

Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



IMEMR Current Contents

March 2016

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Table of Contents

IMEMR Current Contents.....	vii
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Subject Index.....	ix
--------------------	----

Abortion, Spontaneous	1
Activins.....	1
Acute Coronary Syndrome	2
Adrenalectomy	2
Agammaglobulinemia	2
Age Determination by Teeth.....	3
Aluminum	3
Ameloblastoma	4
Anemia, Pernicious.....	4
Angiomyolipoma	5
Ankylosis.....	5
Antibodies, Antinuclear.....	5
Antibodies, Monoclonal	6
Anxiety.....	6
Arrhythmias, Cardiac.....	7
Arteriosclerosis.....	7
Arthritis, Psoriatic.....	7
Aryldialkylphosphatase.....	8
Ascorbic Acid.....	8
Asthma.....	9
Attention Deficit Disorder with Hyperactivity	9
Benzamides.....	10
Berberine Alkaloids	11
beta-Thalassemia.....	11
Bile Ducts	11
bImmunoglobulin A.....	12
Biomass.....	12
Blood Platelets.....	12
Bone Marrow Examination	13
Bone Remodeling.....	13
Boraginaceae	14
Bruxism	14
Carcinoma, Renal Cell.....	14
Carcinoma, Squamous Cell.....	15
Cardiac Catheterization	16
Cathepsins.....	16
Choledochal Cyst	16
Cholelithiasis.....	17
Chromosomes, Human, Pair 14.....	17
Cogan Syndrome.....	17
Congenital Abnormalities.....	18
Constipation.....	18
Corneal Ulcer	19

Coronary Angiography.....	19
Coronary Artery Bypass.....	20
Coronary Thrombosis.....	20
Cystadenoma, Serous.....	21
Cystitis, Interstitial.....	21
Dendritic Cells.....	21
Dental Care for Chronically Ill.....	22
Dental Caries.....	22
Dental Cavity Lining.....	23
Dental Enamel Hypoplasia.....	23
Dental Implants.....	24
Dental Impression Technique.....	24
Dental Marginal Adaptation.....	24
Dental Models.....	25
Dental Pulp Cavity.....	25
Dental Restoration Failure.....	25
Denture, Overlay.....	26
Diabetes, Gestational.....	26
Diabetic Retinopathy.....	26
Diazinon.....	27
Digital Dermatitis.....	27
Dilatation, Pathologic.....	28
Domestic Violence.....	28
Ductus Arteriosus, Patent.....	29
Echocardiography.....	29
Edema.....	30
Education, Dental.....	30
Education, Medical.....	30
Education, Medical, Undergraduate.....	31
Educational Status.....	31
Electrocardiography.....	32
Embolism.....	32
Embolization, Therapeutic.....	33
Embryo Transfer.....	33
Endometriosis6bcomplications.....	33
Energy Intake.....	34
Epidermodysplasia Verruciformis.....	34
Esophageal Neoplasms.....	34
Exercise.....	35
Fatty Acids.....	35
Femoral Neoplasms.....	36
Fontan Procedure.....	36
Food Microbiology.....	36
Gallstones.....	37
Gamma Rays.....	37
Genital Neoplasms, Female.....	38
Gestational Age.....	38
Glycoproteins.....	39
Glycyrrhiza.....	39
Hair.....	39
Health Promotion.....	39

Hearing Loss, Noise-Induced	40
Heart Failure	40
Heart Septal Defects, Ventricular.....	41
Heart-Assist Devices	41
Hematoma, Epidural, Spinal.....	41
Hematuria	42
Hepatic Encephalopathy.....	42
Hepatitis C.....	42
Hepatitis C, Chronic	43
Hernia, Inguinal	44
Histocompatibility Antigens Class II	44
Hospitals	44
Houseflies	45
Humanities.....	45
Hyperkeratosis, Epidermolytic	45
Hypopigmentation.....	46
Immunophenotyping.....	46
In Vitro Oocyte Maturation Techniques	46
Induced Pluripotent Stem Cells.....	47
Influenza A Virus, H1N1 Subtype	47
Insulin Resistance	47
Interferon-alpha	48
Interleukin-11	48
Interleukin-17	49
Intubation, Intratracheal	49
Islet Amyloid Polypeptide	49
Keratosis, Seborrheic.....	50
Ketoconazole	50
Kidney Transplantation	51
Lactoferrin.....	51
Leadership.....	51
Leishmaniasis, Cutaneous	52
Lip.....	52
Lipoid Proteinosis of Urbach and Wiethe	52
Lupus Erythematosus, Systemic.....	53
Malocclusion, Angle Class II	53
Mandibular Condyle	53
Mandibular Fractures	54
Maxillofacial Injuries	55
Medicine, Unani.....	55
Melatonin	56
Mitral Valve	56
Mitral Valve Prolapse	57
Molar.....	57
Mouth Neoplasms	57
Mouthwashes	58
Myelodysplastic Syndromes.....	59
Myiasis	59
Myocardial Infarction	59
Nalbuphine	60
Nephrectomy.....	60

Neuroendocrine Tumors	61
Nevus, Sebaceous of Jadassohn	61
Obesity	61
Obsessive-Compulsive Disorder	62
Obstetric Labor, Premature	62
Oligospermia.....	63
Oral Health.....	63
Oral Submucous Fibrosis	63
Orthotic Devices	64
Ovarian Failure, Premature	64
Ovarian Follicle	65
Ovary.....	65
Palate	65
Papillon-Lefevre Disease	66
Patient Readmission	66
Patient Satisfaction.....	66
Peer Group.....	67
Penaeidae	67
Percutaneous Coronary Intervention.....	68
Peritoneal Dialysis, Continuous Ambulatory	68
Phenylketonurias	69
Phytotherapy	69
Pistacia	69
Pituitary Neoplasms	70
Plants, Medicinal	70
Pneumoconiosis.....	70
Polyps.....	71
Postoperative Nausea and Vomiting.....	71
Postpartum Hemorrhage.....	72
PPAR gamma.....	72
Prebiotics	72
Pregnadienediols	73
Pregnancy Complications	73
Pregnancy Rate	74
Prostatectomy	74
Prosthesis-Related Infections.....	75
Psoriasis	76
Psychotic Disorders	76
Pulpotomy	76
Real-Time Polymerase Chain Reaction	77
Receptors, Androgen.....	77
Renal Colic	78
Resistance Training.....	78
Respiratory Tract Infections	79
Retroperitoneal Space.....	79
Root Canal Irrigants	79
Rotator Cuff	80
Salmonella	80
Scilla	81
Sepsis	81
Septins	81

Sex Chromosome Aberrations.....	82
Sexual Dysfunction, Physiological	82
Silver	83
Sperm Injections, Intracytoplasmic.....	83
Spinal Cord Injuries.....	84
Spinal Neoplasms	84
Suicide, Attempted.....	85
Sunscreening Agents	85
Surgical Sponges	85
Synbiotics.....	86
Syringoma	86
Temporomandibular Joint Disorders	86
Temporomandibular Joint Dysfunction Syndrome.....	87
Tetralogy of Fallot.....	87
Tooth Fractures.....	88
Tooth Loss	88
Tooth Root	89
Tooth, Impacted	89
Tranexamic Acid	89
Tuberculosis, Female Genital	90
Tuberculosis, Urogenital.....	90
Ubiquinone	91
Umbilicus	91
Urinary Bladder Neoplasms	92
Urinary Tract Infections.....	92
Urticaria	93
Uterine Cervical Neoplasms	93
Uterine Hemorrhage.....	93
Vasculitis, Leukocytoclastic, Cutaneous.....	94
Venous Thrombosis	94
Ventricular Septal Rupture	95
Vibration	95
Vitiligo.....	96
Warts.....	96
Water-Electrolyte Imbalance	96
Wounds and Injuries.....	97
Wrist Injuries	97
Xanthophylls.....	98
Yersinia Infections	98
Zinc.....	99
Zirconium.....	99
Appendix I: Author Index.....	101
Appendix II: List of EMR Journals Indexed in IMEMR (by country).....	125
Appendix III: List of EMR Journals Indexed in MEMR (by title).....	145

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>

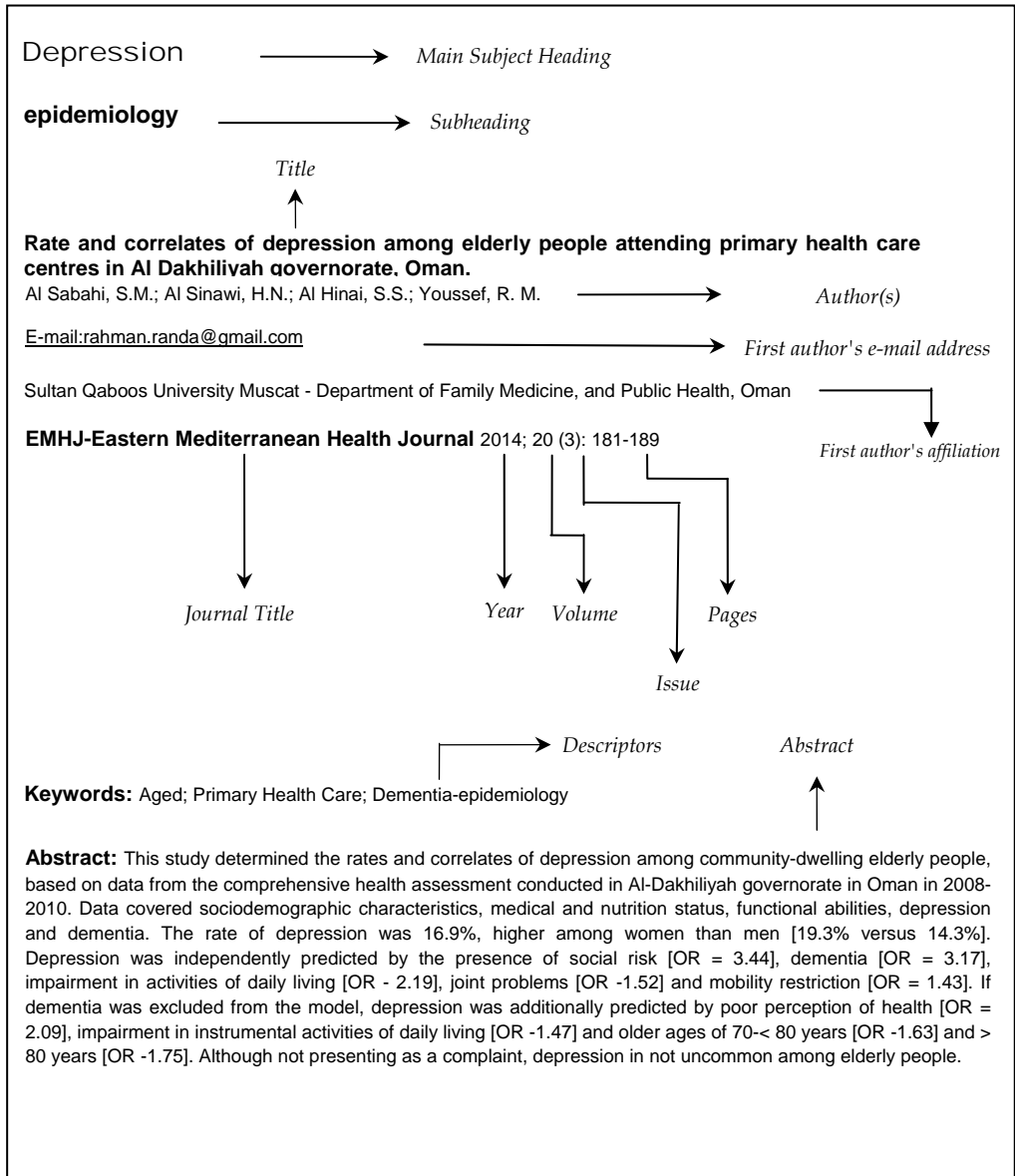


Figure (1): Sample of IMEMR citation

Subject Index

Abortion, Spontaneous

The effect of HLA-DRB1 sharing between the couples with recurrent pregnancy loss on the pregnancy outcome after leukocyte therapy.

Ghaheri Fard, Behrouz; Askarinejad Behbahani, Rahil; Behdin, Shabnam

E-mail:gharesifb@sums.ac.ir

Shiraz University of Medical Sciences - School of Medicine - Department of Immunology

IJ-Iranian Journal of Immunology 2014; 11 (1): 13-20

Keywords: HLA Antigens-immunology; Histocompatibility Testing; Pregnancy Outcome; Leukocytes, Mononuclear-immunology; Family Characteristics; Alleles; Genotype

Abstract: Miscarriage is a common phenomenon complicating more than half of pregnancies. Recurrent Pregnancy Loss [RPL] is defined as three or more pregnancies lost before the twentieth week of gestation. It is believed that abnormality in maternal immune reaction to fetus and sharing of HLA antigens might be associated with RPL. To investigate the effect of HLA-DRB1 sharing between the couples with recurrent pregnancy loss on the pregnancy outcome after leukocyte therapy. Sixty primary RPL women who were immunized and followed after therapy [30 successful and 30 unsuccessful] and their husbands formed the cases of this study. In addition, one hundred healthy women were considered as the controls. HLA-DRB1 genotypes of all the cases and controls were checked by PCR-SSP method. HLA typing indicated that the prevalence of HLA-DRB1 sharing [defined as at least one allele sharing] between the couples with unsuccessful outcomes was significantly higher compared to those with successful outcomes [63.3% vs. 23.3%, $p < 0.004$]. Moreover, HLA DRB1*07:01 allelic group was significantly more frequent in the patients with unsuccessful outcome compared to the controls [18.3% vs. 8%, $p < 0.04$]. Our results confirmed the role of HLA sharing in RPL and revealed that HLA-DRB1 typing may be a valuable prognostic factor for the leukocyte therapy outcome.

immunology

Variations in T-helper 17 and regulatory T cells during the menstrual cycle in peripheral blood of women with recurrent spontaneous abortion.

Sereshki, Nasrin; Gharagozloo, Marjan; Ostadi, Vajihe; Ghahiri, Ataollah; Roghaei, Mohammad Ali; Mehrabian, Ferdos; Andalib, Alireza; Hassanzadeh, M. Akbar; Hosseini, Habibolla; Rezaei, Abbas

Isfahan University of Medical Sciences - School of Medicine - Department of Immunology

IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 59-66

Keywords: T-Lymphocytes, Regulatory-metabolism; Transforming Growth Factors; T-Lymphocytes, Helper-Inducer-metabolism; T-Lymphocytes, Helper-Inducer-pathology; T-Lymphocytes, Regulatory-pathology; Interleukin-17; Menstrual Cycle-immunology; Case-Control Studies

Abstract: Disorders in immune system regulation may result in pregnancy abnormalities such as recurrent spontaneous abortion [RSA]. This study aims to determine the ratio of regulatory T [Treg] and T helper [Th] 17 cells in unexplained RSA [URSA] women during proliferative and secretory phases of their menstrual cycles compared to healthy non-pregnant women. In this case control study, 25 women with URSA and 35 healthy, non-pregnant women were enrolled. The percentage of Th17 and Treg cells in participants peripheral blood were determined by flow cytometry. The percentage of Th17 cells and their related cytokines in serum [IL-17A] were higher in the proliferative and secretory phases of the menstrual cycles of URSA women compared to the control women. However, a lower percentage of Treg cells and their related cytokines in serum, transforming growth factor [TGF] beta1 and interleukin [IL]-10 were detected in the proliferative but not the secretory phase of the URSA group. The ratio of Th17/CD4+ Treg was higher in the URSA group than the control group. We observed an increased ratio of Th17/CD4+ Treg during the proliferative and secretory phases in URSA women. The imbalance between Th17 and Treg cells during the proliferative phase of menstrual cycles in the URSA group may be considered a cause for spontaneous abortion.

Activins

Serum activin A levels and tubal ectopic pregnancy.

Junior, Julio Elito; Oliveira, Leandro Gustavo; Silva, Marcelo Octavio Fernandes; Junior, Edward Araujo; Camano, Luiz Federal University of Sao Paulo - Department of Obstetrics

IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 227-228

Keywords: Pregnancy, Ectopic-diagnosis; Early Diagnosis; Biological Markers; Abortion, Spontaneous-metabolism; Crown-Rump Length; Sensitivity and Specificity; Enzyme-Linked Immunosorbent Assay

Acute Coronary Syndrome

diagnosis

Correlation of global registry of acute coronary events [GRACE] with the angiographic severity and extent of coronary artery disease in patients with non- ST elevation acute coronary syndrome.

