
- Nassar, Ahmed Ibrahim**
ACUTE CORONARY SYNDROME (surgery)
- Nasser, Bana Agha**
HEART BLOCK
- Nasser, Jameel**
DIABETES MELLITUS (diagnosis)
- Nath, Dilip S.**
RECURRENT LARYNGEAL NERVE INJURIES
- Nayan, Swati**
PANTOTHENATE KINASE-ASSOCIATED
NEURODEGENERATION
- Nazari, Mohammadreza**
WELDING
- Nejad, Hossein Mashhadi**
MENINGIOMA
- Nejad, Mohammad Rostami**
CELIAC DISEASE
- Nejad, Zahra Reihani**
SCOLIOSIS
- Ngassam, Anny**
INFERTILITY, FEMALE
- Ngowa, Jean Dupont Kemfang**
INFERTILITY, FEMALE
- Nikbakht, Farnaz**
REPERFUSION INJURY
- Nikzamid, Abdolrahim**
ESOPHAGEAL ACHALASIA (surgery)
- Noa, Claude Cyrile**
INFERTILITY, FEMALE
- Nomeir, Yousra A.**
NIGELLA SATIVA (chemistry)
- Noreen, Shumaila**
IMMUNOLOGIC SURVEILLANCE
- Nour Eldin, Essam**
ASTHMA (genetics)
- Noureddin, E. M.**
AEDES (drug effects)
- Nouri Zadeh, Shohreh**
ANKLE INJURIES
- Nouroz, Faisal**
IMMUNOLOGIC SURVEILLANCE
- Nouzari, A.**
DENTAL RESTORATION, PERMANENT
(standards)
- Nurdiansyah, Rizky**
SERUM ALBUMIN

- Oboh, Ganiyu**
PLANT EXTRACTS (therapeutic use)
- Oguz, Aytakin**
DIABETES MELLITUS (blood)
- Okosun, Jenifer A.**
PLANT EXTRACTS (therapeutic use)
- Okuyan, Ertugul**
VITAMIN D (analogs and derivatives)
- Omar, Heba Alla Hosny**
FRAGILE X SYNDROME (genetics)
- Omar, Nassar Ayoub Abdellatif**
ACETIC ACID (pharmacology)
- Omojokun, Olasunkanmi S.**
PLANT EXTRACTS (therapeutic use)
- Omran, Ahmed**
DIABETES MELLITUS (diagnosis)
- Onder, Hasan**
DENTAL CARIES
- Oner, Can**
DIABETES MELLITUS (blood)
- Oner, Deniz Aslar**
LEUKEMIA, MYELOID, ACUTE (genetics)
- Osman, Elsawi**
UROLITHIASIS (radiography)
- Otohinoyi, David A.**
PLANT EXTRACTS (therapeutic use)
- Owa, Stephen O.**
PLANT EXTRACTS (therapeutic use)
- Oyeeye, Sunday I.**
PLANT EXTRACTS (therapeutic use)
- Oyewale, Damilola G.**
PLANT EXTRACTS (therapeutic use)
- Ozden, Hilmi**
MULTIPLE SCLEROSIS
- Ozoh, Obianuju B.**
PERIODONTAL DISEASES
- Padhy, Rabindra N.**
GRAM-NEGATIVE BACTERIA (genetics)
- Panchal, H.**
TRIPLenegativeBreastNeoplasms
- Pandit, Awadh Kishor**
STROKE
- Pandit, P.N.**
GLIOBLASTOMA (therapy)
- Pant, M.C.**
GALLBLADDER NEOPLASMS
- Paraskevas, George**
HALLUX VALGUS
- Parida, Jyoti R.**
GRANULOMATOSIS WITH POLYANGIITIS (complications)
- Parikh, S.**
TRIPLenegativeBreastNeoplasms
- Park, Sanghoon**
TRACHEAL STENOSIS
- Park, Yong Won**
TRACHEAL STENOSIS
- Parvand, Mandana**
MYOCARDIAL INFARCTION
- Patel, A.A.**
TRIPLenegativeBreastNeoplasms
- Patel, K.M.**
TRIPLenegativeBreastNeoplasms
- Petzl Erler, Maria Luiza**
LACTASE (genetics)
- Pirhajati, Vahid**
CA1 REGION, HIPPOCAMPAL (pathology)
- Pironi, Daniele**
HEMOSTASIS
- Piryaei, Abbas**
ETHIDIUM
- Pisaneschi, Lisa**
SCALP DERMATOSES (epidemiology)
- Pontone, Stefano**
HEMOSTASIS
- Pour, Atefeh Heidary**
RING CHROMOSOMES
- Pourali, Leila**
TWINS, DIZYGOTIC
- Poureslami, H.R.**
ACIDULATED PHOSPHATE FLUORIDE (pharmacology)

- Poureslami, P.**
ACIDULATED PHOSPHATE FLUORIDE
(pharmacology)
- Pourhedayat, Abbas**
HUNTINGTON DISEASE
- Pourhoseingholi, Mohamad Amin**
GASTROINTESTINAL NEOPLASMS
- Pournesaie, Ghazal Saadat**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY
- Prasad, Kameshwar**
STROKE
- Premalata, C.S.**
LYMPHOMA
- Pulido, Olga M.**
CELIAC DISEASE (classification)
- Qadir, Farida**
QUINOLINES
- Rabiee, Fatemeh**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY
- Rad, Parastou**
ARGININE (pharmacology)
- Rafizadeh, Mitra**
GASTRITIS, ATROPHIC
- Rahmani, Saeed**
WELDING
- Rahnama, Leila**
NECK PAIN
- Rai, Vandana**
PROSTATIC NEOPLASMS (genetics)
- Raj, S.**
GLIOBLASTOMA (therapy)
- Rajabi, Hamid**
REPERFUSION INJURY
- Rajabi, Reza**
VOLLEYBALL
- Rajeev, L.K.**
LYMPHOMA
- Ramadan, Manelle**
RECURRENT LARYNGEAL NERVE INJURIES
- Ramazanzadeh, Rashid**
ABORTION, SPONTANEOUS
- Rana, Atif**
BLOOD VESSELS (injuries)
- Rao, C.R.**
LYMPHOMA
- Rashed, Laila**
HEPATITIS C, CHRONIC (genetics)
- Rasoolijazi, Homa**
CA1 REGION, HIPPOCAMPAL (pathology)
- Rassafiani, Mehdi**
PSYCHOMETRICS
- Raza, Syed I.**
HYPOTRICHOSIS (genetics)
- Reilly, Brian K.**
RECURRENT LARYNGEAL NERVE INJURIES
- Resalat, Seyed Navid**
BRAIN-COMPUTER INTERFACES
- Rifa'i, Muhaimin**
SERUM ALBUMIN
- Riskalla, Andrew**
FOREIGN BODIES (surgery)
- Roozbehi, Amrollah**
ARGININE (pharmacology)
- Rosberg, Susanne**
ACCIDENTAL FALLS
- Roshan Milani, Shiva**
IMATINIB MESYLATE (pharmacology)
- Roshani, Daem**
ABORTION, SPONTANEOUS
- Rostami Nejad, Mohammad**
COLITIS (chemically induced)
- Rubio, Jose M.**
ELEPHANTIASIS, FILARIAL (epidemiology)
- Saba, Valiallah**
BRAIN-COMPUTER INTERFACES
- Sabouri, A.**
DENTAL IMPLANTS (standards)
- Sadeghi, Amir**
INTESTINAL POLYPOSIS (diagnosis)

- Sadeghi, M.**
COMPOSITE RESINS
- Sadeq, Hussain**
SEIZURES
- Sadik, Adel**
ANTICOAGULANTS (history)
- Sadiq, Mohammad Ali A.**
EYE INJURIES, PENETRATING (pathology)
- Sadredinamin, Mehrzad**
ANTIMICROBIAL CATIONIC PEPTIDES
- Safari, Ameneh**
CEREBRAL PALSY
- Safari, Mohammad Taghi**
INTESTINAL POLYPOSIS (diagnosis)
- Safari, S.**
GINGIVAL RETRACTION TECHNIQUES
- Saffarzadeh, Fatemeh**
CA1 REGION, HIPPOCAMPAL (pathology)
- Sahaf, Robab**
PSYCHOMETRICS
- Sahin, Irfan**
VITAMIN D (analogs and derivatives)
- Sahu, Mahesh C.**
GRANULOMATOSIS WITH POLYANGIITIS (complications)
- Sajedi, Firouzeh**
LANGUAGE DISORDERS
- Sakrani, Nida Fatima**
DUODENAL OBSTRUCTION (diagnosis)
- Salamat, Amjad**
CELIAC DISEASE (therapy)
- Saleh, Ahmad Megahed Ahmad**
MALARIA, FALCIPARUM (epidemiology)
- Salem, Ahmed N.M.**
TOXOPLASMA (genetics)
- Salem, M.S.Z.**
FRAGILE X SYNDROME (genetics)
- Sali, Shahnaz**
BLOOD-BORNE PATHOGENS
- Salk, Ismail**
PELVIS
- Salk, Sultan**
PELVIS
- Sallam, Y.A.**
MULTIPLE MYELOMA
- Salloum, Alaa'a M.**
DENTURE, COMPLETE
- Samizadeh, Esmaeil**
MORPHINE DEPENDENCE (complications)
- Samra, M.A.**
MULTIPLE MYELOMA
- Sandhu, Amarjit K.**
ANEMIA, SICKLE CELL (mortality)
- Sanlikan, Fatih**
CERVIX UTERI (pathology)
- Saraan, Khalid**
ANTICOAGULANTS (history)
- Sarbaz, Yashar**
CEREBELLAR ATAXIA
HUNTINGTON DISEASE
- Sarkaki, Alireza**
ALZHEIMER DISEASE
- Sarkar, Sanjit**
INFERTILITY, FEMALE
- Sarmadi, Alireza**
MYOCARDIAL INFARCTION
- Sarwar, Muhammad Suhail**
EYE INJURIES, PENETRATING (pathology)
- Sathyanarayanan, V.**
LYMPHOMA
- Sattari, Mahsa**
UPPER EXTREMITY DEFORMITIES,
CONGENITAL (epidemiology)
- Sayed, Ghadir A.**
HEPATITIS C, CHRONIC (drug therapy)
- Sayed, Ola**
HEPATITIS C, CHRONIC (drug therapy)
- Scott, Robert L.**
CORONARY VESSEL ANOMALIES
- Seifeldin, Sameh A.**
ALVEOLAR BONE GRAFTING
- Sen, Fatih**
CORONARY ARTERY DISEASE