Khan, Zahoor Aslam; Khan, Muhammad Qaiser; Majeed, Syed Mohammad Imran

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Armed Forces Institute of Cardiology

PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S19-S21

Keywords: Coronary Angiography; Predictive Value of Tests; Risk Assessment-methods; Myocardial Infarction-mortality; Cross-Sectional Studies

Abstract: To determine whether the GRACE risk score correlates with the angiographic extent and severity of coronary artery disease in patients with NSTEMI-ACS undergoing cardiac catheterization. We conducted a cross sectional descriptive study in 154 patients with NSTEMI-ACS admitted at AFIC-NIHD from 1st April to 30th September 2011. For each patient the GRACE risk score was calculated by using specific variables collected at admission. The extent and severity of coronary artery disease was evaluated on angiography for each patient. A total of 154 patients were included in the study. The average age of the patients was 55.81 years. Majority [75%] of the patients was male and 25% were females. The mean GRACE score was 132.85. Overall 40 patients had low, 54 had intermediate, and 60 had high GRACE risk score. Among patients with low score 28 had SVCAD, 4 patients had DVCAD and none of the patients had TVCAD. In the intermediate group 24 patients had SVCAD, 18 had DVCAD and 6 had TVCAD whereas among the high GRACE risk score 4 patients had SVCAD, 24 had DVCAD and 32 had TVCAD. Regarding the severity of coronary artery disease; among the low GRACE risk score patients; 8 had subcritical and 32 had critical CAD. In the intermediate GRACE risk score subset of patients, 6 had subcritical and 48 had critical CAD and none of the patients of high GRACE risk score had subcritical CAD and all 60 patients had critical CAD. GRACE risk score is a valuable noninvasive tool in predicting the extent and severity of CAD.

Adrenalectomy

instrumentation

Laparo-endoscopic single-site left adrenalectomy using conventional ports and instruments.

Bhandarkar, Deepraj S.; Mittal, Gaurav K.; Katara, Avinash N.; Behera, Ramya R.

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Hinduja Hospital - Department of Minimal Access Surgery

Urology Annals 2014; 6 (2): 169-172

Keywords: Adrenal Gland Neoplasms-surgery; Adenoma-surgery; Laparoscopy; Cost-Benefit Analysis; Review Literature as Topic

Abstract: Laparo-endoscopic single-site adrenalectomy [LESS-A] is commonly performed using specialized access devices and/or instruments. We report a LESS-A in a 47-year-old woman with a left aldosteronoma via a subcostal approach utilizing conventional laparoscopic ports and instruments. The feasibility and cost-effectiveness of this approach are highlighted and the literature on the subject is reviewed.

Agammaglobulinemia

epidemiology

Primary antibody deficiencies at Queen Rania Children Hospital in Jordan: single center experience.

Habahbeh, Zeyad M.; Abu Shukair, Mohammad E.; Almutereen, Mohammad A.; Alzyoud, Raed M.; Wahadneh, Adel M.

Queen Rania Children Hospital - Immunology Allergy and Rheumatology Division

IJI-Iranian Journal of Immunology 2014; 11 (1): 49-58

Keywords: Common Variable Immunodeficiency-epidemiology; Medical Records; Early Diagnosis; Retrospective Studies; Immunologic Deficiency Syndromes

Abstract: Primary antibody deficiency, the most common primary immunodeficiency disorder, represents a heterogeneous spectrum of conditions caused by a defect in any critical stage of B cell development and is characterized by impaired production of normal amounts of antigen-specific antibodies. This retrospective study aimed

at description and analysis of demographic, clinical, immunological features and complications of subjects diagnosed with primary antibody deficiency at a referral center in Jordan. The medical records of pediatric patients who were diagnosed as primary antibody deficiency [PAD] during the period from January 2006 to June 2013 were reviewed. Patients were diagnosed as PADs based on the Pan-American Group for Immunodeficiency [PAGID] and the European Society for Immunodeficiency [ESID] diagnostic criteria. A total number of 53 patients with PAD were identified; 37[70%] males and 16[30%] females, 16[30%] patients with congenital agammaglobulinemia, 16[30%] patients with common variable immunodeficiency, 4[7.5%] patients with IgG subclass deficiency, 10[19%] cases with transient hypogammaglobulinemia of infancy and 7[13.5%] patients as undefined PAD. The most common infection among patients was pneumonia [62%]; followed by suppurative otitis media in 49% of patients. Cytopenia was the most noted autoimmune association and was found at prevalence of 22 %, other autoimmune associations [17%] including inflammatory arthritis, discoid lupus, inflammatory bowel disease, vasculitis and celiac disease. The prevalence of long-term complications was 58%, the most frequent ones were; stunted growth in 13%, bronchiectasis and lymphoproliferation in 11% for each. Our results indicated that congenital agammaglobulinemia and common variable immunodeficiency are the most frequent primary antibody deficiency in our patients. The awareness of families, general population as well as primary health physicians is crucial in the establishment of early diagnosis and prompt commencement of appropriate therapy for PADs.

genetics

A case of Bruton's disease with normal immunoglobulin G level.

Alyasin, Soheila; Abolnezhadian, Farhad; Rezaei, Amir
Shiraz University of Medical Science - Namazi Hospital - Department of Pediatrics

IJI-Iranian Journal of Immunology 2014; 11 (1): 59-63

Keywords: Immunoglobulin G-blood; Chromosomes, Human, X-genetics; Gene Expression Regulation; Diagnosis, Differential; Genetic Linkage; Protein-Tyrosine Kinases-genetics

Age Determination by Teeth

[Age determination of dental in forensic dentistry]

El Osta, Nada; El Osta, Lana

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IAJD-International Arab Journal of Dentistry 2014; 5 (1): 19-25

Keywords: Histological Techniques; Dentition; Evaluation Studies as Topic; Tooth Eruption; Child; Cadaver

Abstract: The study of the dentition is a common manner for age determination. In this article, we will discuss the pertinent methods to estimate the dental age of unknown dead or young alive people. In children, histological techniques as well as tooth eruption or calcification are appropriate to assess dental age in postmortem. After 15 years, it becomes difficult to estimate the age, since the phenomena related to the tooth eruption or calcification is completed. Therefore, the rate of racemization and Lamendin method are pertinent to determine the age adults in postmortem. Finally, in young alive people where age determination has legal interest, the mineralization of the wisdom tooth is a fundamental criterion for evaluating dental age. The determination of age depends on physiologic, environmental, genetic and pathologic factor. Thus, the age estimation in Lebanese population might be appraised using the methods universally adopted after adjustment, to obtain an accurate evaluation.

Aluminum

analysis

[Residual Aluminum from application of Alum and Polyaluminum Chloride in removal of turbidity from turbid water]

Mehdinejad, M.H.; Alimohammadi, N.; Arbabmojeni, S.; Soltani, A.; Amanbaei, A.

E-mail:hmnejad@yahoo.com

Golestan University of Medical Science - Faculty of Health - Department of Environmental Health

Journal of Gorgan University of Medical Sciences 2014; 16 (1): 82-88

Keywords: Water Pollutants, Chemical-analysis; Water Purification; Aluminum Compounds-chemistry; Sensitivity and Specificity; Suspensions; Chemical Precipitation

Abstract: Different coagulants including aluminum sulfate [Alum] and Polyaluminum Chloride [PAC] are used for water clarification process and deposition of colloidal particles. The use of coagulants causes some residual aluminum in water. The residual aluminum higher than 0.2 mg/l, has adverse effects on human health and environment. This study was conducted to determine the amount of residual aluminum by applying Polyaluminum chloride and aluminum sulfate for turbidity removal from turbid water. In this laboratory study, the experiments were run by using synthetic water having low [10-30 NTU], medium [100-130 NTU] and high [200-230 NTU] initial turbidities. Synthetic turbid water

was prepared by adding stock kaolin suspension into distilled water. Samples of 1 liter of water were poured on 6 Jars. After adjusting of pH, coagulant was added into each beaker at various doses and agitated at 100 rpm for 30s. The mixing speed was then reduced to 20 rpm and kept for another 15 minutes. The suspensions were left for sedimentation and after 30 minutes of sedimentation, clarified samples were collected from the top of the beakers. Residual turbidity and residual aluminum was measured. The residual turbidity was measured using a Turbidimeter according to Nephelometric method. The residual aluminum was determined by Eriochrome cyanine R method. Residual aluminium in low, medium and high turbidities was 0.006 mg/l, 0.05 mg/l and 0.07 mg/l by applying Polyaluminum Chloride and 0.065 mg/l, 0.15 mg/l and 0.22 mg/l by applying alum, respectively. There was a significant correlation between dosage of Alum and Polyaluminum Chloride with residual aluminium [$P < 0.05$]. Polyaluminum Chloride due to low sensitivity to pH variation and less residual aluminum in treated water is more suitable than alum coagulant and could be used as a recommended water coagulant.

Ameloblastoma

surgery

Treatment of odontogenic ameloblastomas and their long term follow up at tertiary centre.

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

Montmorency College of Dentistry - Oral and Maxillofacial Surgery Department

Pakistan Oral and Dental Journal 2014; 34 (1): 11-17

Keywords: Ameloblastoma-pathology; Ameloblastoma-radiography; Neoplasm Recurrence, Local-pathology; Treatment Outcome; Odontogenic Cysts-pathology; Maxillary Neoplasms-surgery; Mandibular Neoplasms-surgery

Abstract: Fifty-two patients of ameloblastoma were operated with special emphasis on radiographic and histological appearance. The unicystic radiographico-histological [38] cases were managed conservatively with marsupialization followed by enucleation [Group A' 15 Patients] and enucleation with peripheral ostectomy [Group B' 23 Patients]. The radiographico-histological multicystic [solid] variety [Group C' 14 Patients] was treated aggressively by resection. In conservative treatment regimens Carnoy's solution was applied after enucleation of the tumour whereas, the patients of aggressive surgery were operated with minimum 5mm safety marginal clearance of the tumour. The recurrence rate with average four years follow up was 0.0% for resection, 13.33% for marsupialization followed by enucleation and 8.69% for enucleation with peripheral ostectomy. The results were encouraging for unicystic ameloblastoma treated patients [Group A' and B'], in best interest of jaw bone contour preservation.

Anemia, Pernicious

epidemiology

Frequency of intrinsic factor antibody in megaloblastic anaemia.

Saif ur Rehman; Zafar, Lubna; Imran, Tanzeel; Ghafoor, Adnan; Durrani, Asghar Aurangzeb; Ahmed, Tahir Aziz

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Foundation University Medical College - Department of Pathology

JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 157-159

Keywords: Anemia, Pernicious-congenital; Intrinsic Factor-deficiency; Vitamin B 12 Deficiency-complications; Intrinsic Factor-immunology

Abstract: To evaluate the presence of intrinsic factor antibody in vitamin B12 deficient patients. Cross-sectional, observational study. Fauji Foundation Hospital, Foundation University Medical College and Armed Forces Institute of Pathology, Rawalpindi, from January 2011 to June 2012. A total of 120 patients of megaloblastic anaemia were selected on the basis of low serum vitamin B12 level. The intrinsic factor antibody tests were performed by ELISA method. The patients were considered positive or negative on the basis of presence or absence of intrinsic factor antibody respectively. The data was analyzed by using SPSS version 14. Pernicious anaemia with intrinsic factor deficiency was found in 13.3% in 120 vitamin B12 deficient patients. The mean age of patients of pernicious anaemia was 41.5 years, with a male to female ratio of 1:2.5. It was relatively more common in older age [17% in age more than 60 years] as compared to other age groups. Frequency of pernicious anaemia in megaloblastic anaemia was 13.3%. The male to female ratio was 1:2.5 and it was relatively more common in age group of more than 60 years.

Angiomyolipoma

Robotic nephrectomy for angiomyolipoma.

Aboumarzouk, Omar M.

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

Islamic University of Gaza - College of Medicine - Department of Urology

Urology Annals 2014; 6 (2): 178-179

Keywords: Nephrectomy; Robotics; Kidney Neoplasms-surgery; Vena Cava, Inferior-surgery

Ankylosis

surgery

Viability of costochondral graft in temporomandibular joint ankylosis.

Ahmed, Saeed; Badar, Muhammad Arshad; Wahid, Arsalan; Shah, Syed Adnan Ali

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Pakistan Oral and Dental Journal 2014; 34 (1): 25-29

Keywords: Temporomandibular Joint Disorders-surgery; Hyperostosis-etiology; Hyperostosis-surgery; Transplantation, Autologous-adverse effects; Mandibular Diseases-surgery; Radionuclide Imaging

Abstract: Temporomandibular joint [TMJ] ankylosis is a very distressing structural condition that causes severe facial disfigurement leading to pathopsychological stress. Impairment of speech, difficulty with mastication, rampant caries, poor oral hygiene, disturbances of facial growth and severely compromised airway are the leading consequences of TMJ ankylosis. Surgical intervention is the widely accepted treatment modality of TMJ ankylosis. Current study was performed on 30 patients for three years [2009-2012] department of Oral and Maxillofacial Surgery, Children Hospital and Department of Nuclear Medicine, Shaukat Khanum Memorial Cancer Hospital and Research Center, Lahore and costochondral graft was used to treat mandibular ankylosis. 21 [70%] patients were males and were divided into age groups of 2-5, 6-12 and 13-18 years. Regarding the side of mandible involved in male patients, unilateral ankylosis was found in 15[50%] and bilateral ankylosis were found in 6[20%] patients. Similarly in female patients, unilateral ankylosis was found in 7[23%] and bilateral ankylosis was seen in 2[7%] patients. Regarding post-operative monitoring of graft, bone scintigraphy was performed one week after the surgery and then after 12 weeks and 16 weeks to assess the viability and uptake of costochondral graft. Tc.99m MDP bone scan was performed in supine position with intravenous administration of 370MBq one week after the placement of graft. Results showed that out of 30 patients, CCG graft was viable in 28[93%] while it was non-viable in 2[7%] patients.

Antibodies, Antinuclear

analysis

Prevalence and clinical significance of antinuclear antibodies in Iranian women with unexplained recurrent miscarriage.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 221-226

Keywords: Abortion, Spontaneous-immunology; Antiphospholipid Syndrome-immunology; Antibodies, Anticardiolipin-analysis; Fluorescent Antibody Technique, Indirect; Lupus Erythematosus, Systemic-immunology; Pregnant Women; Pregnancy Complications-immunology; Pregnancy Outcome

Abstract: Antinuclear antibodies [ANAs] in women with recurrent miscarriage have been reported. The presence of moderate to high titers of these antibodies represents an autoimmune condition that can endanger the health of the fetus in pregnant women. In this study, we evaluated the prevalence of ANAs in Iranian women with a history of two or more unexplained abortion. 560 women with unexplained recurrent miscarriage and 560 healthy controls accounted for this study over a period of 13 months. ANAs were detected by indirect immunofluorescence technique. ANAs were detected in 74 of 560 [13.21%] patient with recurrent miscarriage, and in only 5 of 560 [0.9%] controls [p<0.001]. ANA positivity was generally found with low-positive results [1.40-1.80] in about 38% of positive cases, whereas moderate titres [1.160-1.320] and high titres [>1.640] were seen in about 46% and 16% of cases respectively. Finally evaluating of microscopic ANA patterns revealed that about half of positive cases had antibodies against DNA- histone complex, associated with systemic lupus erythematosus disease. Antinuclear antibodies are not uncommon in women with unexplained recurrent miscarriage, suggesting the possible role of an autoimmune disorder on abortion, at least in a subgroup of patients.

Antibodies, Monoclonal

diagnostic use

Hep Par-1: a novel immunohistochemical marker for differentiating hepatocellular carcinoma from metastatic carcinoma.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 186-189

Keywords: Carcinoma, Hepatocellular-diagnosis; Cholangiocarcinoma-diagnosis; Cell Differentiation-immunology; Cholangiocarcinoma-pathology; Carcinoma, Hepatocellular-pathology; Antibodies, Neoplasm-diagnostic use; Antibodies, Neoplasm-immunology; Neoplasm Metastasis; Predictive Value of Tests; Sensitivity and Specificity; Tumor Markers, Biological-immunology; Cross-Sectional Studies; Diagnosis, Differential; Hepatocytes-immunology; Immunohistochemistry

Abstract: To evaluate the diagnostic utility of Hep par-1 in differentiating hepatocellular carcinoma from metastatic carcinoma taking histopathology as a gold standard. Comparative cross-sectional study. Pathology Department, Shaikat Khanum Memorial Cancer Hospital and Research Centre, Lahore, from April 2007 to February 2008. Hep par-1 immunohistochemical stain was performed on 60 cases of liver carcinoma, 30 cases each of metastatic and hepatocellular carcinoma. Information regarding patient age, gender, sign and symptoms, radiographic findings, histological grade of tumour, and expression of Hep par-1 on hepatocellular and metastatic carcinoma were recorded on proforma sheet. Sensitivity, specificity, positive and negative predictive values, and accuracy of Hep par-1 were calculated using the formulas. Hep par-1 expression was noted in 25 out of 30 cases of hepatocellular carcinoma [83%]. Out of 30 cases of metastatic carcinoma, only one case expressed staining in < 5% tumour cells and remaining 29 cases showed no reactivity. The age of the patients with hepatocellular carcinoma ranged from 40 to 76 years with a median age of 60.5 years and 40 - 75 years for metastatic carcinomas with a median age of 57.5 years. Hep par-1 is a reliable immunohistochemical marker for cases of hepatocellular carcinoma [HCC]. It can be used along with other markers in morphologically difficult cases when differential diagnosis lies between poorly differentiated HCC and metastatic carcinoma of liver.

Anxiety

epidemiology

The comparison of anxiety and depression rate between medical staff of infertility centers and obstetrics and gynecology centers of Yazd, Shiraz, Isfahan and Kerman hospitals.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 183-188

Keywords: Depressive Disorder-epidemiology; Infertility-psychology; Medical Staff-psychology; Family Characteristics; Analysis of Variance; Questionnaires

Abstract: Regarding the close and continuous interaction of infertility staff with hopeless infertile couples and in the contrary the atmosphere of happiness especially in obstetric wards make a sense that considering anxiety and depression it would be a difference between these two wards. The objective of this study is the comparison of the rate of depression and anxiety between the two wards of infertility and obstetrics and gynecology. This study is a descriptive-correlation study based on cross-sectional method. 199 individuals who were the staff of infertility and obstetrics and gynecology wards in four provinces enrolled in this study through stratified sampling. Data collection was done by demographic questionnaire, Spiel Berger and Beck depression inventory tests. Data were analyzed by SPSS software using ANOVA test. The result showed the rate of anxiety in obstetrics and gynecology staff of Isfahan center [54.69+/-13.58] and depression rate had increased level in infertility staff of Shiraz center [14.94+/-10.87]. Overall, there was significant correlation between anxiety, depression and work place [p=0.047, 0.008 respectively]. According to ANOVA test, the mean value of anxiety level was higher in the staff of four obstetrics and gynecology centers and one infertility center. As long as we know that infertile couples have little chance for success rate and obstetrics and gynecology wards patients have little risk of failure in treatment, it could be mentioned that the anxiety and depression in the staff are not correlated with the client illness.

Arrhythmias, Cardiac

epidemiology

Types and frequency of cardiac arrhythmias in patients with heart failure.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S109-S113

Keywords: Ventricular Dysfunction-epidemiology; Electrocardiography; Heart Failure-etiology; Cross-Sectional Studies

Abstract: To determine the types and frequency of cardiac arrhythmias in patients with heart failure based on 48 hours ambulatory ECG recordings. Cross sectional descriptive study. Armed Forces Institute of Cardiology/National Institute of Heart Diseases, from April 2013 to August 2013. Fifty three heart failure patients with ejection fraction of $\leq 40\%$ were holter monitored for 48 hours. Patients who had acute myocardial infarction during the last six weeks were excluded. Digital ECG data were manually edited and type and frequency of arrhythmias were analysed using statistical software. The mean age of patients was 57.68 \pm 16.41 years and male to female ratio was 3.4:1. The mean ejection fraction was 22.5 \pm 6.3 and 59% patients had NYHA class III. Cardiac arrhythmias were present in 46 [87%] patients. In patients with chronic heart failure commonest arrhythmias were of ventricular origin followed by conduction blocks. Hypertension, diabetes mellitus and ischemic heart disease were the main underlying etiological factors in 71% patients. There is a high frequency of cardiac arrhythmias among heart failure patients with ventricular arrhythmias being the most frequent. Arrhythmogenesis in heart failure is dependent upon degree of ventricular dysfunction, presenting NYHA functional class and etiology of heart failure.

Arteriosclerosis

pathology

[Non traumatic penetrating atherosclerotic ulcer of the thoracic descending aorta without associated intramural hematoma:a case report].

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 141-145

Keywords: Aortic Diseases-pathology; Aorta, Thoracic-radiography; Aortic Aneurysm, Thoracic-radiography; Chest Pain-etiology; Diagnosis, Differential; Ulcer-radiography

Abstract: Penetrating atheromatous ulcer is the condition in which ulceration of an aortic atherosclerotic lesion penetrates the internal elastic lamina into the media. Differentiation of penetrating atheromatous ulcer from other causes of acute aortic syndrome such as intramural haematoma and aortic dissection is difficult. The main symptom is a severe, acute chest pain radiating to the inter-scapular area, similar to classical acute aortic dissection of the thoracic aorta. In present article a case of a 52 years old woman with long standing retrosternal chest pain and with penetrating atherosclerotic aortic ulcer in descending aorta was reported. Unlike the predominant picture of this disease, associated intramural hematoma was not seen.

Arthritis, Psoriatic

drug therapy

Efficacy and safety of leflunomide in psoriatic arthritis.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 51-56

Keywords: Isoxazoles-therapeutic use; Adjuvants, Immunologic-therapeutic use; Anti-Inflammatory Agents, Non-Steroidal-therapeutic use; Antineoplastic Agents-therapeutic use; Antiviral Agents-therapeutic use; Methotrexate-therapeutic use; Treatment Outcome

Abstract: To compare the effectiveness and safety of leflunomide with methotrexate [MTX] in the treatment of psoriatic arthritis. An open, randomized clinical trial was conducted in 32 patients of psoriatic arthritis at the department of Dermatology and Venereology and Rheumatology wing of Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh, from June 2002 to December 2003. 17 patients of leflunomide group were treated with oral leflunomide

100 mg for first three days followed by 20 mg daily. 15 patients of MTX group were treated with methotrexate 10 mg weekly. Both groups were allowed to take ibuprofen, maximum 1400 mg daily. For both groups hematological and biochemical tests were done at baseline and at every follow-up. All patients were assessed clinically for articular features, psoriasis area and severity index [PASI] for effectiveness and for side effects of drugs was listed for safety measure. Sixteen patients of leflunomide group and 14 of MTX group completed 24 weeks follow-up. Male: female ratio was 14:2, in leflunomide and 13:1 in MTX group. Significant improvement was observed in tender joint count, swollen joint count, joint tenderness index, NSAIDs score and PASI score in both groups. Adverse effects in both groups were tolerable and did not require any withdrawal or dose reduction. Asthenia, alopecia, nausea and vomiting were common side effects noticed by patients but overall there was no significant difference in between two groups. Leflunomide appears to be as effective and safe as methotrexate in psoriatic arthritis.

Aryldialkylphosphatase

Paraoxonase 3 activity and the ratio of antioxidant to peroxidation in the follicular fluid of infertile women.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 51-58

Keywords: Reproductive Techniques, Assisted; Sperm Injections, Intracytoplasmic; Fertilization in Vitro; Embryonic Structures; Family Characteristics; Cross-Sectional Studies; Oocytes; Follicular Fluid; Lipoproteins, LDL-metabolism

Abstract: Paraoxonase-3 [PON3], as a high density lipoprotein [HDL]-associated lactonase, is capable of preventing the oxidative modification of low density lipoprotein [LDL]. PON3 activity in follicular fluid [FF] is three times more than its activity in serum. However, the detailed role of PON3 in women's fertility remains unknown. The aim of this study was to investigate the correlation between PON3 activity in the FF of women undergoing assisted reproductive technique [ART], in vitro fertilization [IVF], or intra-cytoplasmic sperm injection [ICSI]. This cross-sectional study consisted of 50 women from couples with male factor infertility [MFI] or with female factor infertility [FFI]. The FF samples were obtained during the ART intervention. PON3 activity, HDL cholesterol [HDL C], total antioxidant status [TAS] and the level of malondialdehyde [MDA] were determined. The morphology of the embryo was determined using embryo cell number [ECN] and embryo fragmentation score [EFS]. In addition, fertilization rate [FR] was used an oocyte fertilization index. Of 50 women, 20 women belonged to FFI group and the remaining 30 women belonged to MFI group. PON3 activity in FF of women in FFI group was significantly lower [$p < 0.05$] in comparison with corresponding value in MFI group. The value of PON3 activity/MDA in the FFI group was lower than that in MFI group. Moreover, MDA level in the FF of FFI group was significantly higher [$p < 0.05$] than its concentration in MFI group. Meanwhile, no significant difference was found in HDL-C concentration and TAS of both groups. No significant correlation was observed between the ECN and FF biochemical parameters. There was also a negative correlation between FR and MDA [$r = -0.42$, $p = 0.02$], whereas a positive relation between FR with PON3 activity [$r = 0.59$, $p = 0.004$], HDL-C [$r = 0.35$, $p = 0.04$] and PON3/MDA [$r = 0.59$, $p = 0.001$]. Conclusion: According to the results of this study, PON3 activity level as a key component of antioxidant system in FF may directly be associated with the success rate of ART and fertilization rate in women.

Ascorbic Acid

blood

Effects of vitamin C injection on some blood parameters under hyperacute heat stress in male Baluchi sheep.

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Journal of Veterinary Research 2014; 69 (1): 73-77

Keywords: Heat Stress Disorders-prevention and control; Heat Stress Disorders-veterinary; Ascorbic Acid-therapeutic use; Sheep-blood

Abstract: Heat stress can affect the health and performance of sheep. Researchers have investigated various methods to prevent the harmful effects of heat stress. In this study, injection of vitamin C on some biochemical parameters, red blood cells [RBC], hemoglobin [Hb], hematocrit [HCT] and white blood cells [WBC] in sheep under hyper acute heat stress were studied. Eight healthy male sheep in similar range of age [5+/-1 months] and weight [28.75+/-3.17 kg] were enrolled in this study. The sheep were divided into two groups. Both groups were placed in an environment with hyper-acute heat stress based on temperature-humidity index [THI]. Vitamin C was injected intramuscularly on days 0, 1, 3 and 5. Blood samples were collected from the jugular vein on days 0, 1, 3, 5, and 7. Glucose, cortisol, cholesterol, triglycerides and blood components were measured and evaluated. Results were analyzed using statistical software SPSS [version 16]. The results showed that vitamin C injection has a significant effect on serum cortisol, glucose, hematocrit and white blood cells [$p < 0.05$]. Vitamin C injection has lowering effects on

serum cortisol and glucose during heat stress. Mechanism for attenuating the levels of cortisol and glucose by vitamin C is not well known. However, it may be done by decrease in cortisol synthesis or degradation. Increased hematocrit provided sufficient water to cool the body through perspiration. The present study probably shows a beneficial effect of injection of vitamin C on adaptation mechanisms against of heat-stressed sheep.

Asthma

epidemiology

Male preponderance of Ziqun Nafas Sho'bi among 0-14 years age group in Padrayanpura Bangalore an epidemiological study.

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Hamdard Medicus 2013; 56 (2): 36-41

Keywords: Epidemiologic Studies; Cross-Sectional Studies; Chi-Square Distribution; Questionnaires; Age Groups

Abstract: The present study is a one-time observational cross sectional, field survey based study undertaken to know the prevalence of Ziqun Nafas Sho'bi in Padrayanpura, Bangalore. The sample size was estimated as 555 subjects based on known 15.32% prevalence of Ziqun Nafas Sho'bi in Bangalore. Detail of the population and houses of the area were taken from the Bangalore Municipal Corporation. Face to face interview was performed using a structured pre test questionnaire. In the study population the prevalence of asthma among males in age group of 0-14 years was 42.3%, among 15-29 years group it was 11.95%, among 30-44 years it was 12.12%, among 45-60 years it was 15.15%, and among >60 years age group was 20.83%. $P < 0.000.1$, Chi-Square test showed that the findings were statistically highly significant. It is concluded from the study that the prevalence of asthma is increasing day by day in Padrayanpura, the field area of NIUM, Bangalore, and it is more prevalent among males in 0-14 years age group as compared to other age groups.

Attention Deficit Disorder with Hyperactivity

epidemiology

[Prevalence of attention deficit hyperactivity disorder and its relation with depression]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 94-99

Keywords: Diagnostic and Statistical Manual of Mental Disorders; Questionnaires; Depression-epidemiology; Students; Evaluation Studies as Topic

Abstract: According to destructive consequences of untreated attention deficit hyperactivity disorder [ADHD], this study was done to evaluate of the prevalence of adult ADHD and its relation with depression among Iranian students. This descriptive study was carried out on 414 students of Kerman University of Medical Sciences, Kerman, Iran during 2010-11. ADHD was screened by ADHD self report scale for adult ADHD and asking DSM-IV criteria from parents for childhood ADHD. Beck depression inventory questionnaire was used to determine depression. The prevalence of adult ADHD and childhood ADHD was 3.9% and 8.5%, respectively. Depression was more prevalent in those with adult or childhood ADHD. Depression was more prevalent in under graduate than post graduate students [$P < 0.05$]. Depression is more prevalent in students with adult ADHD or with history of childhood ADHD.

Balloon Valvuloplasty

mortality

Prospective study of percutaneous balloon pulmonary valvuloplasty - immediate results and complications.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S86-S89

Keywords: Heart Defects, Congenital-therapy; Outcome and Process Assessment [Health Care]; Pulmonary Valve Stenosis-surgery; Balloon Dilatation; Constriction, Pathologic; Cardiac Tamponade; Prospective Studies

Abstract: To assess the results and immediate complications of percutaneous balloon pulmonary valvuloplasty at AFIC/NIHD. Quasi experimental study Paediatric cardiology department of Armed Forces Institute of Cardiology and National Institute of Heart Diseases [AFIC-NIHD] Pakistan from 01[st] October 2010 to 31[st] September 2013. This

study comprised 143 patients [74 male and 69 female] with pulmonary valve stenosis undergoing percutaneous balloon valvuloplasty. The procedure was classified as successful when the angiographic derived peak to peak pressure gradient [PG] across right ventricular outflow tract was reduced to less than 50% of pre-procedural value, suboptimal if reduction was 25-50% and unsuccessful if PG reduced by less than 25% of its initial value. The mean age of study population was 8.4 +/- 10.3 years and procedure was successful in 133 [93%] cases. Mean PG was reduced from 85.6 +/- 34.4 mmHg to 24.7 +/- 14.5 mmHg [$p < 0.001$]. Procedure was considered unsuccessful in one case, where PG across right ventricular outflow tract [RVOT] reduced from 70 to 60 mmHg, due to concomitant infundibular bands. In another nine patients, procedure considered suboptimal, as mean PG reduced from 81 +/- 24.1 to 50 +/- 16 mmHg. Among study population, 31 [21.7%] cases were considered as critical pulmonary stenosis. There were two deaths, two non fatal cardiac arrests, one life threatening arrhythmias and minor rhythm problems in five cases, but no cardiac tamponade or emergency cardiac surgery in our study population. Percutaneous balloon valvuloplasty was effective and safe for the treatment of pulmonary valve stenosis with excellent short term results.

Benzamides

toxicity

The effects of imatinib on the testicular histology in male rats administered at peripubertal period.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 24-34

Keywords: Piperazines-toxicity; Pyrimidines-toxicity; Testis-drug effects; Testis-anatomy and histology; Puberty; Evaluation Studies as Topic; Control Groups

Abstract: Male and female gonadal toxicity are common complications of modern anti-cancer treatments. Although effective cancer therapy, and where possible cure, are of paramount importance, infertility and hypogonadism can be a source of considerable distress. There is a paucity of studies on the effect of imatinib on the histological parameters of the testes of rats. The aim of this study was to evaluate the short-term effects of peri-pubertal administration of a low dose, clinically non-relevant high dose of imatinib and its repercussions in adulthood in comparison with that of control. This experimental study was performed over a period of four months starting from the 10th march 2013 to the 10th July 2013 and was conducted on male Albino rats purchased from Animal Houses of both Mosul Medical College, and Veterinary College, University of Mosul, Mosul, Northern Iraq. Animals were randomly assigned to the experimental groups. The first experiment includes 40-45 days aged rats who administered orally daily dose of 75 mg/kg of imatinib mesylate [Glivec; Novartis] purchased from Ibn-Sena Teaching Hospital, Mosul, or bought from some private pharmacies for 30 days with age matched control who administered distilled water. The second experiment includes 40-45 days aged rats who administered daily dose of 200 mg/kg orally with age matched control who administered distilled water. Animals in each experiment were euthanized with ether 24 hours after the final dose was given, respectively, at the end of treatment [short-term evaluation] and after the recovery period [long-term evaluation], testes of rats from each experimental group were obtained at laboratory of postgraduate studies of Department of Anatomy, Histology and Embryology in Mosul College of Medicine. The tissues were embedded in paraffin and stained with hematoxylin-eosin, PAS-Harris [PAS-H] stain. The evaluation was blinded to treatment and any data. Testes from the control and treated animals are analyzed for any disorganization of cytoarchitecture of seminiferous tubules, the presence of vacuoles, gaps and abnormal cells in the seminiferous epithelium and sloughing, degeneration of seminiferous epithelium and oedema in the interstitial spaces. Johnsen' scores were used to evaluate the spermatogenesis in all groups. The photomicrographs were taken. The light microscopic examination of the testicular sections obtained from of the control group showed a normal organized appearance of the seminiferous epithelium with intact cytoarchitecture of the testes. Histological analysis of seminiferous tubules in imatinib-treated rats showed that the most striking features are disorganization of the seminiferous tubules, interstitial oedema, sloughing of the epithelium, and detachment of sertoli cells toward the lumen. This study revealed that there are different alterations in the testicular histology in the imatinib-treated rats, however these changes were focal, scattered and showed interindividual variability. In addition, this study showed that the testicular injuries were more pronounced in imatinib-treated with high dose group compared to that of imatinib-treated with low dose group. Sections obtained from the rats that euthanized after the recovery period demonstrated a better organization of the seminiferous tubules in both low and high dose groups. Histological assessment demonstrated that both imatinib-treated rats [low dose-IML, or high dose-IMH] presented decreased Johnsen' scores in relation to control animals, indicating that imatinib induced toxic effects in testis, however, animals euthanized after the recovery period showed better Johnsen' scores. Imatinib does affect the histopathology of rat testis significantly at low dose, or at high dose, but this effect is reversible, to some extent, once the drug is withdrawn. This finding may help the clinicians to plan and address the fertility related issues in young patients of reproductive age who are being treated with imatinib for gastrointestinal tumors and chronic myeloid leukemia.