- Sensoy, Baris**
CORONARY ARTERY DISEASE
- Serinsoz, Hulya**
POLYCYSTIC OVARY SYNDROME
- Seyedzadeh Sabounchi, S.**
TOOTH ROOT (drug effects)
- Shaaban, Yasser Hassan**
SEPSIS (mortality)
- Shaaban, Zohdi Abu**
ANTICOAGULANTS (history)
- Shabahang, Hossein**
MENINGIOMA
- Shadifar, Mohammad**
ANTIOXIDANTS
- Shafi, S.**
GALLBLADDER NEOPLASMS (pathology)
- Shah, P.**
GALLBLADDER NEOPLASMS (pathology)
- Shah, P.M.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Shah, S.A.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Shah, Shafqat Ali**
ANESTHESIA, DENTAL (methods)
- Shahabi, Parviz**
CEREBELLAR ATAXIA
- Shahbazi, Ali**
REPERFUSION INJURY
- Shahbakhani, Bijan**
CELIAC DISEASE
- Shaheer, Muhammad**
EYE INJURIES, PENETRATING (pathology)
- Shahnazari, Parisa**
INFERTILITY
- shahrokh, Shabnam**
INTESTINAL POLYPOSIS (diagnosis)
- Shahshahanipour, Soheila**
LANGUAGE DISORDERS
- Shahvaisizadeh, Farhad**
RING CHROMOSOMES
- Shakeel, Shaheera**
PARATHYROID GLANDS (pathology)
- Shaker, Emad S.**
DIOXANES (toxicity)
- Shakir, Munira**
RETINAL DETACHMENT (surgery)
- Shams, Alireza**
ETHIDIUM
- Shamsaei, Nabi**
REPERFUSION INJURY
- Sharaf, Osama F.**
FASCIOLA HEPATICA (immunology)
- Sharifi, H.**
ACIDULATED PHOSPHATE FLUORIDE
(pharmacology)
- Sharifian, Abdolhamid**
GASTROINTESTINAL NEOPLASMS
- Shaughnessy, Conner**
RECURRENT LARYNGEAL NERVE INJURIES
- Shebl, A.M.**
LYMPHOMA
- Shehab, Abdulla**
ANTICOAGULANTS (history)
- Shehab, Diaa**
OSTEOARTHRITIS, KNEE
- Shehab, Omer Abdulla**
ANTICOAGULANTS (history)
- Sheir, Hassan T.**
SPIRAMYCIN (pharmacology)
- Shoar, Saeed**
MORPHINE DEPENDENCE (complications)
- Shoeib, Eman Y.**
ELEPHANTIASIS, FILARIAL (epidemiology)
- Shojaei, Fariba**
HEPATITIS B (epidemiology)
- Shokouhi, Shervin**
MENINGITIS
- Shokryabdallah, Eman**
DIABETIC FOOT (therapy)
- Shomali, M.**
ORTHODONTIC APPLIANCE DESIGN
- Shoukat**
KIDNEY FAILURE, CHRONIC

- Shrihari, T.G.**
CHRONIC PERIODONTITIS
- Shrwani, Y. A.**
AEDES (drug effects)
- Shukla, S.N.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Siddiqi, Abeer Qamar**
QUINOLINES
- Sikandar, Huma**
ANESTHESIA, DENTAL (methods)
- Simbar, Masoumeh**
ELECTROMAGNETIC FIELDS (adverse effects)
- Singh, Navjot**
GENITAL DISEASES, MALE (radiography)
- Singh, Renu**
UTERINE CERVICAL NEOPLASMS (genetics)
- Singhal, A.**
GALLBLADDER NEOPLASMS
- Sistani, Nouriyeh Sharifi**
MENINGIOMA
- Sohail, Saba**
RESEARCH PERSONNEL (education)
- Soleimani, Farin**
LANGUAGE DISORDERS
- Soleimani, Mansooreh**
EPILEPSY, TEMPORAL LOBE
- Soliman, Mohamed Ismail**
XENOPSYLLA (drug effects)
- Srivastava, Mukesh Kumar**
STROKE
- Stevic, Ruza**
PANNICULITIS, PERITONEAL (diagnosis)
- Stojakov, Dejan**
PANNICULITIS, PERITONEAL (diagnosis)
- Suer, Berkay Tolga**
ALVEOLAR BONE GRAFTING (methods)
- Suh, Yiji**
GENITAL DISEASES, MALE (radiography)
- Suresh, B.**
LYMPHOMA
- Svantesson, Ulla**
ACCIDENTAL FALLS
- Swain, Santosh K.**
GRANULOMATOSIS WITH POLYANGIITIS
(complications)
- Swain, Shasank S.**
GRAM-NEGATIVE BACTERIA (genetics)
- Sweilam, Samya**
HEPATITIS C, CHRONIC (genetics)
- Taalab, M.M.**
LYMPHOMA
- Taghipour, Niloofar**
COLITIS (chemically induced)
- Tahmasian, Masoud**
SLEEP APNEA SYNDROMES
- Taiwo, Adeolu A.**
PLANT EXTRACTS (therapeutic use)
- Tajedin, Elahe**
ESCHERICHIA COLI (isolation and purification)
- Takzare, Nasrin**
MORPHINE DEPENDENCE (complications)
- Talaei, Fatemeh**
MULTIPLE SCLEROSIS
- Talati, S.S.**
TRIPLE NEGATIVE BREAST NEOPLASMS
- Taufiq, Marium**
ENDOMETRIAL NEOPLASMS (diagnosis)
- Tawfik, A.M.**
LYMPHOMA
- Tehrani, Shabnam**
BLOOD-BORNE PATHOGENS
- Tehrani, Fahimeh Ramezani**
POLYCYSTIC OVARY SYNDROME
- Teimouri, Robab**
LANGUAGE DISORDERS
- Tekin, Umut**
ALVEOLAR BONE GRAFTING (methods)
- Telatar, Berrin**
DIABETES MELLITUS (blood)
- Thomson, W.M.**
CAREGIVERS

- Tierney, Eamon**
CARDIAC OUTPUT
- Tomasello, Salvatore D.**
COLLATERAL CIRCULATION
- Tonekaboni, Seyed Hassan**
RING CHROMOSOMES
- Topal, Salih**
CORONARY ARTERY DISEASE
- Torkzaban, P.**
TOOTH ROOT (drug effects)
- Toukam, Michel**
INFERTILITY, FEMALE
- Tunc, Emine Sen**
DENTAL CARIES
- Turkmen, Simge Bagci**
CERVIX UTERI (pathology)
- Tuz, Hakan H.**
ALVEOLAR BONE GRAFTING (methods)
- Ucar, Mustafa**
HEART FAILURE
- Ulusoy, Ayca Tuba**
DENTAL CARIES
- Umezudike, Kehinde A.**
PERIODONTAL DISEASES
- Ur Rehman, Iqbal**
KIDNEY FAILURE, CHRONIC
- Uzun, Salih**
RETINITIS PIGMENTOSA (diagnosis)
- Vaezjalali, Maryam**
HEPATITIS B (epidemiology)
- Valecha, Rekha**
PLANT OILS
- Valizadeh, Nasim**
IMATINIB MESYLATE (pharmacology)
- Valizadeh, Zohreh**
ALZHEIMER DISEASE
- Vameghi, Roshanak**
LANGUAGE DISORDERS
- Vasmehjani, Abbas Ahmadi**
DEPRESSIVE DISORDER
- Vasudev, V.**
ADAPTATION, PHYSIOLOGICAL (drug effects)
- Vasudevan, V.**
CHRONIC PERIODONTITIS
- Vaziri, Hamidreza**
APOLIPOPROTEINS E (genetics)
- Venu, R.**
ADAPTATION, PHYSIOLOGICAL (drug effects)
- Vossoghi Sheshkalani, Ma**
GINGIVAL RETRACTION TECHNIQUES
- Vrettakos, Aristidis**
HALLUX VALGUS
- Vural, Aylin**
CERVIX UTERI (pathology)
- Waheed, Khadija**
STREPTOCOCCUS AGALACTIAE
- Waked, Neveen M.**
ECHINOCOCCOSIS (parasitology)
- Wallis, Lee A.**
EMERGENCY MEDICAL SERVICES
- Warren, Kelly**
GENITAL DISEASES, MALE (radiography)
- Widodo**
SERUM ALBUMIN
- Willen, Carin**
ACCIDENTAL FALLS
- Wu, Hao Rong**
HERNIORRHAPHY (methods)
- Xie, Jia Ming**
HERNIORRHAPHY (methods)
- Yadav, Upendra**
PROSTATIC NEOPLASMS (genetics)
- Yadegari, Fariba**
LANGUAGE DISORDERS
- Yagan, Canan Fidan Celik**
DIABETES MELLITUS (blood)
- Yaqoob, Alaeddin**
UROLITHIASIS (radiography)
- Yassin, Areej A.**
VITAMIN D DEFICIENCY (complications)

- Yayla, Cagri**
CORONARY ARTERY DISEASE
- Yazan, Murude**
ALVEOLAR BONE GRAFTING (methods)
- Yehia, Hoda**
METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (drug effects)
- Yildiz, Suleyman Sezai**
VITAMIN D (analogues and derivatives)
- Yolcu, Umit**
RETINITIS PIGMENTOSA (diagnosis)
- Yoon, Seon Bin**
TRACHEAL STENOSIS
- Youssef, Gehan A.**
PANAX
- Yusoff, Muhamad S.B.**
EDUCATIONAL MEASUREMENT (methods)
- Zafar, Shakir**
RETINAL DETACHMENT (surgery)
- Zaglool, Dina A.M.**
TOXOPLASMOSIS (diagnosis)
- Zahir, Z.**
GALLBLADDER NEOPLASMS (pathology)
- Zain, Muhammad**
ANESTHESIA, DENTAL (methods)
- Zakaria, Y.**
LYMPHOMA
- Zali, Mohammad Reza**
COLITIS (chemically induced)
ESCHERICHIA COLI (isolation and purification)
- Zandi, Shahrzad**
VOLLEYBALL
- Zare Abdollahi, Davood**
RING CHROMOSOMES
- Zarei, I.**
DENTAL IMPLANTS (standards)
- Zarifian, Ahmadrza**
TWINS, DIZYGOTIC
- Zarifian, Talieh**
LANGUAGE DISORDERS
- Zarinara, Alireza**
INFERTILITY
- Zayed, Louay H.**
FRASER SYNDROME (genetics)
- Zehi, Vahid**
MENINGIOMA
- Zehra, Tabassum**
QUINOLINES
- Zeraati, Hojjat**
INFERTILITY
- Zhang, Heng**
HERNIORRHAPHY (methods)
- Zidan, Mahmoud M.**
DIPTERA (physiology)
- Zohrei, A.**
DENTAL RESTORATION, PERMANENT (standards)
- Zojaji, Homayoun**
GASTRITIS, ATROPHIC
- Zolbin, Masoumeh Majidi**
MORPHINE DEPENDENCE (complications)
- Zomorodi, Saeedeh**
ESOPHAGEAL ACHALASIA (surgery)
- Zurakowski, David**
RECURRENT LARYNGEAL NERVE INJURIES

Appendix II

**List of EMR Journals Indexed in
IMEMR**

(by country)

Journal	ISSN
Afghanistan (2)	
Afghan Medical Journal	N/A
AFJPH-Afghanistan Journal of Public Health	2308-2895
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 (141)	
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 Intensive Care	N/A
AJM-Alexandria Journal of Medicine	2090-5068
Al-Azhar Journal of Dental Science	1110-6751
Al-Azhar Medical Journal	1110-0400
Alexandria Dental Journal	1110-015X
Alexandria Journal of Food Science and Technology	1687-3920
Alexandria Journal of Hepatogastroenterology	2090-1879
Alexandria Journal of Pediatrics	1687-9945
Alexandria Journal of Pharmaceutical Sciences	1110-1792
Alexandria Journal of Veterinary Science [AJVS]	1110-2407
Alexandria Medical Journal [The]	0516-5849
Annals of Pediatric Surgery	1687-4137
Applied Endocrinology in Egypt	1110-1776
Arab Family Health and Population	N/A
Arab Journal of Biotechnology	1110-6875
Arab Journal of Gastroenterology	1687-1979
Arab Journal of Laboratory Medicine [The]	1110-1822
ASJOG-Ain-Shams Journal of Obstetrics and Gynecology	1697-2193
ASNJ-Alexandria Scientific Nursing Journal	1687-3858
Assiut Medical Journal	1110-0494
Assiut University Bulletin for Environmental Researches	1110-6107
Assiut Veterinary Medical Journal	N/A