Berberine Alkaloids

therapeutic use

[Palmitine hydrochloride improves motor dysfunction in streptozotocin-induced diabetic rats]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 42-48

Keywords: Gait Disorders, Neurologic-drug therapy; Diabetes Complications-drug therapy; Motor Activity; Hand Strength; Rats, Wistar; Diabetes Mellitus, Experimental

Abstract: Diabetes induces motor dysfunctions, Palmitine is an isoquinoline alkaloid, with anti-diabetic and antioxidant activities. This study was conducted to evaluate the effect of Palmitine on motor dysfunction in STZ-induced diabetic rats. In this experimental study, 32 male wistar rats were randomly allocated into control, Palmitine-treated non-diabetic, diabetic and Palmitine-treated diabetic groups. Diabetes was induced by STZ administration at the dose of 55 mg/kg/bw, intraperitoneally. Palmitine hydrochloride was administered subcutaneous at doses of 10 mg/kg/bw per day for a period of 6 weeks, one week after induction of diabetes. Blood glucose level was measured 1, 3, 5, 7 weeks after STZ injection. Locomotor activity tests including Y maze, grip-traction and inclined plane tests were performed to determine locomotor activity. In Y maze test, the number of arms entered significantly increased in Palmitine-treated diabetic group compared to diabetic group [P<0.05]. Grip traction and inclined plane tests significantly increased in Palmitine-treated diabetic group compared to diabetic animals [P<0.05]. Palmitine hydrochloride administration for 6 weeks improves motor dysfunctions in streptozotocin-induced diabetic rats.

beta-Thalassemia

psychology

[General health of beta-thalassemia major patients in Gorgan, Iran]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 120-125

Keywords: Social Class; Questionnaires; Educational Status; Depression; Anxiety

Abstract: Thalassemias is the most common inherited disease in the world. This study was designed to assess general health of patients with beta-thalassemia major in Gorgan, northern Iran. This descriptive study was performed on 163 patients with beta-thalassemia major whom referred to Thalghani hospital in Gorgan, northern Iran. Socio-Psychosocial status of patients was assessed by using general health questionnaire-28 [GHQ-28]. Socio-Psychosocial status of 44.2%, 46% and 9.8% of patients was normal, suspected and suffered from psychosocial disorders, respectively. Social dysfunction [12.9%] and depression [10.4%] were the most prevalent and anxiety was the less prevalent [4.9%] in the patients. There were significant correlations between psychosocial status and mother's occupation [P<0.05], patients level of education [P<0.05] and history of associated diseases [P<0.05]. Social dysfunction and depression were the two major general health complications in betathalassemia patients in this region.

Bile Ducts

injuries

Frequency of common bile duct injury in laparoscopic cholecystectomy.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 172-176

Keywords: Cholecystectomy, Laparoscopic-adverse effects; Cholelithiasis-surgery; Intraoperative Complications-epidemiology; Cholecystitis-surgery

Abstract: The aim of the study is to review the frequency of Common Bile Duct [CBD] injury in laparoscopic cholecystectomy [LC] and its management in our set up. This descriptive study was conducted at Surgical Department, Rawalpindi Medical College and the author's Surgical Clinics from January 1998 to December 2012. Two thousand patients undergoing laparoscopic cholecystectomy were included in the study. The cases were operated between January 1998 and December 2012. The important variables included were frequency of CBD injury and its management. There were 1723 females and 277 males with mean age 45.04+/-11years. 67.8% patients had chronic

cholecystitis with cholelithiasis and were admitted through Out Patient Department whereas 32.2% patients were admitted through A and E department. Abdominal ultrasound showed multiple calculi in 1535 [76.7%] patients and 435 [23.3%] patients had single calculus preoperatively. Empyema was found in 245[12.2%] cases whereas adhesions were present in 783[39.1%] patients. Conversion rate to open cholecystectomy was 3.4 %. Seventeen cases had CBD injury [0.85%]. 14 cases [82.3%] were diagnosed in traoperatively whereas 3 cases [17.7%] were diagnosed postoperatively. In 13 cases [76.5%] CBD repair was done over T. tube. Mean operating time was 30 minutes. The frequency of CBD injury in LC in our setup was less than 1% and is comparable to international experience. Most of the cases were diagnosed in traoperatively. Repair over T. tube is commonest method employed for management of CBD injury with favorable results.

Immunoglobulin A

blood

[Effect of exercise program and curcumin supplementation on serum level of immunoglobulin A in rats exposed to lead acetate]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 49-54

Keywords: Organometallic Compounds-toxicity; Exercise Therapy; Curcumin-pharmacology; Lead Poisoning-immunology; Rats; Treatment Outcome

Abstract: Lead as an environmental pollutant can damage the immune system. This study was done to determine the effect of moderate-intensity exercise and Curcumin supplement on serum level of immunoglobulin A in rats exposed to lead acetate. In this experimental study, 46 male rats were allocated into six groups including; Control [C], vehicle [V], lead [L], lead and exercise [LE], lead and curcumin [LC], Lead+exercise+curcumin [LEC]. Animals in training groups ran on treadmill for 8 weeks [25- 64 minutes per daily, 15-22 meter/minute and 0% grade]. Animals in Lead, LE, LC and LEC groups were received lead acetate [20 mg/kg/bw] and vehicle animals were received ethyl oleat [30 mg/kg/bw] Intraperitoneally for 3 days per week for 8 weeks. Rats in curcumin and LEC groups were received Curcumin [30mg/kg/bw], for 3 day per week for 8 weeks. IgA level were measured by single radial immuno diffusion method. Lead acetate significantly increased MDA levels at $P < 0.05$ in animals. IgA level was 0.2, 0.41 and 0.47 mg/dL in Lead, LE and LEC groups [$P < 0.05$]. The simultaneous use of endurance exercise training and curcumin due to increased IgA activity has beneficial effects against lead poisoning.

Biomass

Biomass fuel smoke: a silent killer.

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Lady Reading Hospital - Department of Pulmonology Postgraduate

JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 117-120

Keywords: Air Pollution, Indoor-adverse effects; Energy-Generating Resources; Smoke-adverse effects; Developing Countries; Respiratory Tract Infections-etiology; Cardiovascular Diseases-etiology

Blood Platelets

metabolism

Relationship between platelet indices and lipidemias: a cross-sectional study at Karachi.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 121-127

Keywords: Hypercholesterolemia-blood; Hypercholesterolemia-physiopathology; Hypertriglyceridemia-blood; Hypertriglyceridemia-physiopathology; Cross-Sectional Studies; Linear Models; Platelet Count

Abstract: To compare platelet indices among patients with low and high levels of cholesterolemia and triglyceridemia. This cross-sectional study was conducted from January 2011to May 2012 at the departments of pathology, PNS Rahat and Baqai medical and dental university, Karachi. A total of 867 subjects presenting for estimation of fasting triglycerides and total cholesterol were selected after excluding patients receiving anti-platelet or lipid medication, pregnancy, acute in factious disorders. They were interviewed, examined and sampled for

measurement of total cholesterol, triglycerides and platelet indices including total platelet count, mean platelet volume [MPV], platelet distribution width [PDW] and platecrit [PCT]. The results of platelet count and mean platelet volume were found to be significantly different among subjects with normal cholesterolemia [<5.2 mmol/L], borderline raised cholesterol group [$5.2-6.3$ mmol/L] and hypercholesterolemia [>6.3 mmol/L]; however, post-hoc comparison did not show any significant difference between all groups. Using age as a variable and segregating total cholesterol results into 7 groups, starting from very low cholesterol values [<4.0 mmol/L] to highest [>6.5 mmol/L], in a univariate general linear model, higher mean platelet volume were observed at the extremes of cholesterolemia groups [$p=0.039$]. A similar trend was observed for platelet count after adjusting for age, where low levels of platelet levels were associated with hypocholesterolemia and hypercholesterolemia [$p=0.021$]. Higher MPV and low total platelet counts were associated with the observed extremes of cholesterol range. No significant differences were observed for platelet indices across various groups formulated based upon fasting triglycerides.

Bone Marrow Examination

methods

Diagnostic role of bone marrow aspiration and trephine biopsy in haematological practice.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 217-221

Keywords: Biopsy, Needle; Biopsy-methods; Diagnostic Techniques and Procedures; Bone Marrow-pathology; Anemia, Aplastic-pathology; Anemia, Megaloblastic-pathology; Hematologic Diseases-diagnosis; Myelodysplastic Syndromes-pathology

Abstract: To determine the usefulness of bone marrow aspiration and trephine biopsy in evaluation of the bone marrow in routine haematological practice. This study included 443 cases of bone marrow examination, referred to Pathology Department, Lady Reading Hospital Peshawar during the period extending from January 2012 till July 2013. All the bone marrow smears and bone biopsy sections were examined in detail. The diagnosis and findings on aspirate and biopsy were evaluated and compared with each other. In 73.8% of the cases the bone marrow aspiration and trephine biopsy showed same diagnosis i. e., bone marrow aspiration alone was sufficient for diagnosis in these cases. In the remaining 116 [26.2%] cases trephine biopsy sections or touch imprints were found to be necessary in for making final diagnosis. These cases were those of the hypoplastic / aplastic marrows, Myelofibrosis, lymphomatous infiltration and chronic granulomatous inflammation. The study results suggest that both the aspirate and trephine biopsy complement each other. Nutritional anaemias, Haematological Malignancies and Immune Thrombocytopenia can be readily diagnosed by bone marrow aspiration alone. Trephine biopsy is necessary for diagnosing Granulomatous Inflammation and Hypoplastic/Aplastic Anaemia. Also trephine biopsy is required to diagnose Myelofibrosis and Lymphomatous infiltration.

Bone Remodeling

Facial proportions in different mandibular rotations in class I individuals.

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IAJD-International Arab Journal of Dentistry 2014; 5 (1): 9-18

Keywords: Mandible-anatomy and histology; Sex Characteristics; Mandible-growth and development; Vertical Dimension; Rotation

Abstract: The aims of this study were to evaluate facial proportions in different types of mandibular rotation using various parameters, to explore gender dimorphism within each type and to evaluate the correlation between the mandibular rotation measurements and the facial proportions. Lateral cephalograms of a total of 62 class I subjects [30 males and 32 female], aged between 18-25 years, were studied. The sample was divided into forward, normal, and backward rotation subgroups. Nine soft tissue facial proportions and five skeletal proportions were measured on lateral cephalometric radiographs. The facial proportions data were analyzed using independent sample Student t-test and Pearson correlation analysis. The backward rotation subjects showed the lowest value for the proportion of total posterior facial height [TPFH] and total anterior facial height [TAFH] and proportion of lower posterior facial height [LPFH] and TPFH and the highest value for the proportion of Sn-Pn./Stms-Sn., while forward rotation subjects exhibited the lowest value for proportion of upper posterior facial height [UPFH] and TPFH. Gender dimorphism was recorded; males showed higher value for the proportion of TPFH and TAFH, as well as for the proportion of Sn-Me'/G-Me' and Me'-Stmi/Me'-Sn in the backward rotation group. All the skeletal facial proportions were found correlated with mandibular rotation measurements [NS-GoMe, B, FH-GoMe, Bjork] while only the soft tissue proportion for G-Sn/Sn-Me', Sn-Me'/G-Me' and G-Sn/G-Me' were correlated with mandibular rotation measurements. The soft tissue drape particularly facial vertical dimensions are influenced by the underlying skeletal vertical pattern.

Boraginaceae

[Biomechanical evaluation of root extracts of *Onosma dichroanthum* Boiss. on skin wound healing in rat]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 55-61

Keywords: Wound Healing; Plant Extracts-pharmacology; Plant Roots; Plant Preparations-therapeutic use; Plant Extracts-therapeutic use; Models, Animal; Rats, Wistar; Plants, Medicinal

Abstract: *Onosma dichroanthum* Boiss. is one of the most important mountainous medicinal plants in Iran. This study was done to determine the biomechanical evaluation of root extract ointment of *Onosma dichroanthum* Boiss. on wound healing in rats. In this experimental study, 18 male adult Wistar rats were randomly allocated into control [I], vehicle [II] and treated group with ointment containing of extract 1% of root of *Onosma dichroanthum* Boiss. [III]. 20 mm vertical skin incision wound were made on rats back side. The assessment of the wound healing was carried out at day 14. At the end of study, rats were sacrificed, skin sample were extracted and evaluated by biomechanical method [maximum force, elastic stiffness, energy absorption]. There was no significant difference in biomechanical parameters among the treated, vehicle and control groups. Topical application of *Onosma dichroanthum* Boiss. root have no effect on healing of skin wound in animal model.

Bruxism

rehabilitation

[Global Beauty and functional rehabilitation by scheduled hearing in a Bruxism case]

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IAJD-International Arab Journal of Dentistry 2014; 5 (1): 31-37

Keywords: Masticatory Muscles; Stress, Psychological; Tooth Wear-etiology; Stomatognathic System

Abstract: Bruxism is an unconscious behavior characterized by contractions of the masticatory muscles outside the physiological functions. The dentist is required to manage the oral consequences of bruxism; the most remarkable one is dental wear. When the dental degree of damage becomes important, a total fixed prosthetic treatment must be conceived. The prosthetic rehabilitation aims at restoring all the occlusal functions [centering, guidance], to allow the entire masticatory system to operate with minimal constraints. It must redefine esthetic criteria, reestablish a good functional occlusal stability and optimize the functions of the masticatory system. These basic concepts are illustrated by the presentation of a clinical case of a patient suffering from bruxism.

Carcinoma, Renal Cell

pathology

Clinico-pathological prognostic factors of renal cell carcinoma: a 15-year review from a single center in Greece.

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Urology Annals 2014; 6 (2): 116-121

Keywords: Nephrectomy; Disease-Free Survival; Retrospective Studies; Carcinoma, Renal Cell-mortality; Kidney Neoplasms-pathology; Prognosis; Review Literature as Topic

Abstract: To investigate the prognostic significance of certain clinical and pathological factors of renal cell cancer. One hundred and fourteen patients who underwent radical nephrectomy between 1996 and 2011 in our hospital were examined. Parameters including age, gender, mode of presentation, hematological and pathological parameters were evaluated for their role as predictors of disease-free and overall survival. Median follow-up was 69 months. Predominant histological type, pathological stage, and nuclear grade were clear cell carcinoma, pT1, and Fuhrman II, respectively. Five-year overall and disease-free survival were 86% and 82%, respectively. Only nuclear grade [P = 0.02] and preoperative anemia [P < 0.01] were correlated with overall survival, while pathological stage, nuclear grade, anemia, and neutrophil-to-lymphocyte ratio of 2.7 or greater were associated with disease-free survival [P = 0.02, P = 0.038, P < 0.01, P = 0.049, respectively]. In the multivariate setting, anemia [P = 0.04] and pathological stage [P = 0.026] were the only independent statistically significant predictors of disease-free survival, while anemia [P = 0.018] and neutrophil to lymphocyte ratio [P = 0.034] were the only factors correlated with overall survival. Due to the wide

application of various imaging studies, patients with kidney cancer are diagnosed more often with localized disease and favorable pathological features. Fuhrman nuclear grade, pathological stage, preoperative anemia, and neutrophil to lymphocyte ratio are strongly associated with survival. In localized disease, such information could be used to guide the intensity of follow-up and identify high-risk patients who can be targeted for adjuvant therapy trials.

Rare synchronous metastases of renal cell carcinoma.

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Urology Annals 2014; 6 (2): 157-158

Keywords: Neoplasm Metastasis; Penile Neoplasms-secondary; Urinary Bladder Neoplasms-secondary; Priapism; Hematuria-etiology; Neoplasms, Multiple Primary

Abstract: Renal cell carcinoma can metastasize to any region of the body. We review a patient who presents fourteen years after initial resection of the primary tumor with distant metastatic disease. This included spread to the bladder and penis that manifested as frank haematuria and malignant priapism respectively. We discuss the mechanism of spread and the management options available.

Carcinoma, Squamous Cell

diagnosis

Photo dermat diagnosis a perianal skin 35-year-old female.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 101-102

Keywords: Anal Canal-pathology; Papillomavirus Infections-diagnosis; Carcinoma, Verrucous; Keratinocytes

genetics

Role of protein kinases and Kirsten Ras pathways in oral squamous cell carcinoma and poorly differentiated oral squamous cell carcinoma in Punjab [Pakistan] population.

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The University of Lahore - University College of Dentistry

Pakistan Oral and Dental Journal 2014; 34 (1): 74-79

Keywords: Protein Isoforms; Mouth Neoplasms-genetics; Oncogenes; DNA Mutational Analysis; Gene Amplification; Genetic Predisposition to Disease; Tumor Markers, Biological; Cell Cycle-genetics; Prognosis

Abstract: Oral Squamous Cell Carcinoma [OSCC] develops by accumulation of multiple genetic alterations, influenced by the patient's genetic predisposition as well as by environmental influences, that includes pan, chaalyia, tobacco, alcohol, chronic inflammation, and viral infection. This study was carried out to understand the molecular alterations which contribute to the development of OSCC in Pakistani population. The study was conducted on a sample of 53 patients collected from different hospitals of Lahore. Results of this study indicate that Akt levels shows higher expression with increase in grades. The value of Akt1 in well differentiated grade 1 tissue is of the order of 0.09+0.00, Akt2 is 0.04+0.00 and Akt3 is 0.02+0.00 while in poorly differentiated tissues the values of Akt 1, Akt and Akt3 are 0.22+0.09, 0.13+0.03 and 0.06+0.01 respectively. kRas is an oncogene which is highly elevated in both grades [well differentiated: 0.09+0.02 and poorly differentiated: 0.13+0.02] in all samples of OSCC. In conclusion, our data demonstrated that Akt isoforms and kRas significantly control the cancer transition pathway. It is seen that Akt 1 expression rises from 2.5- fold in well differentiated tissues to 3.5-fold in poorly differentiated tissues. The Akt-2 on the other hand shows only 0.5-fold increases from normal tissue in grade 1 tissues, but rises to 4-fold in grade-3 tissue. On the other hand there was no change in Akt-3 as compared to normal in grade I tissues yet, 3-fold increase has been recorded in grade III tissue. The oncogene K-RaS shows consistent increase of the order of 2.5-fold in grade I and 3-fold in grade III. This information combined with histopathological reports can further improve our understanding of the prognosis of oral squamous cell carcinoma.

Cardiac Catheterization

instrumentation

Incidence, management and subsequent outcome of transcatheter embolized devices- three years audit at a tertiary cardiac care center.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S49-S52

Keywords: Embolization, Therapeutic-instrumentation; Cardiac Catheterization-adverse effects; Incidence; Follow-Up Studies; Tertiary Care Centers; Treatment Outcome

Abstract: To audit the incidence of misplaced devices during varied interventional procedures carried out in our catheter lab over a period of three years. Descriptive study Armed Forces Institute of Cardiology and National Institute of Heart Diseases. From January 2011 to December 2013 All adult and pediatric cases with structural heart disease both congenital and acquired undergoing interventional procedures were included in the study. Out of a total of 3256 patients, 1174 patients who underwent cardiac catheter device implantation procedures during the study period were included in the study. Nineteen patients out of 1174 patients [1.6%] had device embolization acutely or sub acutely following the procedure. The varied reasons for the device embolizations were analyzed in this study. We concluded that for retrieval to be successful via the transcatheter approach, it was important to have a wide selection of retrieval equipment available and to be conversant with its use. Our audit also concludes that device implantation at our center are safe and an effective procedure with minimal complications.

Cathepsins

Study of cathepsins involved in haemoglobin and vitellin digestion in Rhipicephalus [Boophilus] annulatus larvae by one- and two dimensional zymography.

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Journal of Veterinary Research 2014; 69 (1): 25-31

Keywords: Ticks-enzymology; Cysteine Proteases; Vitellins; Rhipicephalus; Larva; Proteomics; Peptide Hydrolases

Abstract: Enzymatic digestion of proteins in ticks is a complex process and the study of functional proteomics of these enzymes can help to select them as possible vaccine candidates. Blood protein changes [e.g. haemoglobin to vitellin] occur in female mature ticks. Vitellin digestion, as an amino acid and energy source, is one of the vital and important processes in development and evolution of tick eggs and larval stage of unengorged ticks. Several studies reveal a network of proteolytic enzymes involved in haemoglobin and vitellin digestion. These enzymes are mostly cysteine and aspartic peptidases. The aim of this study was the detection of the cathepsins in Rhipicephalus [Boophilus] annulatus larvae extract. In the current research, cysteine proteases extracted from Rhipicephalus [Boophilus] annulatus larvae were studied by one- and two-dimensional zymography. Findings from one dimensional zymography showed a transparent band with 28 KDa. In two-dimensional zymography transparent area are seen in the dark gel background distributed in 21 to 65 KDa zones related to cathepsins. When DTT was added to incubation buffer [10 mM acetate buffer, pH= 4], the proteolytic activity of some enzymes was increased and appeared as more clear transparent bands in one-dimensional zymography compared with samples incubated in buffer without DTT. As the pH of incubation buffer was acidic and adding DTT resulted in increased activity of the enzymes, therefore, some of these proteolytic enzymes are assumed to be cysteine proteases.

Choledochal Cyst

diagnosis

An unusual cause of pain in the right hypochondrium.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 206-208

Keywords: Abdominal Pain-etiology; Choledochal Cyst-surgery; Choledochal Cyst-ultrasonography; Choledochostomy; Drainage-methods; Treatment Outcome

Abstract: Choledochal cyst is an uncommon anomaly of the biliary system. It manifests by cystic dilation of the extra or intrahepatic biliary tract or both. Three cases of choledochal cysts are reported, who had presented with pain in right hypochondrium. All the three patients presented in one Surgical Unit of a Teaching Hospital within a span of three months. The first patient was initially managed as obstructive jaundice, second as acute pancreatitis and third patient as a case of pancreatic pseudocyst. However, after investigations, the final diagnosis in all three of them was the same i.e. choledochal cyst which was managed by Roux-en-Y hepatico-jejunostomy.

Cholelithiasis

microbiology

Frequency of common bacteria and their antibiotic sensitivity in patients with symptomatic cholelithiasis.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 177-183

Keywords: Bile-microbiology; Microbial Sensitivity Tests; Cross-Sectional Studies; Bacteria-isolation and purification; Bacteria-drug effects

Abstract: To determine the frequency of common bacteria and their antibiotic sensitivity in patients with symptomatic cholelithiasis This cross sectional descriptive study was conducted at Department of Surgery, Lady reading hospital, Peshawar for 6 months i.e., from December 2012 to May 2013. The total number of patients were 126. They presented with symptomatic cholelithiasis. Bile was aspirated preoperatively before cholecystectomy from gall bladder and was sent for culture and sensitivity test. The data was analyzed using Statistical Package for Social Sciences[SPSS] version 10.0. On culture and sensitivity test, 74 [58.73%] have positive growth while 52 [41.27%] have no growth. The most common bacteria was E. Coli isolated in 28 [22.22%] patients followed by Klebsella in 22 [17.46%], Salmonella 16 [12.70%] and Shigella in 8 [6.35%] patients. On culture and sensitivity test, all the 4 isolated bacteria showed sensitivity to Cefuroxime, Ceftriaxone and Ciprofloxacin in more than 50 % cases, while all the four bacteria showed resistance to amoxicillin in more than 50 % cases. The most common bacteria of symptomatic cholelithiasis are E. coli and Klebsella followed by Salmonella and Shigella. These bacteria showed maximum sensitive to cefuroxime and ceftriaxone.

Chromosomes, Human, Pair 14

Chromosome duplication [14q] and the genotype phenotype correlation.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 95-98

Keywords: Chromosome Duplication; Prenatal Diagnosis; Nuchal Translucency Measurement; Genetic Association Studies; Genotype; Cytogenetics; Chromosome Banding

Abstract: The rearrangement of chromosome 14 is a rare cytogenetic finding. Changes in the number or structure of chromosome 14 can have a variety of effects, such as delayed growth and development, and distinctive facial features. The human chromosome 14 plays an important role in imprinting events important of a structural rearrangement is specifically when a phenotype is caused by imprinting, whereby the interpretation of genotype-phenotype correlation becomes extremely difficult. In this study, we examined a 3 year-old mentally impaired girl with unusual facial features. G-banding showed terminal duplication of chromosome 14 in the karyotype of the patient. In this particular case, we explained a phenotype genotype correlation in a patient with a dup [14] rearrangement, thus emphasizing the importance of prenatal diagnosis for pregnancies with an abnormal nuchal translucency.

Cogan Syndrome

diagnosis

[Cogan's syndrome: a case report]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 136-140

Keywords: Cyclophosphamide; Eye Diseases; Evoked Potentials, Auditory, Brain Stem; Hearing Loss, Sensorineural; Hearing Loss, Bilateral; Systemic Vasculitis

Abstract: Cogan's syndrome is a chronic inflammatory disorder of unknown cause affecting mostly young adults. Two main observation of the disease are bilateral interstitial keratitis and vestibuloauditory dysfunction. Association between Cogan's syndrome and systemic vasculitis as well as aortitis are exist. The diagnosis of the disease is based upon the presence of inflammatory eye disease and vestibuloauditory dysfunction. In this article, the classic Cogan's syndrome has been reported in a 47-year-old woman. Two months prior to admission, the patient had been suffering from headache, vertigo, nausea, vomiting, right leg claudication, musculoskeletal pains, bilateral hearing loss and blindness. Ophthalmologic examination revealed that visual acuity was 0.1 bilaterally and on slit lamp examination,

there was a conjunctival hyperemia, bilateral cataract and interstitial keratitis. Pure tone audiogram [PTA] and auditory brain stem response [ABR] showed bilateral sensorineural hearing loss. The patient was initially treated with pulse intravenous methylprednisolone and was followed by oral prednisolone and cyclophosphamide, which in follow-up showed partial improvement.

Congenital Abnormalities

epidemiology

Frequency and pattern of distribution of antenatally diagnosed congenital anomalies and the associated risk factors.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 184-188

Keywords: Congenital Abnormalities-diagnosis; Pregnancy Outcome; Prenatal Diagnosis; Risk Factors; Consanguinity; Congenital Abnormalities-prevention and control

Abstract: To find the frequency and pattern of distribution of antenatally diagnosed congenital anomalies and the associated risk factors. This descriptive study was carried out at the department of Obstetrics and Gynecology, Lady Reading Hospital Peshawar from March 2012 to April 2013. Women with ultrasound report of congenitally abnormal fetus irrespective of the gestational age were included. They were evaluated for the presence of risk factors including periconceptional use of folic acid, maternal medical disorders e.g diabetes, epilepsy and history of smoking, maternal and paternal ages, consanguineous marriages and family history of anomalies. A total of 62 women were included in the study. Fifty seven [91.9%] were having isolated anomalies while 5 [8.1%] presented with complex anomalies. Central nervous system [CNS] was the most commonly involved system [79%]. Lack of folic acid use and consanguineous marriages were two most important risk factors; however their correlation with congenital anomalies was not significant. Forty eight [77.4%] women have never used folic acid and consanguineous relation was present in 52 [83.9%]. Other risk factors like maternal medical disorder e.g. diabetes, epilepsy, maternal and paternal ages, family history and maternal smoking were non-significant. Lack of periconceptional use of folic acid and consanguineous marriages were two most important risk factors. Awareness among the general population and improvement in the antenatal care can help in the early detection and management of congenital anomalies.

Constipation

prevention and control

[Effect of cow's milk elimination from children diet on chronic constipation]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 62-65

Keywords: Milk Hypersensitivity-complications; Milk Proteins-adverse effects; Constipation-etiology; Chronic Disease; Abdominal Pain-etiology; Child

Abstract: Children constipation is one of the common causes of abdominal pain. Cow's milk in children diet is suggested to be one of the main cause of chronic constipation. This study was performed to determine the effect of cow's milk elimination from children diet with chronic constipation. This quasi-experimental study, was performed on 80 children with chronic constipation. Rome-III criteria were considered for disease diagnosis. Cow's milk was eliminated for three weeks from children's diet and the clinical symptoms in children were surveyed, subsequently. Constipation was cured in 33.8% of children as result of cow's milk free diet. The rate of treatment response in affecting children whom their disease in began under 2 years of age [52.6%] was significantly higher than others [16.6%] [P<0.05]. Children treatment was not significantly related to child's gender and amount of milk consumption. Eliminating of cow's milk from the diet improves the chronic constipation in children.

Corneal Ulcer

surgery

Comparative evaluation of conventional medical treatment alone versus conventional medical treatment with amniotic membrane transplantation in infective corneal ulcer.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 206-210

Keywords: Amnion-transplantation; Epithelium, Corneal-injuries; Epithelium, Corneal-surgery; Evaluation Studies as Topic; Treatment Outcome

Abstract: To compare the effect of amniotic membrane transplantation along with conventional therapy and the conventional therapy alone for the treatment of infective corneal ulcer. This study was conducted at Ophthalmology Department, Hayatabad Medical Complex Peshawar. The duration of study was 6 months, i. e., from April 2010 to October 2010, in which a total of 68 patients were included using WHO software for sample size determination. They were divided into two equal groups of 34 each. Non probability purposive sampling technique was used. In this study, mean age was 50+/-0.24 years. Forty six [67.6%] patients were male while 32.4% [n=22] patients were female. Conventional Medical Treatment alone was effective in 87% [n=30] cases while Conventional Medical Treatment with Amniotic Membrane was effective in 96% [n=33] cases with a p-value of 0.03. This study showed encouraging results of amniotic membrane transplantation along with conventional treatment in corneal ulcer in improving both symptoms and signs.

Coronary Angiography

Frequency of common modifiable risk factors in patients with myocardial damage undergoing single vessel coronary angioplasty.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S35-S38

Keywords: Risk Factors; Creatine Kinase, MB Form-analysis; Biological Markers; Angioplasty, Balloon, Coronary-adverse effects; Cardiomyopathies-diagnosis; Cardiomyopathies-etiology; Myocardium-enzymology; Stents-adverse effects

Abstract: To determine the frequency of common modifiable risk factors in patients with myocardial damage undergoing single vessel coronary angioplasty. Descriptive study. Armed forces Institute of Cardiology / National institute of Heart Disease Rawalpindi from June 2012 to Nov 2013. Hundred patients undergoing elective single vessel percutaneous coronary angioplasty were evaluated with creatinine kinase and creatinine kinase MB levels before, after 8 hours and 24 hours following coronary angioplasty. The detailed performa was filled from each patient covering the necessary variables. Out of 100 patients 22% had raised creatinine kinase at 8 hours and 43% had raised creatiniric kinase after 24 hours following coronary angioplasty. Whereas 19% patients and 38% patients had raised creatinine kinase MB levels at 8 hours and 24 hours following the procedure respectively. No patient had rise of creatinine kinase or creatinine kinase MB more than 3 times of normal limits in the study. Among patients with raised CK-MB highest frequency was of diabetes mellitus, raised LDL levels, smoking and hypertension. Patients with raised CK-MB levels after 1[st] day of coronary angiography had diabetes mellitus [84%], raised LDL levels [79%], smoking [68%] and hypertension [58%].

A multi slice computed tomography coronary angiographic study of coronary artery disease in soldiers with chest pain.

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Armed Forces Institute of Cardiology

PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S1-S3

Keywords: Tomography, X-Ray Computed-methods; Coronary Vessels-radiography; Coronary Disease-radiography; Coronary Artery Bypass; Military Personnel; Chest Pain-radiography

Abstract: The study is sought to highlight the role and results of MSCT angiography in scenario of acute chest pain to determine or exclude significant coronary artery disease in patients who do not have high risk features for significant coronary disease. Descriptive study. Computed topography department, Armed Forces Institute of Cardiology, National Institute of Heart Diseases Rawalpindi from September 2013 to December 2013. A total of 150 patients [soldiers] who were referred to this hospital with chest pain and who did not have high risk features were evaluated by multi slice computed coronary angiography. One hundred and fifty patients who reported to this hospital with chest pain were evaluated by multi slice computed tomography [MSCT] angiography. Their age ranged from 20 to 53 years. Cases studied were those having low probability of coronary artery disease. Patients having high probability of coronary disease, acute coronary syndrome or definite coronary artery disease were excluded from this study and were

evaluated by conventional coronary angiography, 114 [76%] patients showed normal coronary arteries. 6 [4%] had subcritical coronary disease, 5 [3.33%] had only minor irregularity in coronary arteries, 4 [2.66%] had significant coronary artery disease that necessitated coronary angiogram. 16 [10.66%] cases had muscle bridge in left anterior descending artery. One [0.66%] patient had patent graft after coronary artery bypass graft surgery. Three [2%] patient's had patent stents in coronary arteries. While 1[0.66%] patient had aberrant origin of coronary artery. There were no side effects observed during study. Patients presenting with chest pain with low risk features can be studied conveniently with MSCT angiography. Prevalence of significant coronary artery disease is low. MSCT angiography is a very useful, convenient and safe tool to screen low risk patients to rule out presence of significant coronary artery disease.