Journal	ISSN
Benha Medical Journal	1110-208X
Bulletin of Alexandria Thoracic Association	1687-997X
Bulletin of Faculty of Pharmacy-Cairo University	1110-0931
Bulletin of Faculty of Physical Therapy-Cairo University	1110-6611
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	0078-5342
Childhood and Development Quarterly	1110-8681
Clinical Diabetes	0891-8929
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 Breastfeeding	N/A
Egyptian Journal of Bronchology [The]	1687-8426
Egyptian Journal of Cardiothoracic Anesthesia	1687-9090
Egyptian Journal of Cataract and Refractive Surgery [The]	N/A
Egyptian Journal of Chemistry	0449-2285
Egyptian Journal of Chest Diseases and Tuberculosis [The]	0422-7638
Egyptian Journal of Community Medicine [The]	1110-1865
Egyptian Journal of Dermatology and Andrology	1110-7650
Egyptian Journal of Diabetes [The]	N/A
Egyptian Journal of Food Science	1110-0192
Egyptian Journal of Genetics and Cytology	0046-161X
Egyptian Journal of Histology [The]	1110-0559
Egyptian Journal of Hospital Medicine [The]	1687-2002
Egyptian Journal of Immunology [The]	1110-4902
Egyptian Journal of Medical Human Genetics [The]	1110-8630
Egyptian Journal of Medical Laboratory Sciences	1110-5593
Egyptian Journal of Microbiology	0022-2704
Egyptian Journal of Neonatology [The]	1110-8991
Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083

Journal	ISSN
Egyptian Journal of Nutrition	1687-1235
Egyptian Journal of Nutrition and Health	1687-7950
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	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 Liver Journal	2090-6218
Egyptian Medical Journal of the National Research Center	1687-1278
Egyptian Orthodontic Journal	1110-435x
Egyptian Orthopaedic Journal [The]	1110-1148
Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
Egyptian Population and Family Planning Review [The]	1110-1156
Egyptian Rheumatologist [The]	1110-1164
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
EJMM-Egyptian Journal of Medical Microbiology [The]	1110-2179
EMHJ-Eastern Mediterranean Health Journal	1020-3397
Gazette of the Egyptian Paediatric Association [The]	1110-6638
Health Services Journal of the Eastern Mediterranean Region	1014-9899
JESN-Journal of Egyptian Society of Nephrology [The]	N/A
Journal of Advanced Research	2090-1232
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 High Institute of Public Health [The]	2357-0601
Journal of Legal Medicine and Forensic Sciences [The]	1110-6468

Journal	ISSN
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]	0013-2446
Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245
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]	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 [The]	N/A
Kasr El Aini Journal of Surgery	0022-9237
Kasr El-Aini Medical Journal	N/A
Kidney Forum	1369-3050
Mansoura Journal of Pharmaceutical Sciences	1110-1318
Mansoura Medical Bulletin	1012-5590
Mansoura Medical Journal	1110-211X
MDV-Molecular Diagnosis and Vaccine	1687-2010
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	1110-5437
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	0255-898X
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 Journal of El-Minia Faculty of Medicine [The]	1110-2446
Scientific Medical Journal	1110-5607
Sohag Medical Journal	1110-7529
South Valley Medical Journal	1110-7529

Journal	ISSN
Suez Canal University Medical Journal	1110-6999
Tanta Medical Journal	1110-1415
Tanta Medical Sciences Journal	1687-5788
Veterinary Medical Journal	1110-1423
Weekly Epidemiology Monitor	2224-4220
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 (32)	
Al-Kindy College Medical Journal	1810-9543
Almustansiriya Journal of Pharmaceutical Sciences	1815-0993
Annals of the College of Medicine-Mosul	0028-1446
Basrah Journal of Surgery	1683-3589
Bulletin of Endemic Disease-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 Agriculture	1818-6645
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	1683-3597
Iraqi Journal of Tropical Disease Researches	1814-0823
Iraqi New Medical Journal	2409-5931
Journal of Baghdad College of Dentistry	1680-0057
Journal of Basic Medical Sciences	N/A
Journal of Community Medicine	N/A
Journal of Contemporary Medical Sciences	2415-1629
Journal of Dohuk University	1812-7568
Journal of Karbala University	1813-0410
Journal of the Faculty of Medicine-Baghdad	0041-9419

Journal	ISSN
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	1812-2388
Zanco Journal of Medical Sciences	1995-5588
Islamic Republic of Iran (262)	
ABJS-Archives of Bone and Joint Surgery [The]	2345-4644
Acta Medica Iranica	0044-6025
Advances in Cognitive Science	1561-4174
AJMB-Avicenna Journal of Medical Biotechnology	2008-2835
Anatomical Sciences Journal [ASJ]	N/A
Anesthesiology and Pain Medicine	2228-7523
Annals of Military and Health Sciences Research	2383-1960
Applied Food Biotechnology	2345-5357
Archive of Breast Cancer	2383-0425
Archives of Clinical Infectious Diseases	2641-2345
Archives of Iranian Medicine	1029-2977
Archives of Medical Laboratory Sciences New	2423-6241
Archives of Trauma Research	2251-953X
Armaghane-danesh	1728-6506
ARYA Atherosclerosis Journal	1735-3955
Asia Oceania Journal of Nuclear Medicine and Biology	2322-5718
Asian Journal of Sports Medicine	2008-000X
Audiology	1735-1936
Avicenna Journal of Phytomedicine [AJP]	2228-7930
Basic and Clinical Neuroscience	2008-126X
BCCR-Basic and Clinical Cancer Research	2228-6527
BEAT-Bulletin of Emergency and Trauma	2322-2522
Bina Journal of Ophthalmology	1026-6399
Caspian Journal of Neurological Sciences	2383-4307
Cell Journal [Yakhteh]	2228-5806
Community Health	2386-3033
DARU-Journal of Pharmaceutical Sciences	1560-8115

Journal	ISSN
DENA-Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450
Dermatology and Cosmetic Quarterly	2008-7470
DRJ-Dental Research Journal	1735-3327
EBNESINA-Medical Journal of Military Medicine [The]	1735-9503
Emergency	2345-4563
Endovascular Journal	2008-1812
Environmental Health Engineering and Management Journal	2423-3765
Feyz-Journal of Kashan University of Medical Sciences	1029-7855
Frontiers in Biomedical Technologies	2345-5829
Gastroenterology and Hepatology from Bed to Bench	2010-2258
Genetics in the 3rd Millennium	2423-7159
Govaresh	1560-7186
HAKIM Research Journal	1561-252X
HAYAT-Journal of Faculty of Nursing and Midwifery [The]	1735-2215
Health in Emergencies and Disasters Quarterly [HDQ]	N/A
Health Information Management	1735-7853
Hepatitis Monthly	1735-143X
Holistic Nursing and Midwifery Journal New	2251-8460
Homa-ye-Salamat	2008-2002
Hormozgan Medical Journal	1735-2223
Hospital-Journal of Iranian Scientific Hospital Association	2008-1928
IBJ-Iranian Biomedical Journal	1028-852X
IEJ-Iranian Endodontic Journal	1735-7497
IHJ-Iranian Heart Journal	1735-7306
IJBC-Iranian Journal of Blood and Cancer	2008-4595
IJB-Iranian Journal of Biotechnology	1728-3043
IJCBNM-International Journal of Community Based Nursing and Midwifery	2322-2476
IJCN-Iranian Journal of Child Neurology	1735-4668
IJDO-Iranian Journal of Diabetes and Obesity	2008-6792
IJEM-Iranian Journal of Endocrinology and Metabolism	1683-4844
IJFS-International Journal of Fertility and Sterility	2008-076X
IJHOSCR-International Journal of Hematology-Oncology and Stem Cell Research	2008-2207
IJHPM-International Journal of Health Policy and Management	N/A
IJHS-Iranian Journal of Health Sciences	2322-553X
IJI-Iranian Journal of Immunology	1735-1383

Journal	ISSN
IJKD-Iranian Journal of Kidney Diseases	1735-8582
IJMCM-International Journal of Molecular and Cellular Medicine	2251-9637
IJME-Iranian Journal of Medical Education	1608-9359
IJM-Iranian Journal of Microbiology	2008-3289
IJML-International Journal of Medical Laboratory New	2423-3706
IJMS-Iranian Journal of Medical Sciences	0253-0716
IJN-Iranian Journal of Neonatology	2251-7510
IJOH-International Journal of Occupational Hygiene	2008-5109
IJO-Iranian Journal of Orthodontics	1735-5087
IJP-International Journal of Pediatrics	2345-5047
IJPM-International Journal of Preventive Medicine	2008-7802
IJPR-Iranian Journal of Pharmaceutical Research	1735-0328
IJRM-International Journal of Reproductive Biomedicine	2476-4108
IJVM-Iranian Journal of Veterinary Medicine	2251-8894
International Cardiovascular Research Journal	2251-9130
International Journal of Endocrinology and Metabolism	1726-913X
International Journal of Environmental Research	1735-6865
International Journal of Environmental Science and Technology	1735-1472
International Journal of High Risk Behaviors and Addiction	2251-8711
International Journal of Mycobacteriology	2212-5531
International Journal of Occupational and Environmental Medicine	2008-6520
International Journal of Organ Transplantation Medicine	2008-6490
International Journal of Radiation Research	2322-3243
International Journal of Women's Health and Reproduction Sciences	N/A
Iran Journal of Nursing	2008-5923
Iran Occupational Health	1735-5133
Iranian Journal of Allergy, Asthma and Immunology	1735-1502
Iranian Journal of Arthropod-Borne Diseases	1735-7179
Iranian Journal of Basic Medical Sciences	2008-3866
Iranian Journal of Cancer Prevention	2008-2398
Iranian Journal of Dermatology	0021-082X
Iranian Journal of Diabetes and Lipid Disorders	1726-7544
Iranian Journal of Emergency Medicine	N/A
Iranian Journal of Environmental Health Science and Engineering	1735-1979
Iranian Journal of Epidemiology	1735-7489

Journal	ISSN
Iranian Journal of Health and Environment	2008-2029
Iranian Journal of Medical Microbiology	1735-8612
Iranian Journal of Medical Physics	1735-160X
Iranian Journal of Nuclear Medicine	1681-2824
Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
Iranian Journal of Nursing Research	1735-7012
Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993
Iranian Journal of Ophthalmology	1735-4153
Iranian Journal of Otorhinolaryngology	1560-1293
Iranian Journal of Parasitology	1735-7020
Iranian Journal of Pediatrics	2008-2142
Iranian Journal of Psychiatric Nursing	2345-2501
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]	1735-4315
Iranian Journal of Public Health	0304-4556
Iranian Journal of Radiology	1735-1065
Iranian Journal of Veterinary Research	1728-1997
Iranian Rehabilitation Journal	1735-3602
IRJNS - Iranian Journal of Neurosurgery	New 2423-6497
JBUMS-Journal of Babol University of Medical Sciences	1561-4107
JCR-Journal of Craniomaxillofacial Research	5489-2345
JCVTR-Journal of Cardiovascular and Thoracic Research	2008-5117
JDB-Journal of Dental Biomaterials	2383-3971
JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
JEHSD-Journal of Environmental Health and Sustainable Development	New 2426-6267
JFH-Journal of Fasting and Health	N/A
JMB-Journal of Medical Bacteriology	2251-8649
JMRH-Journal of Midwifery and Reproductive Health	N/A
JMR-Journal of Medical Research	1728-1962
JNE-Journal of Nursing Education	3812-2322
JNMS-Journal of Nursing and Midwifery Sciences	2345-5756
JNP-Journal of Nephropathology	2251-8363
Journal of Advances in Medical Education and Professionalism	2322-2220

Journal	ISSN
Journal of Anesthesiology and Pain	2228-6659
Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
Journal of Birjand University of Medical Sciences	N/A
Journal of Cardio-Thoracic Medicine	2345-2447
Journal of Client-Centered Nursing Care	N/A
Journal of Clinical Excellence	2322-391X
Journal of Dental Materials and Techniques	2322-4150
Journal of Dental Medicine-Tehran University of Medical Sciences	1024-641X
Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X
Journal of Dental School-Shahid Beheshti University of Medical Sciences	1735-7683
Journal of Dentistry-Shiraz University of Medical Sciences	1728-3426
Journal of Environmental Studies	1025-8620
Journal of Family and Reproductive Health	1735-8949
Journal of Fundamentals of Mental Health [The]	1028-6918
Journal of Gorgan University of Medical Sciences	1562-4765
Journal of Guilan University of Medical Sciences	2008-4048
Journal of Health Administration	2008-1200
Journal of Health and Safety at Work	2251-807X
Journal of Health Management and Informatics [JHMI]	2322-1097
Journal of Health Promotion Management [JHPM]	2251-8614
Journal of Health Sciences and Surveillance System	2345-2218
Journal of Health Scope	2251-8959
Journal of Health-Based Research New	2423-7639
Journal of Hearing Sciences and Otolaryngology	N/A
Journal of Hygiene and Health	1735-2363
Journal of Injury and Violence Research	2008-2053
Journal of Isfahan Dental School	1735-255X
Journal of Isfahan Medical School	1027-7595
Journal of Islamic Dental Association of Iran [The]-JIDA	1024-6428
Journal of Jahrom University of Medical Sciences	2008-7993
Journal of Kerman University of Medical Sciences	1023-9510
Journal of Kermanshah University of Medical Sciences [KUMS]	2251-9068
Journal of Lasers in Medical Sciences	2008-9783
Journal of Mashhad Dental School	1560-9286
Journal of Mazandaran University of Medical Sciences	1735-9260

Journal	ISSN
Journal of Medical Council of Islamic Republic of Iran	1562-1073
Journal of Medical Education	1735-3998
Journal of Medicinal Plants	1684-0240
Journal of Minimally Invasive Surgical Sciences	2251-7022
Journal of Modern Medical Information Science	N/A
Journal of Modern Rehabilitation	2008-2576
Journal of Neyshabur University of Medical Sciences	2383-3203
Journal of Nursing and Midwifery Quarterly-Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
Journal of Ophthalmic and Vision Research	2008-2010
Journal of Paramedical Sciences New	2008-496X
Journal of Paramedical Sciences and Rehabilitation	2322-5238
Journal of Patient Safety and Quality Improvement	2345-4482
Journal of Periodontology and Implant Dentistry	2008-7748
Journal of Practice in Clinical Psychology	2423-5822
Journal of Preventive Medicine	N/A
Journal of Qazvin University of Medical Sciences [The]	1561-3666
Journal of Rafsanjan University of Medical Sciences	1735-3165
Journal of Rehabilitation	1607-2960
Journal of Rehabilitation Sciences and Research [JRSR]	2345-6167
Journal of Reproduction and Infertility	2228-5482
Journal of Research in Behavioural Sciences	1735-2029
Journal of Research in Dental Sciences	2008-4676
Journal of Research in Health Sciences [JRHS]	2228-7795
Journal of Research in Medical Sciences	1735-5311
Journal of Research on History of Medicine [The]	N/A
Journal of Sabzevar University of Medical Sciences	1606-7487
Journal of Safety Promotion and Injury Prevention	2345-2455
Journal of School of Public Health and Institute of Public Health Research	1735-7586
Journal of Screening and Geographical Medicine	1735-7594
Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
Journal of Shahrekord University of Medical Sciences	1735-1448
Journal of Student Research Committee [BEYHAGH]	2008-0328
Journal of Tehran University Heart Center [The]	1735-8620
Journal of Veterinary Research	2008-2525
Journal of Zahedan University of Medical Sciences and Health Services	1735-076X

Journal	ISSN
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
JPC-Journal of Pharmaceutical Care	2322-4630
JPN-Journal of Pediatric Nephrology	N/A
JRH-Journal of Research and Health	2251-6395
JRMS-Journal of Research in Medical Sciences	1735-1995
JRRS-Journal of Research in Rehabilitation Sciences	1735-7519
Jundishapur Journal of Microbiology [JJM]	2008-3645
Jundishapur Journal of Natural Pharmaceutical Products	1735-7780
Jundishapur Scientific Medical Journal	2252-052x
KOOMESH-Journal of Semnan University of Medical Sciences	1608-7046
Medical Journal of Mashad University of Medical Sciences	1735-4013
Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
Medical Journal of the Islamic Republic of Iran	1016-1430
Medical Laboratory Journal	1735-9007
Medical Sciences Journal of Islamic Azad University	1023-5922
Medical-Surgical Nursing Journal	2322-178X
MEJC-Middle East Journal of Cancer	2008-6709
Middle East Journal of Digestive Diseases	2008-5230
Modares Journal of Medical Sciences, Pathobiology	1562-9554
Nanomedicine Journal	2322-3049
Nephro-Urology Monthly	2251-7006
Novelty in Biomedicine	2345-3346
Nursing and Midwifery Research	1753-5001
Nursing Practice Today	2383-1154
Nutrition and Food Sciences Research	2383-0441
Ofogh-E-Danesh	1735-1855
Payavard-Salamat	1735-8132
Payesh-Health Monitor	1680-7626
Pejouhandeh: Bimonthly Research Journal	1735-1022
Physical Treatments: Specific Physical Therapy Journal	2423-5830
Qom University of Medical Sciences Journal	1735-7799
Quarterly Journal of Medical Ethics	2008-4374
Quarterly Journal of Medical Law	N/A
Quarterly Scientific Journal of Relief and Rescue	2008-4544
Razi Journal of Medical Sciences	2228-7043

Journal	ISSN
Reports of Radiotherapy and Oncology	2345-3192
Research in Cardiovascular Medicine	2251-9572
Reviews in Clinical Medicine [RCM]	2345-6256
RMM-Research in Molecular Medicine	2322-1348
Sadra Medical Sciences Journal	N/A
Salmand-Iranian Journal of Aging	1735-806X
Scientific and Research Journal of Army University of Medical Sciences-JAUMS	1727-1789
Scientific Journal of Forensic Medicine	1027-1457
Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520
Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
Shenakht Journal of Psychology and Psychiatry	N/A
Social Determinants of Health	2423-3560
Social Welfare Quarterly	1735-8191
Strides in Development of Medical Education	1735-4242
Tanaffos	1735-0344
Teb Va Tazkie	1608-2397
Tehran University Medical Journal [TUMJ]	1683-1764
Thrita Student Journal of Medical Sciences	2251-8312
TIPS-Trends in Pharmaceutical Sciences	2423-3722
Toloo-e-Behdasht	1728-5127
Trauma Monthly	2251-7464
Urology Journal	1735-1308
WJPS-World Journal of Plastic Surgery	2228-7914
Yafteh Journal	1563-0773
Zahedan Journal of Research in Medical Sciences	N/A
Jordan (9)	
Arab Journal of Psychiatry [The]	1016-8923
Dirasat	1026-3764
Jordan Journal of Pharmaceutical Sciences	1995-7157
Jordan Medical Journal	0446-9283
Journal of the Royal Medical Services	2078-8703
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

Journal	ISSN
Kuwait (6)	
Bulletin of Nutrition and Food	N/A
Bulletin of the Kuwait Institute for Medical Specialization	N/A
GJO-Gulf Journal of Oncology [The]	2078-2101
KMJ-Kuwait Medical Journal	0023-5776
Medical Arabization	N/A
Medical Principles and Practice	1011-7571
Lebanon (11)	
ACES-Actualites Cliniques et Scientifiques	1683-8068
AJU-Arab Journal of Urology	2090-598X
Arab Dental Journal	N/A
IAJD-International Arab Journal of Dentistry	2218-0885
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
MJEM- Mediterranean Journal of Emergency Medicine	2222-9442
Libya (6)	
DMJ-Derna Medical Journal	N/A
Garyounis Medical Journal	0254-7198
JMJ-Jamahiriya Medical Journal	2079-1216
Libyan Journal of Infectious Diseases [The]	N/A
LJM-Libyan Journal of Medicine	1993-2820
Tabib Attifil Alarabi	N/A
Morocco (7)	
Bulletin Epidemiologique	0851-8238
ISESCO Journal of Science and Technology	2028-8077
Journal du Practicien	1113-5667
Maroc Medical	0253-4053
Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
Revue Marocaine de Medecine et Sante	0251-0758
Revue Marocaine des Maladies de L'Enfant	N/A

Journal	ISSN
Oman (3)	
Oman Journal of Ophthalmology	0974-620X
Oman Medical Journal	1999-768X
SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
Pakistan (92)	
Al-Shifa Journal of Ophthalmology	1990-3863
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
APMC-Annals of Punjab Medical College	2077-9143
Bahria Journal of Professional Psychology	1816-0840
Baqai Journal of Health Sciences	2313-4423
Biomedica	1992-4852
Challenge-Quarterly [The]	0528-7944
Community Medicine	0301-7265
Diabetes Digest	1369-7501
Esculapio	2309-3080
FWU Journal of Social Sciences	1995-1272
GJMS-Gomal Journal of Medical Sciences	1819-7973
Hamdard Medicus	0250-7188
Health [The]	2218-3299
IJEHSR-International Journal of Endorsing Health Science Research	2307-3748
Infectious Diseases Journal of Pakistan	1027-0299
International Journal of Pathology	1810-0155
International Journal of Women Empowerment	2413-4252
Isra Medical Journal	2073-8285
JAMC-Journal of Ayub Medical College-Abbottabad-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
JIIMC-Journal of Islamic International Medical College [The]	1815-4018
JIMDC-Journal of Islamabad Medical and Dental College	2227-3875
JKCD-Journal of Khyber College of Dentistry	2220-2633
JLUMHS-Journal of the Liaquat University of Medical Health Sciences	1729-0341
JOPDAK-Journal of the Pakistan Dental Association Karachi	1680-2292