Coronary Artery Bypass

adverse effects

Reduction in platelet count in post CABG patients with or without IABP- an experience at AFIC/NIHD Rawalpindi.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S90-S93

Keywords: Platelet Count; Intra-Aortic Balloon Pumping; Blood Platelets-pathology; Coronary Vessels

Abstract: To study the reduction in platelet count in patients after coronary artery bypass grafting having IABP placed peri operatively with and without IABP placed. Descriptive Study. Armed Forces Institute of Cardiology/National Institute of Heart Diseases [AFIC/NIHD] from Jan 2012 to Dec 2013. All cases with intra-aortic balloon pump [IABP] placed peri operatively [coronary artery bypass grafting, CABG] during this time period were examined in detail. Only those patients who had a platelet count of 150,000 or more pre operatively were included in the study. Patients taking medicines pre operatively that lead to decrease in platelet count were excluded. Platelet counts of each patient were analyzed till the third post-operative day. One hundred and fifty patients were divided into two equal groups, group A without IABP and group B with IABP. Patients without IABP [group A] pre operatively had mean platelet count of 223.57 +/- 83.02, on first post op day the mean platelet count was 171.0 +/- 59.0 which was 76.48% of preoperative level, on second post op day the mean platelet count was 168.1 +/- 59.4 which was 75.20% of preoperative level and on third post op day the mean platelet count was 167.5 +/- 60.0 which was 74.95% of pre-operative level. Patients with IABP [group B], pre operatively had mean platelet count of 205.32 +/- 50.257, on first post op day the mean platelet count of 152.71 +/- 43.77 which was 74.37% of preoperative level, on second post op day the mean platelet count was 112.11 +/- 42.571 which was 54.60% of preoperative level and on third post op day the platelet count was 90.87 +/- 41.538 which was 44.25% of preoperative level. There was significant reduction in platelet count from the pre-operative level in both the groups. Reduction in platelet count in post CABG patients is similar in both the groups i.e. in whom IABP is and those patients who are not treated with IABP.

Coronary Thrombosis

epidemiology

Culprit artery characteristics and severity of angiographic thrombus burden in primary percutaneous coronary intervention in patients presenting with ST elevation myocardial infarction.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S22-S26

Keywords: Percutaneous Coronary Intervention-adverse effects; Coronary Angiography; Coronary Thrombosis-prevention and control; Myocardial Infarction-surgery; Angioplasty, Balloon, Coronary; Thrombolytic Therapy

Abstract: The purpose of study was to characterize culprit artery characteristics in terms of presence of thrombus burden in patients with acute myocardial infarction using prevalent parameters of thrombus estimation. Descriptive study. Adult cardiology departments of Armed Forces Institute of Cardiology / National Institute of Heart Diseases [AFIC/NIHD] from 1[st] October 2011 to 31[st] September 2012. We studied 119 patients treated with primary percutaneous coronary intervention for ST- segment myocardial infarction. Bare metal stents were used in all patients as per hospital protocol. Thrombus burden [TB] was graded [G] as G0 = no thrombus, G1= possible thrombus, G2 = small [greatest dimension <, 1/2 vessel diameter [VD]], G3 = moderate [>1/2 but <2 VD], G4 large [>2 VD], G5 = unable to assess TB due to vessel occlusion. Patients with G5 were reassessed after passage of guide wire or small balloon for thrombus burden. Frequency of major adverse cardiac events [MACE]-defined as death, myocardial infarction and infarct- related artery revascularization was recorded for the pen-procedural period which was defined in our study up to 72 hours. Overall, in hospital MACE was 8.4%. Large thrombus burden is a significant predictor for mortality and MACE.

Cystadenoma, Serous

pathology

Simultaneous serous cyst adenoma and ovarian pregnancy in an infertile woman.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 85-90

Keywords: Ovarian Neoplasms-pathology; Cystectomy; Cystadenoma, Serous-surgery; Ovariectomy; Pregnancy, Ectopic

Abstract: Ovarian pregnancy is a rare form of extra uterine pregnancy. Serous cyst adenoma is a benign variant of epithelial cell tumors of ovary. The coexistence of a cyst adenoma with an ovarian pregnancy in the same ovary is extremely rare. Some studies suggested that infertility or ovulation-inducing drugs can be involved in increased risk of ovarian tumors and ovarian pregnancies. A 28-year-old infertile woman presented with a ruptured ovarian pregnancy following ovulation induction with metformin. She had a concurrent benign serous cyst adenoma in the same ovary. Resection of both ovarian pregnancy and tumoral mass were performed. The ovary was preserved. Removal of gestational tissue and preservation of the involved ovary are the best options for management of ovarian pregnancy in young patient. Although there is an association between infertility/ovulation inducing medications and ovarian gestation, their connections with serous cyst adenoma are undetermined.

Cystitis, Interstitial

drug therapy

Chemical cystitis developed in experimental animals model: topical effect of intravesical ozone application to bladder.

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Urology Annals 2014; 6 (2): 122-126

Keywords: Ozone-therapeutic use; Ozone-pharmacology; Treatment Outcome; Disease Models, Animal; Cystitis, Interstitial-chemically induced; Epithelial Cells; Administration, Intravesical; Hydrochloric Acid; Rabbits

Abstract: To demonstrate the effects of intravesical ozone treatment on inflammation and epithelial cell damage in chemical cystitis animal model. A total of 30 New Zealand rabbits were divided into six groups. Cystitis was conducted with transurethral intravesical hydrochloric acid instillation on the subjects in Groups IA, IB, IIA, and IIB. Then, Group IA-IB subjects were transurethrally administered intravesical ozone therapy twice a week, while Group IIA-IIB subjects were only given intravesical isotonic NaCl instillation. Group IIIA-IIIB subjects were administered intravesical isotonic NaCl instillation without conducting chemical cystitis in order to create the same stress. Treatment schemes of all groups were arranged in the same manner. Following a 3-week [early period] and 6-week [late period] therapy, the rabbits were sacrificed and histopathologic investigations were carried out in order to demonstrate changes in the urinary bladder. In our study, we observed that the basal membrane and mucosal integrity were maintained, inflammatory cells were suppressed in Group IA-IB [Early and late period], which received ozone therapy. However, it was also observed that mucosal integrity was spoiled, numerous inflammatory cells were accumulated in Group IIA-IIB, which was administered isotonic NaCl. Due to its low cost and minimal side effects; ozone therapy could be a new therapeutic approach in the treatment of interstitial cystitis.

Dendritic Cells

An optimized method for ex vivo generation of dendritic cells.

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Journal of Veterinary Research 2014; 69 (1): 17-23

Keywords: Granulocyte-Macrophage Colony-Stimulating Factor; Bone Marrow Cells; Antigen-Presenting Cells; Immunophenotyping; Interleukin-4; Stem Cells; Antigens, CD11; Cell Culture Techniques

Abstract: Dendritic cells are the most potent antigen presenting cells. They capture, process and present antigens to T cells and secrete various cytokines and soluble factors to initiate adaptive immune responses. Dendritic cells are also important in induction of immunological tolerance to self- antigens. Due to their crucial role in immune responses during infections, cancers, transplantations, allergies, and autoimmune diseases, they have become important targets

for many biological and clinical studies. Usually large numbers of dendritic cells is essential for these studies; however, small numbers of these cells in blood and tissues makes the isolation very difficult. Therefore, In vitro generation of these cells is useful for research and clinical applications. The aim of this study was in vitro generation of dendritic cells from bone marrow-hematopoietic progenitor cells using a simple and efficient method. Murine bone marrow cells were cultured in medium supplemented with Granulocyte-macrophage colony-stimulating factor and Interleukin 4 without depletion of any cell population for 9 days. Fresh medium containing cytokines was added every 3 days. Analysis of the morphology and immunophenotype of cultured cells showed the generation of dendritic cells from day 2 of the culture period. But, the number of cells that possess morphological characteristics and typical cell surface markers [CD11c, MHC-II and CD86] of dendritic cells was elevated by increasing the culture period. The purity of dendritic cells was 86% by the end of 9 days culture. This method can be used as an efficient method for ex vivo generation of dendritic cells.

Dental Care for Chronically III

methods

Dental management of diabetic patients: a clinical review.

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IAJD-International Arab Journal of Dentistry 2014; 5 (1): 26-30

Keywords: Diabetes Complications; Diabetes Mellitus-complications; Dental Caries-etiology; Mouth Diseases-etiology; Comprehensive Dental Care; Stomatognathic Diseases

Abstract: Diabetes describes a group of metabolic diseases resulting from impaired insulin secretion, varying degrees of insulin resistance, or both. Management of the diabetic dental patients must take into consideration the impact of dental disease and dental treatment on the management of diabetes as well as an appreciation for the comorbidities that accompany long-standing diabetes. Those comorbidities include obesity, hypertension and dyslipidemia. Management of the diabetic dental patient should focus on periodontal health and the delivery of comprehensive dental care with minimal disruption of metabolic homeostasis and recognition of diabetic comorbidities.

Dental Caries

epidemiology

Frequency of simultaneous presence of dental caries in mandibular first permanent molar and its antimere in children of Lahore Cantt.

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Military Dental Centre

Pakistan Oral and Dental Journal 2014; 34 (1): 139-141

Keywords: Molar; Child; Dentition, Permanent; Cross-Sectional Studies; Mandible

Abstract: The study was a cross sectional observational study undertaken to evaluate the frequency of dental caries in mandibular first molar and its antimere in the opposite mandibular quadrant in eight to ten years old children seen at 28 Military Dental Centre. The study involved 100 male and 100 female children of age 6-10 Years. 80[80%] males exhibited evidence of simultaneous presence of dental caries in mandibular first permanent molar and its antimere while 20[20%] males did not show any evidence. 85[85%] females exhibited evidence of simultaneous presence of dental caries in mandibular first permanent molar and its antimere while 15[15%] females did not show any evidence. Dental caries is frequently observed in the antimere of mandibular permanent first molar when the dental caries involves mandibular permanent first molar.

Prevalence of dental caries in Bibi Aseefa Dental College, Larkana areas.

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Pakistan Oral and Dental Journal 2014; 34 (1): 131-134

Keywords: Oral Hygiene; Age Factors; Socioeconomic Factors; Sex Factors; Cross-Sectional Studies; Chi-Square Distribution; Social Class

Abstract: The study was conducted for the first time in Bibi Aseefa Dental College [BADC], Larkana from April 2012 to March 2013 to evaluate the prevalence of dental caries in Larkana city and its adjoining areas, and to know the effect of age, gender, socioeconomic status, oral hygiene status and attitude towards dental awareness to caries prevalence. It was a Cross-sectional study. Six hundred patients between 13-20 and 21-30 years of age were selected from dental OPD, BADC, Larkana. The dentition was examined using WHO 1997 guidelines. The results were tabulated and statistically analyzed. Chi-square test was used to evaluate results. The overall caries prevalence in 13-

20 years and 21-30 years old groups in Larkana city and adjoining areas determined was 100%. The mean DMFT value was higher i.e. 3.42 in age group 13-20 years. Besides age, the gender, socioeconomic status, oral hygiene status and attitude towards dental awareness were significantly related to dental caries prevalence. It was concluded that prevalence of dental caries in Larkana city and its adjoining areas was found considerably higher, and it was significantly related to bad oral hygiene and socioeconomically deprived patients which indicates lack of awareness and motivation. Prevalence of dental caries decreased with increasing age.

Dental Cavity Lining

Depth of the cavity and its relationship with the post-operative sensitivity in class I posterior resin composite restorations on molars.

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Pakistan Oral and Dental Journal 2014; 34 (1): 135-138

Keywords: Dentin Sensitivity-etiology; Dental Restoration, Permanent; Dental Cavity Preparation; Composite Resins; Cold Temperature; Occlusal Adjustment; Molar; Chi-Square Distribution; Data Collection

Abstract: This study was conducted to assess the post-operative sensitivity in different depths of Class I cavities in molars restored with posterior composite resin. It was an Experimental study and was conducted in Fatima Jinnah Dental Hospital, Karachi from May 2010 to October 2010. One hundred and thirty one patients had Class I cavities [depth of cavities between 3-4mm] were selected after clinical and radiographic examination. After rubber dam isolation, Class 1 cavity prepared on molars teeth. Incremental technique was used to restore cavity with posterior composite resin. After finishing the filling, patient was recalled at day 7 to assess post-operative sensitivity with cold and hot stimuli. Data were collected using data collection proforma, were computerized and analyzed by using SPSS [Statistical Package of Social Sciences] version 17. One hundred thirty one patients, 61 male and 70 female formed the study group. The mean age was 29.6 [+/-9.004] years. The mean score of post-operative sensitivity was 1.05 for cold [+/-0.226] and 1.04 [+/-0.192] for hot. The chi-Square test revealed significant results with p-value < 0.000 for cold and < 0.009 for hot, when both stimuli were analyzed with different cavities depths. Deeper cavities in Class I composite resin restorations showed more post-restoration sensitivity as compared to cavities with lesser depth in dentine.

Dental Enamel Hypoplasia

epidemiology

Enamel defects frequency in deciduous teeth.

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Pakistan Oral and Dental Journal 2014; 34 (1): 122-125

Keywords: Tooth, Deciduous-abnormalities; Amelogenesis; Cross-Sectional Studies; Child

Abstract: Developmental defects of the enamel are the result of alterations during amelogenesis due to hereditary, systemic or environmental factors. The present study was done to determine the frequency of developmental defects of enamel in primary teeth at Children Hospital PIMS, Islamabad from February 2011 to January 2012. The study was cross sectional and sample comprised of 300 children, which included 182 [60.7%] males and 118 [39.3%] females. The mean age of the studied population was 3.63+/-1.05 years. Enamel defects were present in 115 [38.3%] children. Out of 182 males 69 [37.9%] males and out of 118 females, 46 [38.9%] females had enamel defect; thus frequency of enamel defect was not significantly different between the two genders [p=0.852]. The mean age of the children with enamel defect was 3.74+/-1.00 and mean age of children without enamel defect was 3.55+/-1.06 years respectively. This difference was not statistically significant [p=0.124]. Frequency of enamel defect was significantly higher among families with higher income categories [p=0.020]. Out of 300 children, 185 [61.7%] had normal enamel, 5 [1%] had only demarcated opacity, 9 [3%] had only diffuse opacity, 80 [26.7%] had only hypoplasia, 3 [1%] had demarcated diffuse opacity, 3 [1%] had demarcated opacity with hypoplasia, 13 [4.3%] had diffuse opacity with hypoplasia and 2 [0.7%] had all three defects. Present study concluded that more than one third of the children had developmental defects of enamel in primary teeth and most frequent lesion was enamel hypoplasia.

Dental Implants

A step by step guide to finite element analysis in dental implantology.

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Pakistan Oral and Dental Journal 2014; 34 (1): 164-169

Keywords: Finite Element Analysis; Periodontal Diseases; Osseointegration; Dental Prosthesis Design; Dental Prosthesis, Implant-Supported; Dental Stress Analysis-methods

Abstract: As a consequence of dental implant treatment being considered effective, safe and predictable they are now a preferred solution for those who have lost teeth due to dental caries, periodontal disease, injuries or other reasons. The biomechanical performance of implants cannot be proven or tested in vivo due to difficulties in assessing or quantifying the level of osseointegration, the stability of the implant and various other factors. Finite element analysis [FEA] has been used extensively to examine intractable and inaccessible interfaces of the dental implant assembly and to predict biomechanical performance as well as the effect of clinical factors on implant success. Although an in depth understanding of the theory, method, application and limitations of FEA in implant dentistry will help the clinician to interpret results of FEA studies and extrapolate these results to clinical situations, this article explains the basic practical steps involved in the utilization of FEA from a viewpoint of a researcher interested in conducting studies in dental implantology.

Dental Impression Technique

instrumentation

Impression techniques and materials used for fabrication of complete denture. A survey.

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Pakistan Oral and Dental Journal 2014; 34 (1): 170-173

Keywords: Dental Impression Materials; Denture, Complete; Questionnaires; Schools, Dental; Prosthodontics-education; Curriculum; Data Collection; Zinc Oxide

Abstract: In 2013, a survey of Pakistani dental graduates was conducted to determine which techniques and materials are currently prevalent in the teaching of initial and final impression procedures and custom tray fabrication for complete dentures in the undergraduate clinical curriculum. A questionnaire was prepared and distributed among 150 dentists belonging to different regions of the country. The questionnaire consisted of multiple choice questions. All responses remained anonymous. The results highlighted that majority of dental schools were following the traditional approach. Impression compound was used by 93% of the respondents. Self cure acrylic resin was used by 92% for making custom tray. Majority of the respondents [97%] were using Zinc oxide eugenol to record final impression. The findings from this study showed that impression technique and material used in the fabrication of complete denture in the existing prosthodontic curriculum require modification in order to raise the standard of under graduate dental program.

Dental Marginal Adaptation

Solubility of nanofilled versus conventional composites.

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Pakistan Oral and Dental Journal 2014; 34 (1): 118-121

Keywords: Dental Materials-analysis; Analysis of Variance; Dental Restoration, Permanent-instrumentation; Solubility; Nanocomposites-analysis; Nanostructures-analysis; Tooth Diseases-therapy

Abstract: Solubility of resin-based composite materials is of great importance in restorative dentistry, since inorganic ions present as fillers within composites can leach into the surrounding environment resulting in breakdown of the restoration. The aim of this study was to evaluate and compare solubility values of three different nanofilled light-activated composites with other four conventional composite dental materials. Seven commercial light-activated composite materials: Tetric Evo Ceram, Premise, Herculite, Z100, Z250, P60, Supreme XT. Ten disc specimens were prepared for each composite material using a stainless steel mold with 15 mm in inner diameter and 1 mm in thickness. The curing of each composite specimen was divided into five segments and each segment was photo-cures for 40 seconds. Water solubility of different materials was calculated by means of weighting the samples before and after water immersion [15 days] and desiccation. Data were analyzed by one-way ANOVA at 5% level of significance. Tetric Evo Ceram composite showed the lowest solubility values, while Premise composite displayed the highest values. Solubility values of the tested composites did not show significant differences among them [P>0.05]. All the composites being tested in this study exhibited solubility values within the acceptable limits and composite composition is insignificantly influences its water solubility values.