Journal	ISSN
Journal of Basic and Applied Sciences	1814-8085
Journal of Medical Sciences	1682-4474
Journal of Medical Sciences	1997-3438
Journal of Medical Students	N/A
Journal of Nephrology Urology and Transplantation	1606-9331
Journal of Sheikh Zayed Medical College [JSZMC]	2078-8274
Journal of Surgery [The]	1681-4517
Journal of the Pakistan Prosthodontics Association [JPPA]	2308-8613
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 Medical Institute	1013-5472
JPPS-Journal of Pakistan Psychiatric Society	1726-8710
JSOGP-Journal of the Society of Obstetricians and Gynaecologists of Paksitan	N/A
JSP-Journal of Surgery Pakistan International	1817-0242
KMUJ-Khyber Medical University Journal	2072-7763
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
NUST Journal of Natural Sciences-NJNS	2072-4659
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	0030-9834
Pakistan Journal of Medical and Health Sciences	1996-7195
Pakistan Journal of Medical Ethics	N/A
Pakistan Journal of Medical Sciences	1682-024X
Pakistan Journal of Medicine and Dentistry	2308-2593

Journal	ISSN
Pakistan Journal of Neurological Sciences	1990-6269
Pakistan Journal of Neurology	1990-6269
Pakistan Journal of Obstetrics and Gynaecology	N/A
Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X
Pakistan Journal of Otolaryngology-Head and Neck Surgery	0257-4985
Pakistan Journal of Pathology	1024-6193
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 Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413
Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421
Pakistan Medical Journal	0031-000X
Pakistan Ophthalmology	0259-3661
Pakistan Oral and Dental Journal	1012-8700
Pakistan Pediatric Journal	0304-4904
PJC-Pakistan Journal of Cardiology	1016-1244
PJMR-Pakistan Journal of Medical Research	0030-9842
PJO-Pakistan Journal of Ophthalmology	0886-3067
PJPH-Pakistan Journal of Public Health	2225-0891
PJR-Pakistan Journal of Radiology	1607-2006
PJS-Pakistan Journal of Surgery	0258-8552
POJ-Pakistan Orthodontic Journal	2074-0069
Proceedings-Shaikh Zayed Postgraduate Medical Institute	N/A
Professional Medical Journal-Quarterly [The]	1024-8919
RMJ-Rawal Medical Journal	0303-5212
Palestine (3)	
Al-Quds Medical Journal	N/A
Annals of Alquds Medicine	1815-2635
PMJ-Palestinian Medical Journal	N/A
Qatar (4)	
Gulf Journal of Dermatology and Venereology [The]	N/A
Heart Views	1995-705X
JEMTAC-Journal of Emergency Medicine, Trauma and Acute Care	1999-7086

Journal	ISSN
Qatar Medical Journal	0253-8253
Saudi Arabia (31)	
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	1877-5934
International Journal of Health Sciences	1658-3639
Journal of Epidemiology and Global Health	2210-6006
Journal of Family and Community Medicine	2230-8229
Journal of Health Specialties [JHS]	1658-600X
Journal of Infection and Public Health	1876-0341
Journal of King Abdulaziz University-Medical Sciences	1319-1004
Journal of Taibah University Medical Sciences	1658-3612
Journal of the Saudi Heart Association	1016-7315
MEAJO-Middle East African Journal of Ophthalmology	0974-9233
Neurosciences	1319-6138
Pan Arab Journal of Neurosurgery	1319-6995
Rehabilitation International	N/A
Research Centre Bulletin	1019-5335
Saudi Epidemiology Bulletin	1319-3965
Saudi Heart Journal	1018-077X
Saudi Journal of Disability and Rehabilitation	1319-6499
Saudi Journal of Gastroenterology [The]	1319-3767
Saudi Journal of Medicine and Medical Sciences [SJMMs]	1658-631X
Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	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
SJA-Saudi Journal of Anaesthesia	1658-354X
SJO-Saudi Journal of Ophthalmology	1319-4534
SPJ-Saudi Pharmaceutical Journal	1319-0164
Urology Annals	0974-7796
Sudan (11)	
AJNT-Arab Journal of Nephrology and Transplantation	1858-554X

Journal	ISSN
BIJO-Albasar International Journal of Ophthalmology New	1858-6538
Gezira Journal of Health Sciences	1810-5386
JMJ-Juba Medical Journal	N/A
Khartoum Pharmacy Journal	1816-5168
Omdurman Journal of Pharmaceutical Sciences	N/A
SJPH-Sudanese Journal of Public Health	1990-7567
Sudan Journal of Medical Sciences	1858-5051
Sudan Medical Journal	0491-4481
Sudan Medical Monitor	1858-5000
Sudanese Journal of Dermatology	1815-3941
Syrian Arab Republic (10)	
Arab Journal of Pharmaceutical Sciences	1683-0369
Arabic Journal of Forensic Medicine and Criminal Science	N/A
Arabic Medical Journal	N/A
Damascus University Journal for Health Sciences	2072-2265
JABHS-Journal of the Arab Board of Health Specializations	1561-0217
JISHIM-Journal of the International Society for the History of Islamic Medicine	1303-667X
Journal of Clinical Laboratory [The]	1814-411X
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
Cahiers 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	1737-8958
SST-Sante et Securite au Travail	N/A
Tunisie Medicale [La]	0041-4131
United Arab Emirates (5)	
EMJ-Emirates Medical Journal	0250-6882
Gulf Medical University: Proceedings	2306-6865
HMJ-Hamdan Medical Journal	2227-2437

Journal	ISSN
International Journal of Diabetes and Metabolism	1606-7754
IRCMJ-Iranian Red Crescent Medical Journal	1561-4395
Yemen (8)	
HJMS-Hadramout Journal of Medical Sciences	2224-1806
Journal of Tropical Nephro-Urology	N/A
Sana'a University Journal of Medical Sciences	1993-3584
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
YJMRH-Yemeni Journal of Medical and Health Research	N/A
YMJ-Yemen Medical Journal	N/A

Last update June 2017

Appendix III

**List of EMR Journals Indexed in
IMEMR**

(by title)

S/N	Journal	ISSN
1	AAMJ-AI-Azhar Assiut Medical Journal	1687-1693
2	ABJS-Archives of Bone and Joint Surgery [The]	2345-4644
3	ACES-Actualites Cliniques et Scientifiques	1683-8068
4	Acta Medica Iranica	0044-6025
5	Advances in Cognitive Science	1561-4174
6	Afghan Medical Journal	N/A
7	AFJPH-Afghanistan Journal of Public Health	2308-2895
8	African Journal of Urology	1110-5704
9	Afro-Arab Liver Journal	1687-224X
10	Ain-Shams Journal of Forensic Medicine and Clinical Toxicology	1687-1030
11	Ain-Shams Medical Journal	0002-2144
12	AJAIC-Alexandria Journal of Anaesthesia and Intensive Care	N/A
13	AJM-Alexandria Journal of Medicine	2090-5068
14	AJMB-Avicenna Journal of Medical Biotechnology	2008-2835
15	AJNT-Arab Journal of Nephrology and Transplantation	1858-554X
16	AJU-Arab Journal of Urology	2090-598X
17	Al-Azhar Journal of Dental Science	1110-6751
18	Al-Azhar Medical Journal	1110-0400
19	Alexandria Dental Journal	1110-015X
20	Alexandria Journal of Food Science and Technology	1687-3920
21	Alexandria Journal of Hepatogastroenterology	2090-1879
22	Alexandria Journal of Pediatrics	1687-9945
23	Alexandria Journal of Pharmaceutical Sciences	1110-1792
24	Alexandria Journal of Veterinary Science [AJVS]	1110-2407
25	Alexandria Medical Journal [The]	0516-5849
26	Al-Kindy College Medical Journal	1810-9543
27	Almustansiriya Journal of Pharmaceutical Sciences	1815-0993
28	Al-Quds Medical Journal	N/A
29	Al-Shifa Journal of Ophthalmology	1990-3863
30	Anaesthesia, Pain and Intensive Care	1607-8322
31	Anatomical Sciences Journal [ASJ]	N/A
32	Anesthesiology and Pain Medicine	2228-7523
33	Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241
34	Annals of Alquds Medicine	1815-2635
35	Annals of Jinnah Postgraduate Medical Centre - Karachi	N/A

S/N	Journal	ISSN
36	Annals of King Edward Medical College	1684-6680
37	Annals of Military and Health Sciences Research	2383-1960
38	Annals of Pediatric Surgery	1687-4137
39	Annals of Saudi Medicine	0256-4947
40	Annals of the College of Medicine-Mosul	0028-1446
41	Annals of Thoracic Medicine	1817-1737
42	APMC-Annals of Punjab Medical College	2077-9143
43	Applied Endocrinology in Egypt	1110-1776
44	Applied Food Biotechnology	2345-5357
45	Arab Dental Journal	N/A
46	Arab Family Health and Population	N/A
47	Arab Journal for Food and Nutrition	1608-8352
48	Arab Journal of Biotechnology	1110-6875
49	Arab Journal of Gastroenterology	1687-1979
50	Arab Journal of Laboratory Medicine [The]	1110-1822
51	Arab Journal of Pharmaceutical Sciences	1683-0369
52	Arab Journal of Psychiatry [The]	1016-8923
53	Arabic Journal of Forensic Medicine and Criminal Science	N/A
54	Arabic Medical Journal	N/A
55	Archive of Breast Cancer	2383-0425
56	Archives de l'Institut Pasteur de Tunis	0020-2509
57	Archives of Clinical Infectious Diseases	2641-2345
58	Archives of Iranian Medicine	1029-2977
59	Archives of Medical Laboratory Sciences New	2423-6241
60	Archives of Trauma Research	2251-953X
61	Armaghane-danesh	1728-6506
62	ARYA Atherosclerosis Journal	1735-3955
63	Asia Oceania Journal of Nuclear Medicine and Biology	2322-5718
64	Asian Journal of Sports Medicine	2008-000X
65	ASJOG-Ain-Shams Journal of Obstetrics and Gynecology	1697-2193
66	ASNJ-Alexandria Scientific Nursing Journal	1687-3858
67	Assiut Medical Journal	1110-0494
68	Assiut University Bulletin for Environmental Researches	1110-6107
69	Assiut Veterinary Medical Journal	N/A
70	Audiology	1735-1936

S/N	Journal	ISSN
71	Avicenna Journal of Phytomedicine [AJP]	2228-7930
72	Bahrain Medical Bulletin	1012-8298
73	Bahria Journal of Professional Psychology	1816-0840
74	Baqai Journal of Health Sciences	2313-4423
75	Basic and Clinical Neuroscience	2008-126X
76	Basrah Journal of Surgery	1683-3589
77	BCCR-Basic and Clinical Cancer Research	2228-6527
78	BEAT-Bulletin of Emergency and Trauma	2322-2522
79	Benha Medical Journal	1110-208X
80	BIJO-Albasar International Journal of Ophthalmology New	1858-6538
81	Bina Journal of Ophthalmology	1026-6399
82	Biomedica	1992-4852
83	Bulletin Epidemiologique	0851-8238
84	Bulletin of Alexandria Thoracic Association	1687-997X
85	Bulletin of Endemic Disease-Baghdad	0007-4845
86	Bulletin of Faculty of Pharmacy-Cairo University	1110-0931
87	Bulletin of Faculty of Physical Therapy-Cairo University	1110-6611
88	Bulletin of Nutrition and Food	N/A
89	Bulletin of Pharmaceutical Sciences-Assiut University	1110-0052
90	Bulletin of the Faculty of Science-University of Alexandria	0568-9619
91	Bulletin of the Kuwait Institute for Medical Specialization	N/A
92	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
93	Bulletin of the National Research Centre	1110-0591
94	Bulletin of the Ophthalmological Society of Egypt	0078-5342
95	Cahiers Medicaux de Tunisie	0300-5291
96	Caspian Journal of Neurological Sciences	2383-4307
97	Cell Journal [Yakhteh]	2228-5806
98	Challenge-Quarterly [The]	0528-7944
99	Childhood and Development Quarterly	1110-8681
100	Clinical Diabetes	0891-8929
101	Community Health	2386-3033
102	Community Medicine	0301-7265
103	Damascus University Journal for Health Sciences	2072-2265
104	DARU-Journal of Pharmaceutical Sciences	1560-8115
105	DENA-Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450

S/N	Journal	ISSN
106	Dermatology and Cosmetic Quarterly	2008-7470
107	Diabetes Digest	1369-7501
108	Dirasat	1026-3764
109	DMJ-Derna Medical Journal	N/A
110	DMJ-Dohuk Medical Journal	2071-7326
111	DRJ-Dental Research Journal	1735-3327
112	EBNESINA-Medical Journal of Military Medicine [The]	1735-9503
113	EDJ-Egyptian Dental Journal	0070-9484
114	Egyptian Heart Journal [The]	1110-2608
115	Egyptian Journal of Anatomy [The]	1110-2144
116	Egyptian Journal of Biomedical Engineering	1012-5558
117	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
118	Egyptian Journal of Breastfeeding	N/A
119	Egyptian Journal of Bronchology [The]	1687-8426
120	Egyptian Journal of Cardiothoracic Anesthesia	1687-9090
121	Egyptian Journal of Cataract and Refractive Surgery [The]	N/A
122	Egyptian Journal of Chemistry	0449-2285
123	Egyptian Journal of Chest Diseases and Tuberculosis [The]	0422-7638
124	Egyptian Journal of Community Medicine [The]	1110-1865
125	Egyptian Journal of Dermatology and Andrology	1110-7650
126	Egyptian Journal of Diabetes [The]	N/A
127	Egyptian Journal of Food Science	1110-0192
128	Egyptian Journal of Genetics and Cytology	0046-161X
129	Egyptian Journal of Histology [The]	1110-0559
130	Egyptian Journal of Hospital Medicine [The]	1687-2002
131	Egyptian Journal of Immunology [The]	1110-4902
132	Egyptian Journal of Medical Human Genetics [The]	1110-8630
133	Egyptian Journal of Medical Laboratory Sciences	1110-5593
134	Egyptian Journal of Microbiology	0022-2704
135	Egyptian Journal of Neonatology [The]	1110-8991
136	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
137	Egyptian Journal of Nutrition	1687-1235
138	Egyptian Journal of Nutrition and Health	1687-7950
139	Egyptian Journal of Occupational Medicine	1110-1881
140	Egyptian Journal of Otolaryngology [The]	1012-5574

S/N	Journal	ISSN
141	Egyptian Journal of Paediatrics [The]	1687-1677
142	Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642
143	Egyptian Journal of Pharmaceutical Sciences	0301-5068
144	Egyptian Journal of Physiological Sciences	0301-8660
145	Egyptian Journal of Psychiatry [The]	1110-1105
146	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278
147	Egyptian Journal of Surgery [The]	1110-1121
148	Egyptian Journal of Urology	1110-5712
149	Egyptian Journal of Veterinary Science	1110-0222
150	Egyptian Liver Journal	2090-6218
151	Egyptian Medical Journal of the National Research Center	1687-1278
152	Egyptian Orthodontic Journal	1110-435x
153	Egyptian Orthopaedic Journal [The]	1110-1148
154	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
155	Egyptian Population and Family Planning Review [The]	1110-1156
156	Egyptian Rheumatologist [The]	1110-1164
157	Egyptian Rheumatology and Rehabilitation	1110-161X
158	Egyptian Science Magazine [The]	1687-3815
159	EJB-Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
160	EJENTAS-Egyptian Journal of ENT and Allied Sciences	2090-0740
161	EJMM-Egyptian Journal of Medical Microbiology [The]	1110-2179
162	Emergency	2345-4563
163	EMHJ-Eastern Mediterranean Health Journal	1020-3397
164	EMJ-Emirates Medical Journal	0250-6882
165	Endovascular Journal	2008-1812
166	Environmental Health Engineering and Management Journal	2423-3765
167	Esculapio	2309-3080
168	Feyz-Journal of Kashan University of Medical Sciences	1029-7855
169	Frontiers in Biomedical Technologies	2345-5829
170	FWU Journal of Social Sciences	1995-1272
171	Garyounis Medical Journal	0254-7198
172	Gastroenterology and Hepatology from Bed to Bench	2010-2258
173	Gazette of the Egyptian Paediatric Association [The]	1110-6638
174	Genetics in the 3rd Millennium	2423-7159
175	Gezira Journal of Health Sciences	1810-5386

S/N	Journal	ISSN
176	GJMS-Gomal Journal of Medical Sciences	1819-7973
177	GJO-Gulf Journal of Oncology [The]	2078-2101
178	Govaresh	1560-7186
179	Gulf Journal of Dermatology and Venereology [The]	N/A
180	Gulf Medical University: Proceedings	2306-6865
181	HAKIM Research Journal	1561-252X
182	Hamdard Medicus	0250-7188
183	HAYAT-Journal of Faculty of Nursing and Midwifery [The]	1735-2215
184	Health [The]	2218-3299
185	Health in Emergencies and Disasters Quarterly [HDQ]	N/A
186	Health Information Management	1735-7853
187	Health Services Journal of the Eastern Mediterranean Region	1014-9899
188	Heart Views	1995-705X
189	Hematology, Oncology and Stem Cell Therapy	1658-3876
190	Hepatitis Monthly	1735-143X
191	HJMS-Hadramout Journal of Medical Sciences	2224-1806
192	HMJ-Hamdan Medical Journal	2227-2437
193	Holistic Nursing and Midwifery Journal	New 2251-8460
194	Homa-ye-Salamat	2008-2002
195	Hormozgan Medical Journal	1735-2223
196	Hospital-Journal of Iranian Scientific Hospital Association	2008-1928
197	IAJD-International Arab Journal of Dentistry	2218-0885
198	IBJ-Iranian Biomedical Journal	1028-852X
199	IDEES-Revue de Perfectionnement Medical et Paramedical	N/A
200	IEJ-Iranian Endodontic Journal	1735-7497
201	IHJ-Iranian Heart Journal	1735-7306
202	IJBC-Iranian Journal of Blood and Cancer	2008-4595
203	IJB-Iranian Journal of Biotechnology	1728-3043
204	IJCBNM-International Journal of Community Based Nursing and Midwifery	2322-2476
205	IJCN-Iranian Journal of Child Neurology	1735-4668
206	IJDO-Iranian Journal of Diabetes and Obesity	2008-6792
207	IJEHSR-International Journal of Endorsing Health Science Research	2307-3748
208	IJEM-Iranian Journal of Endocrinology and Metabolism	1683-4844
209	IJFS-International Journal of Fertility and Sterility	2008-076X
210	IJHOSCR-International Journal of Hematology-Oncology and Stem Cell Research	2008-2207

S/N	Journal	ISSN
211	IJHPM-International Journal of Health Policy and Management	N/A
212	IJHS-Iranian Journal of Health Sciences	2322-553X
213	IJI-Iranian Journal of Immunology	1735-1383
214	IJKD-Iranian Journal of Kidney Diseases	1735-8582
215	IJMCM-International Journal of Molecular and Cellular Medicine	2251-9637
216	IJME-Iranian Journal of Medical Education	1608-9359
217	IJM-Iranian Journal of Microbiology	2008-3289
218	IJML-International Journal of Medical Laboratory New	2423-3706
219	IJMS-Iranian Journal of Medical Sciences	0253-0716
220	IJN-Iranian Journal of Neonatology	2251-7510
221	IJOH-International Journal of Occupational Hygiene	2008-5109
222	IJO-Iranian Journal of Orthodontics	1735-5087
223	IJP-International Journal of Pediatrics	2345-5047
224	IJPM-International Journal of Preventive Medicine	2008-7802
225	IJPR-Iranian Journal of Pharmaceutical Research	1735-0328
226	IJRM-International Journal of Reproductive Biomedicine	2476-4108
227	IJVM-Iranian Journal of Veterinary Medicine	2251-8894
228	IMJ-Iraqi Medical Journal	0304-4564
229	Infectious Diseases Journal of Pakistan	1027-0299
230	International Cardiovascular Research Journal	2251-9130
231	International Journal of Diabetes and Metabolism	1606-7754
232	International Journal of Diabetes Mellitus	1877-5934
233	International Journal of Endocrinology and Metabolism	1726-913X
234	International Journal of Environmental Research	1735-6865
235	International Journal of Environmental Science and Technology	1735-1472
236	International Journal of Health Sciences	1658-3639
237	International Journal of High Risk Behaviors and Addiction	2251-8711
238	International Journal of Mycobacteriology	2212-5531
239	International Journal of Occupational and Environmental Medicine	2008-6520
240	International Journal of Organ Transplantation Medicine	2008-6490
241	International Journal of Pathology	1810-0155
242	International Journal of Radiation Research	2322-3243
243	International Journal of Women Empowerment	2413-4252
244	International Journal of Women's Health and Reproduction Sciences	N/A
245	IOJ-Iraqi Orthodontic Journal	1816-0581

S/N	Journal	ISSN
246	IPMJ-Iraqi Postgraduate Medical Journal	1608-8360
247	Iran Journal of Nursing	2008-5923
248	Iran Occupational Health	1735-5133
249	Iranian Journal of Allergy, Asthma and Immunology	1735-1502
250	Iranian Journal of Arthropod-Borne Diseases	1735-7179
251	Iranian Journal of Basic Medical Sciences	2008-3866
252	Iranian Journal of Cancer Prevention	2008-2398
253	Iranian Journal of Dermatology	0021-082X
254	Iranian Journal of Diabetes and Lipid Disorders	1726-7544
255	Iranian Journal of Emergency Medicine	N/A
256	Iranian Journal of Environmental Health Science and Engineering	1735-1979
257	Iranian Journal of Epidemiology	1735-7489
258	Iranian Journal of Health and Environment	2008-2029
259	Iranian Journal of Medical Microbiology	1735-8612
260	Iranian Journal of Medical Physics	1735-160X
261	Iranian Journal of Nuclear Medicine	1681-2824
262	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
263	Iranian Journal of Nursing Research	1735-7012
264	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
265	Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993
266	Iranian Journal of Ophthalmology	1735-4153
267	Iranian Journal of Otorhinolaryngology	1560-1293
268	Iranian Journal of Parasitology	1735-7020
269	Iranian Journal of Pediatrics	2008-2142
270	Iranian Journal of Psychiatric Nursing	2345-2501
271	Iranian Journal of Psychiatry	1735-4587
272	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
273	Iranian Journal of Psychiatry and Clinical Psychology [ANDEESHEH VA RAFTAR]	1735-4315
274	Iranian Journal of Public Health	0304-4556
275	Iranian Journal of Radiology	1735-1065
276	Iranian Journal of Veterinary Research	1728-1997
277	Iranian Rehabilitation Journal	1735-3602
278	Iraqi Army Medical Journal	N/A
279	Iraqi Journal of Agriculture	1818-6645
280	Iraqi Journal of Biotechnology	N/A