Dental Models

Diagnostic cast - a forgotten diagnostic tool.

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Pakistan Oral and Dental Journal 2014; 34 (1): 184-189

Keywords: Denture, Partial, Fixed; Denture Precision Attachment; Denture Design; Diagnostic Equipment; Tooth Preparation

Abstract: Dentists are challenged to create solutions for problems that patients present from chipped or missing teeth, a collapsed bite, or teeth that are irregular or misshapen. A clear diagnosis of the condition often is required for a proper treatment planning. The diagnostic cast helps the dentist to evaluate the condition of the patient's oral condition and for the diagnostic purposes. Casts may also be used as education tools for dentists as they explain characteristics of a patient's bite or particular dental needs. They can also show how a restoration will look when the work is complete.

Dental Pulp Cavity

Frequency of fourth canal in permanent mandibular first molars.

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Pakistan Oral and Dental Journal 2014; 34 (1): 142-146

Keywords: Molar; Dentistry, Operative; Epidemiology; Mandible; Molar; Chi-Square Distribution

Abstract: This study was carried out to investigate the frequency of fourth [distolingual] canal in the permanent mandibular first molars and to determine the effect of modified access cavity preparation for endodontic treatment. It was an observational study. The study was conducted at the Department of Operative Dentistry, Institute of Dentistry, Liaquat University of Medical and Health Sciences, Jamshoro/Hyderabad from September 2009 to February 2010. Two hundred permanent mandibular first molars were selected from male and female patients presenting for endodontic treatment. The method used for exploring the fourth canal was the modified access cavity preparation which involved changing the triangular access cavity shape to a quadrangular shape. The study involved careful selection criteria, pre-operative radiological examination and then triangular access cavity preparation. The number of canals found by triangular access cavity preparation was noted on the proforma before extending the shape to a quadrangular shape and then a thorough exploration of the floor of the pulp chamber was done. Finally, if fourth canal was present, the presence of the fourth canal was confirmed by taking two periapical radiographs at two different angles with 15 # K files in the root canals. The data collected were analyzed using the chi square test. The results showed that fourth canal was found in 36% of permanent mandibular first molars. The effect of modified access cavity preparation was significantly higher [P= 0.0001] in cases with a fourth canal than in teeth with three canals [P= 0.05]. Statistically there was insignificant difference [P= 0.7] between the genders for the occurrence of fourth canal. This study demonstrates that there is a greater frequency of fourth canal in the permanent mandibular first molar teeth than previously thought. Also changing the shape of access cavity from a triangular outline to a quadrangular outline facilitates in locating the fourth canal.

Dental Restoration Failure

Cross sectional study of endodontic failures in patients reporting at RACKODS dental clinic.

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Pakistan Oral and Dental Journal 2014; 34 (1): 154-158

Keywords: Root Canal Therapy-standards; Dental Pulp Cavity; Periapical Periodontitis; Root Canal Obturation-adverse effects; Medical Errors; Cross-Sectional Studies; Bacterial Infections-complications

Abstract: This study was conducted to evaluate the possible reasons for failure of Root canal treatment in patients screened at RACKODS dental clinic. Clinical observation of endodontic failure reveals multiple etiologies. [Stabholz, Lin, Torabinejad]. The Washington Study of endodontic success and failure suggests percolation of periradicular exudate into the incompletely filled canal as the greatest cause of endodontic failure. 547 patients with pain were examined clinically and radio-graphically for signs of failed root canal treatment over a period of eight months on a standard criterion by three different observers. 128 patients were found with post endodontic complaints and were included in the study. The inclusion criterion was; root canal therapy done more than six months ago; pain on percussion, outcome of thermal test and presence of periradicular radiolucency. The quality of root filling and the radiographic apical periodontitis was accessed according to the criteria proposed by De-Moor et al. In molars the most common reason for failure was inadequate obturation [44.7%] followed by fractured instruments [21.1%] and overextended fillings [13.2%]. In premolars the most common reason for failure was inadequate coronal sealing [30%] and inadequate obturation [30%]. Test of Homogeneity of Variances, Welch and Brown-Forsythe were done which yielded significant results. Appropriate measures for the control and prevention of infection are essential to maximize the success of retreatment; including strict asepsis, complete chemomechanical preparation using antimicrobial irrigants, intracanal medication, adequate root canal filling, and proper coronal sealing.

Denture, Overlay

The clinical trial of patient satisfaction with tooth and magnet supported overdenture by visual analogue scale [VAS]

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Pakistan Oral and Dental Journal 2014; 34 (1): 194-198

Keywords: Denture Retention-instrumentation; Dental Prosthesis, Implant-Supported; Magnets; Visual Analog Scale; Questionnaires; Treatment Outcome; Pain Measurement; Patient Satisfaction

Abstract: The purpose of this study was to determine the effect of magnet retained overdenture treatment over tooth supported overdenture and degree to which subjective treatment outcome could be predicted by VAS [Visual Analogue Scale]. 10 patients were identified and conventional over denture was delivered, they form group A1. In the same patients magnets were attached to the abutments and the same over denture was converted to magnet retained over denture after 6 months. They form group A2. They finished a questionnaire with 10 statements on overdenture complaint. Visual analogue scale were used to investigate their satisfaction. Difference between the group were analyzed. Magnet retained overdenture was shown to be very effective on compare to tooth supported overdenture.

Diabetes, Gestational

[Gestational diabetes reduces motor neurons of spinal cord in 4, 8 and 12 weeks rat offspring]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 29-34

Keywords: Motor Neurons; Spinal Cord; Models, Animal; Rats

Abstract: Previous studies have shown the adverse effects of gestational diabetes on hippocampal neuron density in animal model. This study was conducted to determine the effect of gestational diabetes on number of motor neuron in the ventral horns of spinal cord in 4, 8 and 12 weeks rat offspring. In this experimental study, 30 Wistar dams were randomly allocated in control and diabetic groups. Dams in diabetic group were received 40 mg/kg/bw of streptozotocin [STZ] at the first day of gestational day [GD] and control group were received an equivalent volume normal saline, intraperitoneally. Six offspring of cases and controls were randomly selected at the 4, 8, 12 postnatal weeks. Postnatal rats were scarified and sections [6 micrometer] were taken from the cervical part of spinal cord, stained by cresyl violet. A photograph of sections was produced using an Olympus BX51 microscope and a DP12 digital camera. The number of motor neurons in the right ventral horns of spinal cord was evaluated in 100000 microm² area of spinal cord using OLYSIA Autobioreport software. The number of motor neurons in 4 weeks rat offspring were reduced [24.90%] in gestational diabetics compared to controls [17.16+/-0.5 vs22.85+/-2.1, P<0.05]. The motor neurons in 8 weeks rat offspring were reduced [32.95%] in gestational diabetics in comparison with controls [17.70+/-1.7 vs26.40+/-2.0, P<0.05]. Also, the number of motor neurons in 12 weeks rat offspring were reduced [24.38%] in gestational diabetics in comparison with controls [17.83+/-0.7 vs23.58+/-1.4, P<0.05]. The uncontrolled gestational diabetes reduces the number of motor neurons in the ventral horn of spinal cord in rat offspring.

Diabetic Retinopathy

blood

Negative association of serum IL-6 and IL-17 with type-II diabetes retinopathy.

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IJ-Iranian Journal of Immunology 2014; 11 (1): 40-48

Keywords: Interleukin-6-blood; Interleukin-17-blood; Enzyme-Linked Immunosorbent Assay; Diabetes Mellitus, Type 2-complications; Case-Control Studies; Analysis of Variance; Cross-Sectional Studies

Abstract: Diabetes mellitus [DM] is a health concern which leads to complications such as retinopathy. Pakistan has 6.9 million people living with DM and this toll will be doubled by 2025. To determine serum IL-6 and IL-17 of type 2 diabetes mellitus [T2DM] patients with retinopathy. In this cross-sectional case- control study, 212 subjects enrolled which were categorized into 3 groups. Group-I included 30 subjects without diabetes, group-II consisted of 30 subjects with T2DM without retinopathy and group-III consisted of 152 subjects with T2DM and retinopathy. Serum IL-6 and IL-17 levels were determined by ELISA. Data was analysed using SPSS 17.0 and one way ANOVA to observe group mean differences. Longer mean duration of disease was detected in group-III than group-II [p=0.007]. Highest IL-6 level was detected in group-II and highest IL-17 level was detected in

group-I. For IL-6, significant differences were detected among groups in total, between Group-I and Group-III and between Group-II and Group-III [$p < 0.0001$ each]. Regarding IL-17, significant differences were found among groups in total [$p = 0.002$] and between Group-I and Group-III [$p = 0.001$]. No significant difference in the percentages of HbA1c observed between groups. Age, gender and duration of diabetes contribute to T2DM retinopathy. Serum IL-6 and IL-17 were inversely associated with T2DM retinopathy.

Diazinon

adverse effects

[Diazinon alters sex hormones, Interferon-gamma, Interleukin-4 and 10 in male Wistar rats]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 22-28

Keywords: Follicle Stimulating Hormone, Human; Interleukin-10-blood; Testosterone-blood; Rats, Wistar; Interferon-gamma-blood; Random Allocation

Abstract: Agricultural toxins including organochlorine and organophosphorus families cause damages in the various tissues in humans. Diazinon is a non-systemic organophosphate insecticide. This study was carried out to determine the effect of Diazinon on sex hormone, interferon gamma, interleukin-4 and 10 in male rats. In this experimental study 24 adult male Wistar rats were randomly allocated into four groups. Three experimental groups were received Diazinon 5 days per week for one month at 0.3, 3 and 30 mg/kg/bw intraperitoneally, while controls received nothing. Seven days after the last injection, blood samples were obtained and the serum testosterone, FSH, LH, interferon gamma, interleukin-4 and interleukin-10 were measured. Serum level of Interleukin-10 significantly increased in experimental group [30 mg/kg/bw of Diazinon] compared to controls [$P < 0.05$]. Serum level of Interleukin-10 significantly decreased in 0.3 mg/kg/bw and 3mg/kg/bw of Diazinon groups compared to controls [$P < 0.05$]. Interleukin-4 level was only significant in the group receiving 30 mg/kg/bw of Diazinon [$P < 0.05$]. Reduction in interferongamma level was not significant between control and experimental groups. FSH significantly reduced in the three experimental groups in comparison with controls [$P < 0.05$]. Testosterone level was significantly increased in experimental groups compared to control [$P < 0.05$]. Diazinon increases interleukin-10 and testosterone and reduces FSH hormone in the rat.

Digital Dermatitis

pathology

Atypical digital dermatitis of bovine claw in dairy cows: clinical and histopathologic findings.

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Journal of Veterinary Research 2014; 69 (1): 1-7

Keywords: Hoof and Claw-pathology; Foot Diseases-veterinary; Cattle Diseases-microbiology; Cattle Diseases-pathology; Evaluation Studies as Topic

Abstract: Digital dermatitis is an inflammation of the skin on the bulbs of the heel which cause lameness and economic losses. Atypical digital dermatitis is a new form of an old disease which has been reported recently in the USA, UK and Netherlands. The purpose of this study is the clinical and histopathological evaluation of claw lesions with exposed corium in cases of concurrent digital dermatitis in two endemically infected herds without preventative herd strategies for BDD. The majority of non-healing claw lesion samples included in this study were taken from 'typical' clinical cases, namely, from lame cows examined in the course of veterinary practice by one author over a period of 8 months in two commercial dairy farms in Iran. Forty five lame cows with claw lesions were selected for clinical and histopathological purposes. Examination of the affected claws revealed a topical granular appearance, painful to touch, prone to bleed with distinctive odour and extensive regional loss of the claw horn. Histologically, the epidermis was lost completely over the extension of sole ulcer lesion. The underlying dermis was intensely infiltrated by inflammatory cells, mainly polymorphic leukocytes, and in deep, newly formed capillaries were embedded in the stroma. Hyalinized thrombi were also significant in small blood vessels. In wall ulcer, there was extremely proliferative epidermis, 2-3 times with severe acanthosis and rete ridge formation. Stratum corneum was hyperplastic. The stratum corneum were filled with neutrophils, cellular debris and erythrocytes lodged in the orthokeratotic stratum corneum. In all the observed cases, the disorder included penetration through the horn capsule lesions to involve the corium, resulting in damage of the horn-forming cells. This new manifestation seems to be a combination of metabolic and infectious diseases.

Dilatation, Pathologic

radiography

Frequency and angiographic characteristics of coronary artery ectasia in patients undergoing coronary angiograms at AFIC and NIHD.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S31-S34

Keywords: Dilatation, Pathologic-epidemiology; Dilatation, Pathologic-mortality; Coronary Angiography; Constriction, Pathologic; Coronary Stenosis-epidemiology; Coronary Artery Bypass-methods

Abstract: To determine the frequency and angiographic characteristics of coronary artery ectasia in the patient population of AFIC and NIHD. Descriptive Study Armed Forces Institute of Cardiology and National Institute of Heart Diseases, Rawalpindi from Jan 2007 to Dec 2011. All coronary angiograms done during the period were included in the study. The reports of coronary angiograms of those patients who were diagnosed to have coronary artery ectasia were left circumflex artery reviewed to assess the distribution of ectasia in different coronary arteries. Concomitant significant coronary artery stenosis left ventricular [LV] systolic function and history of revascularization were also documented. Over the study period, a total of 41,459 patients underwent coronary angiograms. 548 [1.32%] patients were diagnosed to have coronary artery ectasia. Out of these 467 [85.21%] patients were males and 81 [14.78%] were females. Their mean age was 53.7 years. Left anterior descending [LAD] was the coronary artery, most commonly affected by ectasia followed by left circumflex artery [LCx] and Right coronary artery [RCA]. Twenty three patients also had ectasia of left main stem. Four Hundred and three [73.54%] patients also had concomitant occlusive coronary artery disease and 19.52% patients had history of coronary revascularization either by percutaneous coronary intervention [PCI] or coronary artery bypass grafting [CABG]. Coronary artery ectasia is not a benign disorder as it could present as acute coronary syndrome having its own morbidity and mortality.

Domestic Violence

[Prevalence of domestic violence against women]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 126-131

Keywords: Prevalence; Educational Status; Questionnaires; Substance-Related Disorders-psychology; Women; Cross-Sectional Studies

Abstract: Domestic violence is the most common against women with negative effect on mother's health, family, children and society. This study was performed to determine the prevalence of domestic violence against women in Bandar Abbas, Iran. This descriptive cross - sectional study was conducted on 500 women referred to Shahid Mohammadi hospital in Bandar Abbas, Southern Iran. Violence and physical injuries were recorded for each woman using a questionnaire. Domestic violence was reported in 460 [92 %] women. The mean age of women was 33.80+/-8.64 years. The mean years of marriage were 10.53+/-7.83 years. 389 [77.8%], 102 [20.4%] and 9 [1.8%] of women were housewife, employee and self employee, respectively. 14 [2.8%] women had addiction background. The most common type of violence against women was psychological [54%], followed by verbal [31%], physical [24.8%] and sexual [6.8%]. Level of education and addiction in the families were the main factors in domestic violence. Psychological violence is the most common type of domestic violence and it is related to the level of education and addiction in the families.

psychology

The effect of marital violence on infertility distress among a sample of Turkish women.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 67-76

Keywords: Infertility, Female-psychology; Family Characteristics; Data Collection; Women; Questionnaires; Cross-Sectional Studies

Abstract: The aim of this study was to determine the relationship between marital violence and distress level among women with a diagnosis of infertility. This cross-sectional study consisted of 139 married women diagnosed as primary infertile who applied to an in vitro fertilization [IVF] center in Turkey, between September and December 2009. A descriptive information questionnaire developed by the researcher was used for data collection. In addition, an infertility distress scale [IDS] for determining the severity effect of infertility and the scale for marital violence against women

[SDVW] for determining level of marital violence against the women were used. The total IDS score of the study sample was 37.76 +/- 10.53. There was no significant relationship between the age and education level of the women and the total IDS score. The total IDS score was higher in women who did not work and those being treated for infertility for more than three years. The total SDVW score of the study sample was 67.0 +/- 8.26. The total SDVW score was higher in women who had been trying to have a child for more than six years and had received infertility treatment for longer than three years. The employment status of the women and physical, emotional, and sexual violence scores had a statistically significant relationship with the IDS scores. The emotional violence score was found to have the highest significance among the variables affecting total IDS score. Marital violence is a factor increasing the distress of infertile women. Healthcare staff serving infertile couples should consider the possibility of domestic violence against women as a factor affecting the psychological infertility distress level.