S/N	Journal	ISSN
281	Iraqi Journal of Community Medicine	1684-5382
282	Iraqi Journal of Medical Sciences	1681-6579
283	Iraqi Journal of Microbiology	N/A
284	Iraqi Journal of Pharmaceutical Sciences	1683-3597
285	Iraqi Journal of Tropical Disease Researches	1814-0823
286	Iraqi New Medical Journal	2409-5931
287	IRCMJ-Iranian Red Crescent Medical Journal	1561-4395
288	IRJNS - Iranian Journal of Neurosurgery New	2423-6497
289	ISESCO Journal of Science and Technology	2028-8077
290	Isra Medical Journal	2073-8285
291	JABHS-Journal of the Arab Board of Health Specializations	1561-0217
292	JAMC-Journal of Ayub Medical College-Abbotabad-Pakistan	1025-9589
293	JBMS-Journal of the Bahrain Medical Society	1015-6321
294	JBUMS-Journal of Babol University of Medical Sciences	1561-4107
295	JCPSP-Journal of the College of Physicians and Surgeons Pakistan	1022-386X
296	JCR-Journal of Craniomaxillofacial Research	5489-2345
297	JCVTR-Journal of Cardiovascular and Thoracic Research	2008-5117
298	JDB-Journal of Dental Biomaterials	2383-3971
299	JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
300	JDUHS-Journal of the Dow University of Health Sciences	1995-2198
301	JEHSD-Journal of Environmental Health and Sustainable Development New	2426-6267
302	JEMTAC-Journal of Emergency Medicine, Trauma and Acute Care	1999-7086
303	JESN-Journal of Egyptian Society of Nephrology [The]	N/A
304	JFH-Journal of Fasting and Health	N/A
305	JIIMC-Journal of Islamic International Medical College [The]	1815-4018
306	JIMDC-Journal of Islamabad Medical and Dental College	2227-3875
307	JISHIM-Journal of the International Society for the History of Islamic Medicine	1303-667X
308	JKCD-Journal of Khyber College of Dentistry	2220-2633
309	JLDA-Journal of the Lebanese Dental Association	1810-9632
310	JLUMHS-Journal of the Liaquat University of Medical Health Sciences	1729-0341
311	JMB-Journal of Medical Bacteriology	2251-8649
312	JMJ-Jamahiriya Medical Journal	2079-1216
313	JMJ-Juba Medical Journal	N/A
314	JMRH-Journal of Midwifery and Reproductive Health	N/A
315	JMR-Journal of Medical Research	1728-1962

S/N	Journal	ISSN
316	JNE-Journal of Nursing Education	3812-2322
317	JNMS-Journal of Nursing and Midwifery Sciences	2345-5756
318	JNP-Journal of Nephropathology	2251-8363
319	JOPDAK-Journal of the Pakistan Dental Association Karachi	1680-2292
320	Jordan Journal of Pharmaceutical Sciences	1995-7157
321	Jordan Medical Journal	0446-9283
322	Journal du Practicien	1113-5667
323	Journal of Advanced Research	2090-1232
324	Journal of Advances in Medical Education and Professionalism	2322-2220
325	Journal of Anesthesiology and Pain	2228-6659
326	Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
327	Journal of Baghdad College of Dentistry	1680-0057
328	Journal of Basic and Applied Sciences	1814-8085
329	Journal of Basic Medical Sciences	N/A
330	Journal of Birjand University of Medical Sciences	N/A
331	Journal of Cardio-Thoracic Medicine	2345-2447
332	Journal of Childhood Studies	2090-0619
333	Journal of Client-Centered Nursing Care	N/A
334	Journal of Clinical Excellence	2322-391X
335	Journal of Clinical Laboratory [The]	1814-411X
336	Journal of Community Medicine	N/A
337	Journal of Contemporary Medical Sciences	2415-1629
338	Journal of Dental Materials and Techniques	2322-4150
339	Journal of Dental Medicine-Tehran University of Medical Sciences	1024-641X
340	Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X
341	Journal of Dental School-Shahid Beheshti University of Medical Sciences	1735-7683
342	Journal of Dentistry-Shiraz University of Medical Sciences	1728-3426
343	Journal of Dohuk University	1812-7568
344	Journal of Drug Research of Egypt	0085-2406
345	Journal of Environmental Studies	1025-8620
346	Journal of Epidemiology and Global Health	2210-6006
347	Journal of Family and Community Medicine	2230-8229
348	Journal of Family and Reproductive Health	1735-8949
349	Journal of Fundamentals of Mental Health [The]	1028-6918
350	Journal of Gorgan University of Medical Sciences	1562-4765

S/N	Journal	ISSN
351	Journal of Guilan University of Medical Sciences	2008-4048
352	Journal of Health Administration	2008-1200
353	Journal of Health and Safety at Work	2251-807X
354	Journal of Health Management and Informatics [JHMI]	2322-1097
355	Journal of Health Promotion Management [JHPM]	2251-8614
356	Journal of Health Sciences and Surveillance System	2345-2218
357	Journal of Health Scope	2251-8959
358	Journal of Health Specialties [JHS]	1658-600X
359	Journal of Health-Based Research New	2423-7639
360	Journal of Hearing Sciences and Otolaryngology	N/A
361	Journal of Hepatology, Gastroenterology and Infectious Diseases	1110-0796
362	Journal of High Institute of Public Health [The]	2357-0601
363	Journal of Hygiene and Health	1735-2363
364	Journal of Infection and Public Health	1876-0341
365	Journal of Injury and Violence Research	2008-2053
366	Journal of Isfahan Dental School	1735-255X
367	Journal of Isfahan Medical School	1027-7595
368	Journal of Islamic Dental Association of Iran [The]-JIDA	1024-6428
369	Journal of Jahrom University of Medical Sciences	2008-7993
370	Journal of Karbala University	1813-0410
371	Journal of Kerman University of Medical Sciences	1023-9510
372	Journal of Kermanshah University of Medical Sciences [KUMS]	2251-9068
373	Journal of King Abdulaziz University-Medical Sciences	1319-1004
374	Journal of Lasers in Medical Sciences	2008-9783
375	Journal of Legal Medicine and Forensic Sciences [The]	1110-6468
376	Journal of Mashhad Dental School	1560-9286
377	Journal of Mazandaran University of Medical Sciences	1735-9260
378	Journal of Medical Council of Islamic Republic of Iran	1562-1073
379	Journal of Medical Education	1735-3998
380	Journal of Medical Sciences	1997-3438
381	Journal of Medical Sciences	1682-4474
382	Journal of Medical Students	N/A
383	Journal of Medicinal Plants	1684-0240
384	Journal of Minimally Invasive Surgical Sciences	2251-7022
385	Journal of Modern Medical Information Science	N/A

S/N	Journal	ISSN
386	Journal of Modern Rehabilitation	2008-2576
387	Journal of Nephrology Urology and Transplantation	1606-9331
388	Journal of Neyshabur University of Medical Sciences	2383-3203
389	Journal of Nursing and Midwifery Quarterly-Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
390	Journal of Ophthalmic and Vision Research	2008-2010
391	Journal of Paramedical Sciences New	2008-496X
392	Journal of Paramedical Sciences and Rehabilitation	2322-5238
393	Journal of Patient Safety and Quality Improvement	2345-4482
394	Journal of Periodontology and Implant Dentistry	2008-7748
395	Journal of Practice in Clinical Psychology	2423-5822
396	Journal of Preventive Medicine	N/A
397	Journal of Qazvin University of Medical Sciences [The]	1561-3666
398	Journal of Rafsanjan University of Medical Sciences	1735-3165
399	Journal of Rehabilitation	1607-2960
400	Journal of Rehabilitation Sciences and Research [JRSR]	2345-6167
401	Journal of Reproduction and Infertility	2228-5482
402	Journal of Research in Behavioural Sciences	1735-2029
403	Journal of Research in Dental Sciences	2008-4676
404	Journal of Research in Health Sciences [JRHS]	2228-7795
405	Journal of Research in Medical Sciences	1735-5311
406	Journal of Research on History of Medicine [The]	N/A
407	Journal of Sabzevar University of Medical Sciences	1606-7487
408	Journal of Safety Promotion and Injury Prevention	2345-2455
409	Journal of School of Public Health and Institute of Public Health Research	1735-7586
410	Journal of Screening and Geographical Medicine	1735-7594
411	Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
412	Journal of Shahrekord University of Medical Sciences	1735-1448
413	Journal of Sheikh Zayed Medical College [JSZMC]	2078-8274
414	Journal of Student Research Committee [BEYHAGH]	2008-0328
415	Journal of Surgery [The]	1681-4517
416	Journal of Taibah University Medical Sciences	1658-3612
417	Journal of Tehran University Heart Center [The]	1735-8620
418	Journal of the Arab Board of Medical Specializations	1561-0217
419	Journal of the Arab Dentist	N/A

S/N	Journal	ISSN
420	Journal of the Arab Neonatology Forum	1812-1756
421	Journal of the Arab Society for Medical Research	1687-4293
422	Journal of the Egyptian Medical Association [The]	0013-2411
423	Journal of the Egyptian National Cancer Institute	1110-0362
424	Journal of the Egyptian Public Health Association [The]	0013-2446
425	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245
426	Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216
427	Journal of the Egyptian Society of Parasitology	1110-0583
428	Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A
429	Journal of the Egyptian Society of Toxicology	1110-127X
430	Journal of the Faculty of Medicine-Baghdad	0041-9419
431	Journal of the Medical Research Institute-Alexandria University	1110-0133
432	Journal of the Pakistan Prosthodontics Association [JPPA]	2308-8613
433	Journal of the Royal Medical Services	2078-8703
434	Journal of the Saudi Heart Association	1016-7315
435	Journal of Tropical Nephro-Urology	N/A
436	Journal of Veterinary Research	2008-2525
437	Journal of Zahedan University of Medical Sciences and Health Services	1735-076X
438	Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
439	JPAD-Journal of Pakistan Association of Dermatologists	1560-9014
440	JPC-Journal of Pediatric Club [The]	N/A
441	JPC-Journal of Pharmaceutical Care	2322-4630
442	JPDA-Journal of the Pakistan Dental Association	1680-2292
443	JPIMS-Journal of Pakistan Institute of Medical Sciences	1683-6928
444	JPMA-Journal of Pakistan Medical Association	0030-9982
445	JPMI-Journal of Postgraduate Medical Institute	1013-5472
446	JPN-Journal of Pediatric Nephrology	N/A
447	JPPS-Journal of Pakistan Psychiatric Society	1726-8710
448	JRH-Journal of Research and Health	2251-6395
449	JRMS-Journal of Research in Medical Sciences	1735-1995
450	JRRS-Journal of Research in Rehabilitation Sciences	1735-7519
451	JSOGP-Journal of the Society of Obstetricians and Gynaecologists of Paksitan	N/A
452	JSP-Journal of Surgery Pakistan International	1817-0242
453	Jundishapur Journal of Microbiology [JJM]	2008-3645

S/N	Journal	ISSN
454	Jundishapur Journal of Natural Pharmaceutical Products	1735-7780
455	Jundishapur Scientific Medical Journal	2252-052x
456	Kasr El Aini Journal of Surgery	0022-9237
457	Kasr El-Aini Medical Journal	N/A
458	Khartoum Pharmacy Journal	1816-5168
459	Kidney Forum	1369-3050
460	KMJ-Kuwait Medical Journal	0023-5776
461	KMUJ-Khyber Medical University Journal	2072-7763
462	KOOMESH-Journal of Semnan University of Medical Sciences	1608-7046
463	Kufa Medical Journal	N/A
464	Lahore Journal of Public Health	N/A
465	Lebanese Science Journal	1561-3410
466	Libyan Journal of Infectious Diseases [The]	N/A
467	LJM-Libyan Journal of Medicine	1993-2820
468	LMJ-Lebanese Medical Journal	0023-9852
469	Maghreb Medical	0330-258X
470	Mansoura Journal of Pharmaceutical Sciences	1110-1318
471	Mansoura Medical Bulletin	1012-5590
472	Mansoura Medical Journal	1110-211X
473	Maroc Medical	0253-4053
474	MDV-Molecular Diagnosis and Vaccine	1687-2010
475	MEAJO-Middle East African Journal of Ophthalmology	0974-9233
476	Medical Arabization	N/A
477	Medical Channel	1681-5491
478	Medical Forum Monthly	1029-385X
479	Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A
480	Medical Journal of Basrah University [The]	0253-0759
481	Medical Journal of Cairo University [The]	0045-3803
482	Medical Journal of Islamic World Academy of Sciences	1016-3360
483	Medical Journal of Mashad University of Medical Sciences	1735-4013
484	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
485	Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039
486	Medical Journal of the Islamic Republic of Iran	1016-1430
487	Medical Journal of Tikrit University [The]	N/A
488	Medical Laboratory Journal	1735-9007

S/N	Journal	ISSN
489	Medical Principles and Practice	1011-7571
490	Medical Sciences Journal of Islamic Azad University	1023-5922
491	Medical Spectrum [The]	0254-8534
492	Medical-Surgical Nursing Journal	2322-178X
493	Medicine Today	1813-9876
494	MEJC-Middle East Journal of Cancer	2008-6709
495	Middle East Journal of Anesthesiology	0544-0440
496	Middle East Journal of Digestive Diseases	2008-5230
497	Middle East Journal of Family Medicine	N/A
498	Minoufia Medical Journal	1110-2098
499	MJEM- Mediterranean Journal of Emergency Medicine	2222-9442
500	MJFCT-Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437
501	Modares Journal of Medical Sciences, Pathobiology	1562-9554
502	Mother and Child	0379-2617
503	Nanomedicine Journal	2322-3049
504	Neonatology	1687-0492
505	Nephro-Urology Monthly	2251-7006
506	Neurosciences	1319-6138
507	New Egyptian Journal of Medicine [The]	1110-1946
508	New Iraqi Journal of Medicine [The]	1817-5562
509	Novelty in Biomedicine	2345-3346
510	Nursing and Midwifery Research	1753-5001
511	Nursing Practice Today	2383-1154
512	NUST Journal of Natural Sciences-NJNS	2072-4659
513	Nutrition and Food Sciences Research	2383-0441
514	Ofogh-E-Danesh	1735-1855
515	Oman Journal of Ophthalmology	0974-620X
516	Oman Medical Journal	1999-768X
517	Omdurman Journal of Pharmaceutical Sciences	N/A
518	PAFMJ-Pakistan Armed Forces Medical Journal	0030-9648
519	Pakistan Heart Journal	0048-2706
520	Pakistan Journal of Biochemistry	0300-8185
521	Pakistan Journal of Chest Medicine	N/A
522	Pakistan Journal of Clinical Psychology	1019-438X
523	Pakistan Journal of Community Medicine [The]	N/A

S/N	Journal	ISSN
524	Pakistan Journal of Health	0030-9834
525	Pakistan Journal of Medical and Health Sciences	1996-7195
526	Pakistan Journal of Medical Ethics	N/A
527	Pakistan Journal of Medical Sciences	1682-024X
528	Pakistan Journal of Medicine and Dentistry	2308-2593
529	Pakistan Journal of Neurological Sciences	1990-6269
530	Pakistan Journal of Neurology	1990-6269
531	Pakistan Journal of Obstetrics and Gynaecology	N/A
532	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X
533	Pakistan Journal of Otolaryngology-Head and Neck Surgery	0257-4985
534	Pakistan Journal of Pathology	1024-6193
535	Pakistan Journal of Pharmaceutical Sciences	1011-601X
536	Pakistan Journal of Pharmacology	0255-7088
537	Pakistan Journal of Physiology	1819-270X
538	Pakistan Journal of Psychology	0030-9869
539	Pakistan Journal of Scientific and Industrial Research	0030-9885
540	Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413
541	Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421
542	Pakistan Medical Journal	0031-000X
543	Pakistan Ophthalmology	0259-3661
544	Pakistan Oral and Dental Journal	1012-8700
545	Pakistan Pediatric Journal	0304-4904
546	Pan Arab Journal of Neurosurgery	1319-6995
547	Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
548	Pan Arab Medical Journal	N/A
549	Payavard-Salamat	1735-8132
550	Payesh-Health Monitor	1680-7626
551	Pejouhandeh: Bimonthly Research Journal	1735-1022
552	Physical Treatments: Specific Physical Therapy Journal	2423-5830
553	PJC-Pakistan Journal of Cardiology	1016-1244
554	PJMR-Pakistan Journal of Medical Research	0030-9842
555	PJO-Pakistan Journal of Ophthalmology	0886-3067
556	PJPH-Pakistan Journal of Public Health	2225-0891
557	PJR-Pakistan Journal of Radiology	1607-2006
558	PJS-Pakistan Journal of Surgery	0258-8552

S/N	Journal	ISSN
559	PMJ-Palestinian Medical Journal	N/A
560	POJ-Pakistan Orthodontic Journal	2074-0069
561	Population Bulletin of ESCWA	0258-1914
562	Population Researches and Studies	0255-898X
563	Population Sciences	N/A
564	Population Studies	1110-1342
565	Proceedings-Shaikh Zayed Postgraduate Medical Institute	N/A
566	Professional Medical Journal-Quarterly [The]	1024-8919
567	PUJ-Parasitologists United Journal	1687-7942
568	Qatar Medical Journal	0253-8253
569	Qom University of Medical Sciences Journal	1735-7799
570	Quarterly Journal of Medical Ethics	2008-4374
571	Quarterly Journal of Medical Law	N/A
572	Quarterly Scientific Journal of Relief and Rescue	2008-4544
573	Razi Journal of Medical Sciences	2228-7043
574	Rehabilitation International	N/A
575	Reports of Radiotherapy and Oncology	2345-3192
576	Research Centre Bulletin	1019-5335
577	Research in Cardiovascular Medicine	2251-9572
578	Research Journal of Aleppo University-Medical Sciences Series	N/A
579	Reviews in Clinical Medicine [RCM]	2345-6256
580	Revue Maghrebine de Pediatrie [La]	0330-7611
581	Revue Maghrebine d'Endocrinologie-Diabete et de Reproduction [La]	N/A
582	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
583	Revue Marocaine de Medecine et Sante	0251-0758
584	Revue Marocaine des Maladies de L'Enfant	N/A
585	Revue Tunisienne d'Infectiologie	1737-8958
586	Risafa Medical Journal	N/A
587	RMJ-Rawal Medical Journal	0303-5212
588	RMM-Research in Molecular Medicine	2322-1348
589	Sadra Medical Sciences Journal	N/A
590	Salmand-Iranian Journal of Aging	1735-806X
591	Sana'a University Journal of Medical Sciences	1993-3584
592	Saudi Epidemiology Bulletin	1319-3965
593	Saudi Heart Journal	1018-077X

S/N	Journal	ISSN
594	Saudi Journal of Disability and Rehabilitation	1319-6499
595	Saudi Journal of Gastroenterology [The]	1319-3767
596	Saudi Journal of Medicine and Medical Sciences [SJMMs]	1658-631X
597	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491
598	Saudi Journal of Sports Medicine [The]	1319-6308
599	Saudi Medical Journal	0379-5284
600	Scientific and Research Journal of Army University of Medical Sciences-JAUMS	1727-1789
601	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381
602	Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
603	Scientific Journal of Forensic Medicine	1027-1457
604	Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520
605	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
606	Scientific Medical Journal	1110-5607
607	Scientific Nursing Journal	1812-2388
608	SDJ-Saudi Dental Journal [The]	1013-9052
609	SGH Medical Journal	1658-2489
610	Shenakht Journal of Psychology and Psychiatry	N/A
611	SJA-Saudi Journal of Anaesthesia	1658-354X
612	SJO-Saudi Journal of Ophthalmology	1319-4534
613	SJPH-Sudanese Journal of Public Health	1990-7567
614	Smile Dental Journal	2072-473X
615	Social Determinants of Health	2423-3560
616	Social Welfare Quarterly	1735-8191
617	Sohag Medical Journal	1110-7529
618	South Valley Medical Journal	1110-7529
619	SPJ-Saudi Pharmaceutical Journal	1319-0164
620	SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
621	SST-Sante et Securite au Travail	N/A
622	Strides in Development of Medical Education	1735-4242
623	Sudan Journal of Medical Sciences	1858-5051
624	Sudan Medical Journal	0491-4481
625	Sudan Medical Monitor	1858-5000
626	Sudanese Journal of Dermatology	1815-3941
627	Suez Canal University Medical Journal	1110-6999
628	Tabib Attifil Alarabi	N/A

S/N	Journal	ISSN
629	Tanaffos	1735-0344
630	Tanta Medical Journal	1110-1415
631	Tanta Medical Sciences Journal	1687-5788
632	Teb Va Tazkie	1608-2397
633	Tehran University Medical Journal [TUMJ]	1683-1764
634	Thrita Student Journal of Medical Sciences	2251-8312
635	TIPS-Trends in Pharmaceutical Sciences	2423-3722
636	Toloo-e-Behdasht	1728-5127
637	Trauma Monthly	2251-7464
638	Tunisie Medicale [La]	0041-4131
639	University of Aden Journal of Natural and Applied Sciences	1606-8947
640	Urology Annals	0974-7796
641	Urology Journal	1735-1308
642	Veterinary Medical Journal	1110-1423
643	Weekly Epidemiology Monitor	2224-4220
644	WJPS-World Journal of Plastic Surgery	2228-7914
645	Yafteh Journal	1563-0773
646	Yemeni Journal for Medical Sciences [The]	N/A
647	YHMRJ-Yemeni Health and Medical Research Journal	N/A
648	YJMRH-Yemeni Journal of Medical and Health Research	N/A
649	YMJ-Yemen Medical Journal	N/A
650	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
651	Zagazig Journal of Pharmaceutical Sciences	1110-5089
652	Zagazig Medical Association Journal	1110-2322
653	Zagazig University Medical Journal	1110-1431
654	Zahedan Journal of Research in Medical Sciences	N/A
655	Zanco Journal of Medical Sciences	1995-5588

Last update June 2017

For further information contact:

World Health Organization
Regional Office for the Eastern Mediterranean
Knowledge Sharing and Production (KSP)
Index Medicus for the Eastern Mediterranean Region (IMEMR)
Monazamet El Seha El Alamia Street
Extension of Abdel Razak El Sanhoury Street
P.O. Box 7608, Nasr City
Cairo 11371, Egypt
Operator: +20 2 22765000
Central Fax: +20 2 23492092-75
e-mail: emrgoimemr@who.int