Ductus Arteriosus, Patent

surgery

Outcome and immediate complications of device occlusion of different types of patent ductus arteriosus with range of devices.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S75-S79

Keywords: Cardiac Catheterization-adverse effects; Embolization, Therapeutic-adverse effects; Postoperative Complications; Cardiovascular Infections-etiology

Abstract: The aim of our study was to report the outcome and immediate complications of PDA device closure, comparing ducts according to Krichenko classification. Quasi experimental study. Pediatric Cardiology Department of Armed Forces Institute of Cardiology / National institute of Heart Diseases [AFIC/NIHD] from 1st May 2012 to 30th Nov 2013. Total 368 consecutive cases, were included with intention of transcatheter closure of patent ductus arteriosus [PDA]. Detailed echocardiography was done before procedure. Aortogram determined duct size, length, narrowest diameter and morphology. Device attempted only after duct was considered suitable. The mean narrowest duct diameter was 4.5+/-2.4 mm. Out of 368 cases, five cases were considered unsuitable for device closure after aortogram. In two cases, device embolized after deployment and in one case procedure abandoned due to technical reasons. There was no cardiac perforation, tamponade or death in our study population. The success according to Krichenko duct types was 100% for type A, 100% for type B, 87.5% for type C, 100% for type D and 100% for type E. PDA device closure is a safe and effective therapeutic option in vast majority of cases. Type C tubular type ducts are more difficult to negotiate with high complication rates.

Echocardiography

Comparative study to evaluate the efficacy of transthoracic echocardiography versus cardiac catheterization for pre operative assessment of tetralogy of fallot.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S4-S8

Keywords: Cardiac Catheterization; Tetralogy of Fallot-radiography; Reproducibility of Results; Preoperative Care; Evaluation Studies as Topic

Abstract: To determine the results of transthoracic echocardiography and cardiac catheterization for pre operative assessment of Tetralogy of Fallot and operative outcomes for the patients. Case Series; prospective descriptive study. Armed Forces Institute of Cardiology/National Institute of Heart Diseases, Rawalpindi, Jan 2006 to December 2010. All patients admitted in AFIC/NIHD for surgical repair of Tetralogy of Fallot. A total of 746 patients were included in study, male [33%], female [67%], mean age was 4.7 years. Group I was evaluated for total correction with combined transthoracic two dimensional echocardiography and cardiac catheterization, and group II was subjected to transthoracic two dimensional echocardiography only for pre operative assessment. Overall mortality was 8.4% in group I and 10.8% in group II. In group II, 84% had total correction and 16% had closed heart, while in group I 73% had open heart and 27% had closed heart surgery. Tetralogy of Fallot is the leading cause of cyanotic congenital cardiac heart disease. The pre operative evaluation with help of Transthoracic two dimensional echocardiography requires oral sedation, is cost effective and minimally invasive. Cardiac catheterization being reserved for the patients having inadequate information on Transthoracic echocardiography. Early surgery during childhood has long term benefits in terms of morbidity and lifestyle adjustment.

Edema

epidemiology

Incidence of generalized oedema in random population attending the Moalejat and Modern Medicine OPD of Ajmal Khan Tibbiya College Hospital, Aligarh Muslim university, Aligarh, India.

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Hamdard Medicus 2013; 56 (2): 24-35

Keywords: Edema-etiology; Extracellular Fluid; Random Allocation; Demography

Abstract: Oedema is defined as clinically apparent increase in the interstitial fluid volume which may expand by several liters before it becomes clinically apparent. Depending upon its cause and mechanism, oedema may be localized or generalized. In generalized form it is recognized by puffiness of face and by persistence of an indentation of the skin following pressure, which is known as pitting oedema. The patients may complain of fitting of ring on a finger snugly or difficulty on putting of shoes particularly towards evening. It has been our observation in the recent past that there is an appreciable increase in number of patients suffering from generalized swelling without any known cause. This prompted us to find out the cause of such a sudden rise in its incidence. The present study is a demographic study of 126 patients suffering from oedema due to different causes. In idiopathic type oedema, we have tried to discuss its possible causes.

Education, Dental

standards

Staff perception of the quality of education in a dental college.

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Pakistan Oral and Dental Journal 2014; 34 (1): 96-99

Keywords: Perception; Educational Measurement; Educational Status; Students, Dental; Teaching-standards; Learning-standards; Faculty; Data Collection

Abstract: The aim of this study was to assess the quality of education in a dental college in Lahore, Pakistan. Eight performance indicators for teaching and learning were modified from the UK code of quality for higher education and used for a staff survey. Respondents were asked to either agree or disagree with each of the eight indicators. There were 42 responses; 23 faculty members and 19 house surgeons. Response rate was 59%. Majority of staff agreed with six of the eight indicators. Faculty and house surgeons had similar views for seven of the eight indicators. The perceived strengths of the institute were: shared strategic vision well resourced faculty equal opportunities for students to achieve learning outcomes. Room for improvement was perceived in providing information and feedback to students, and in providing appropriate learning environments. Lack of evidence based teaching practices and lack of resources to support learning were perceived as challenges for the future. Staff identified strengths, opportunities and weaknesses in the quality of teaching and learning. There was an overall positive perception of the quality of education in the college.

Education, Medical

standards

Quality assurance and its application in medical education.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 151-152

Keywords: Total Quality Management; Program Evaluation; Schools, Medical

Education, Medical, Undergraduate

Low attendance in lectures at medical colleges of Karachi - a cross sectional survey.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 161-164

Keywords: Students, Medical; Lectures; Appointments and Schedules; Absenteeism; Cross-Sectional Studies; Questionnaires; Teaching

Abstract: To evaluate the attendance of medical students in the lectures and to identify different factors responsible for low attendance. This cross sectional study was conducted at three medical colleges in Karachi, Pakistan during July to September 2012. Medical students of 3rd year and above representing different medical colleges were asked to fill out a questionnaire to assess the different reasons why medical students tend to absent themselves from lectures, their views regarding content and quality of lectures. Students having attendance of 50% or more were included in the study. A total of 509 student responded to the survey. Two hundred and eighty two students [having >50% attendance in the last semester] were included in the study. Mean age was 21.14 +/- 1.9 years. There were 110 [39%] males and 172 [61%] females. The two most common reasons for not attending the lectures were; timing of the lectures not adjusted according to the students schedule [n=180; 63.8%] and the students preferred self/group study over lectures [n=198; 70.2%]. On the other hand majority of the students [n=173; 61.3%] were also of the opinion that it is difficult and complex to learn without lectures. There are various reasons for absenteeism from lectures including timing of the lectures and preference for self study. These need to be rectified in order to strengthen the learning process in medical undergraduates.

methods

Self-directed learning and research attitudes among medical students.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 173-177

Keywords: Problem-Based Learning; Self Efficacy; Students, Medical-psychology; Attitude; Cross-Sectional Studies; Curriculum; Motivation; Questionnaires

Abstract: To describe the correlation between Self-directed Learning [SDL] and medical students' attitude towards research, based on the premise that self-directed learners are independent, motivated, and curious learners. Observational cross-sectional study. Rawalpindi Medical College, Rawalpindi, from August 2011 to January 2012. One hundred and ninety-four students of final [5th] year class at Rawalpindi Medical College, Rawalpindi participated in this cross-sectional study. SDL ability of students was measured using Odd's Continuing Learning Inventory [OCLI] whereas Attitude Towards Research [ATR] scale was used to measure their research attitudes. Spearman's rank-order analysis was performed to measure correlation between SDL scores on OCLI and all the 18 items on ATR scale. Statistically significant relationships with correlation coefficients ranging from +0.12 to +0.32 were found for the correlation between scores on the OCLI and eleven statements highlighting research use and positive attributes of research [14 items]. Those students who participated in extra-curricular research projects [n=58, 29.9%] had relatively higher scores on OCLI as compared to those who did not participate [n=136, 70.1%, p=0.041]. Self-directed learners show a positive attitude towards research, though the relationship is not strong.

Educational Status

Effects of educational attainment on dentition status in socioeconomically deprived population of Karachi.

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Pakistan Oral and Dental Journal 2014; 34 (1): 105-108

Keywords: Oral Health-education; Cross-Sectional Studies; Data Collection; Consumer Participation; Diagnosis, Oral

Abstract: The objective of this study was to evaluate the relationship between educational attainment and dentition status. A cross sectional survey was conducted. The total number of participants in this study was 408. The subjects of age 15 years to 65 years were included in this survey. To record subjects own educational attainment, education level was divided into levels which are Primary school [1-5 grade], Middle [6-8 Grade], Secondary or High school [9-10 Grade], Higher Secondary and highly educated which include Tertiary School [Bachelors]. To record dentition status, DMFT index was used. The DMFT score of 0 indicates minimum risk of caries, DMFT score between 1-4 indicates moderate risk of decay and DMFT score greater than 4 indicates high risk of dental decay. The data was collected through intra oral examination of subjects. The test indicates that association exists between level of education and DMFT scores. However, the strength of association is not very strong. The correlation value for spearman's rho was

[.116] and $P = .01$). The impact of poor oral health in low educated people can be reduced by the developing policies related to building healthy public policy, strengthening community actions, and developing personal skills. To improve the knowledge, attitudes and oral health of people with low educational status, it is necessary to increase the oral health promotion activities.

Electrocardiography

methods

Accuracy of 12 lead ECG for diagnosis of posterior myocardial infarction.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 145-148

Keywords: Myocardial Infarction-diagnosis; Diagnostic Techniques, Cardiovascular; Predictive Value of Tests; Reproducibility of Results

Abstract: To determine the accuracy of 12 lead ECG for diagnosis of acute Posterior Myocardial Infarction [MI] after its confirmation by 15 leads ECG. This study was conducted in Cardiology Department, Lady Reading Hospital Peshawar from January to July, 2012. Patients presenting to CCU with typical chest pain, pain epigastrium, sweating, nausea or vomiting and with admitting diagnosis of acute coronary syndrome [ACS] were included. The diagnostic criteria for posterior MI on 12 leads ECG was when R:S was more than 1:1 in V2 or there was tall R wave in V1 or V2 [more than Sin the same leads] or more than 2mm ST segment depression in anterior lead. Posterior MI was confirmed on 15 leads ECG taking it as a standard when ST segment elevation of >1 mm was present in C7,8,9. Out of 176 randomly selected patients, 90[51.1%] were male and 86[48.9%] female; with mean age of 63 years. Out of these, 70 were in the age range of 51 to 60 years and 40 each in 41-50 and 61-70 years. Eighteen patients had changes of posterior MI on 12 leads ECG and amongst them 10 patients had true posterior MI on 15 leads ECG. We had 8 false positive cases on 12 leads ECG with no false negative cases after confirmation with 15 leads. The accuracy of 12 leads ECG for detection of posterior MI was 55% after confirmation with 15 leads and there was no age and gender difference in its accuracy.

Embolism

prevention and control

Role of aspiration thrombectomy in primary PCI for STEMI - myth or reality?

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S94-S99

Keywords: Suction-instrumentation; Thrombectomy-methods; Myocardial Infarction-therapy; Myocardial Reperfusion; Outcome and Process Assessment [Health Care]; Electrocardiography; Heart Catheterization; Shock, Cardiogenic

Abstract: The objective of the study was to determine the outcome of thrombus aspiration in Primary coronary intervention [PCI] for ST elevation myocardial infarction [STEMI]. Case Series The study was carried out in Armed Forces Institute of Cardiology - National Institute of Heart Diseases [AFIC-NIHD] over a period of twelve months from January 2013 to December 2013. Data of 30 patients who underwent aspiration thrombectomy during primary PCI for STEMI by the transradial approach was collected. Inclusion criteria were chest pain suggestive of myocardial ischemia lasting longer than 30 min accompanied by ST segment elevation or new left bundle branch block on the ECG within 12 h of symptom onset. Patients with previous CABG, cardiogenic shock or requiring TPM placement were excluded from this study. A 6F sheath was placed inside the radial artery, and cardiac catheterization was performed. Angiographic and electrocardiographic signs of myocardial reperfusion were assessed. Study endpoints included TIMI III flow and ST-segment resolution at the end of the procedure. Mean age of the patients was 52 years [range 37-77 yrs] and 63% [n= 19] were males and 37% [n=11] were females. The right radial artery was used in 90% of cases. Thrombus aspiration catheter used was 6 F Thrombuster II [70%] and Hunter [30%]. There was significant improvement in markers of myocardial reperfusion with achievement of ST-segment resolution and TIMI 3 flow in 28 patients [93%]. No case of vascular complications such as major access site bleeding, vascular perforation, radial artery occlusion, forearm ischemia, compartment syndrome or MACE was observed. Thrombus aspiration [TA] is applicable in the majority of patients undergoing primary PCI for myocardial infarction with ST-segment elevation, and it improves early markers of myocardial reperfusion.

Embolization, Therapeutic

adverse effects

Bladder necrosis secondary to internal iliac artery embolization following pelvic fracture.

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Urology Annals 2014; 6 (2): 166-168

Keywords: Postoperative Complications-etiology; Fracture Fixation, Internal-methods; Iliac Artery; Necrosis-diagnosis; Urinary Diversion; Foreign Bodies-complications; Foreign Bodies-diagnosis; Accidents, Traffic; Catheterization; Wound Infection

Abstract: A 49-year-old man following a road traffic accident [RTA] had an unstable pelvic fracture with urethral injury. Internal pelvic fixation with Supra-pubic catheter [SPC] drainage of his bladder was done. This failed to stop the bleeding and a pelvic angiography with bilateral internal iliac embolization using steel coils was performed successfully controlling the bleeding. After 4 weeks, the patient developed wound infection [Clavien Grade III] and on exploration, bladder necrosis was found. A urinary diversion using ileal conduit with excision of bladder was performed. A biopsy of the excised bladder confirmed bladder necrosis with a foreign material [coil] in one arterial lumen.

Embryo Transfer

ethics

Using fertile couples as embryo donors: an ethical dilemma.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 169-174

Keywords: Reproductive Techniques, Assisted-ethics; Reproductive Techniques, Assisted-legislation and jurisprudence; Fertilization in Vitro-legislation and jurisprudence; Embryo Disposition-ethics; Oocyte Donation-ethics

Abstract: The use of donated embryos has offered hope for infertile couples who have no other means to have children. In Iran, fertility centers use fertile couples as embryo donors. In this paper, the advantages and disadvantages of this procedure will be discussed. We conclude that embryo-donation should be performed with frozen embryos thus preventing healthy donors from being harmed by fertility drugs. There must be guidelines for choosing the appropriate donor families. In countries where commercial egg donation is acceptable, fertile couples can be procured as embryo donors thus fulfilling the possible shortage of good quality embryos. Using frozen embryos seems to have less ethical, religious and legal problems when compared to the use of fertile embryo donors.

Endometriosis&complications

Impact of the endometrioma on ovarian response and pregnancy rate in in vitro fertilization cycles.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 29-34

Keywords: Pregnancy Rate; Fertilization in Vitro; Endometriosis-pathology; Ovulation Induction; Outcome Assessment [Health Care]; Prospective Studies; Cohort Studies; Embryonic Structures; Infertility, Female; Oocytes-cytology

Abstract: Our objective was to evaluate the effect of ovarian endometrioma on ovarian stimulation outcomes in in vitro fertilization cycles [IVF]. In this prospective cohort study, we followed 103 patients who underwent intracytoplasmic sperm injection [ICSI] procedures over a 24-months period. The study group consisted of 47 infertile women with either unilateral or bilateral ovarian endometrial cysts of less than 3 cm. The control group consisting of 57 patients with mild male factor infertility was candidate for ICSI treatment during the same time period as the study groups. Both groups were compared for number of oocytes retrieved, grades of oocytes, as well as embryo quantity and quality. Our results showed similar follicle numbers, good embryo grades [A or B] and pregnancy rates in the compared groups. However, patients with endometrioma had higher gonadotropin consumption than the control group. The mean number of retrieved oocytes in patients with endometrioma was significantly lower than control group [6.6 +/- 3.74 vs. 10.4 +/- 5.25] [p<0.001]. In addition, patients with endometrioma had significantly lower numbers of metaphase II [MII] oocytes [5 +/- 3.21] than controls [8.2 +/- 5.4] [p<0.001]. In patients with unilateral endometrioma, there were no significant differences in main outcome measures between normal and involved ovaries in the patients

with endometrioma. Patients with ovarian endometrioma had poor outcome. They showed poor ovarian response with lower total numbers of retrieved oocytes and lower MII oocytes during the stimulation phase; however, it does not affect the total number of embryos transferred per patient, quality of embryos, and pregnancy rate per patient.

Energy Intake

Comparison of dietary intake and dietary requirement in post operative adult cardiac surgical patients in ICU.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S9-S12

Keywords: Protein-Energy Malnutrition; Malnutrition; Cardiac Surgical Procedures; Postoperative Care; Questionnaires; Eating; Intensive Care Units

Abstract: To estimate optimum energy and protein intake and to examine the differences in actual intake versus optimum protein and energy requirement during first three days of patients at surgical ITC of AFIC. A descriptive, cross sectional study was conducted by using purposive sampling technique. One hundred patients admitted in adult ITC of Armed Forces Institute of Cardiology and National Institute of Cardiovascular Diseases between periods of 10th July to 10th December 2013, fulfilling study criteria were included in study sample. Data was collected from hospital records [bedside charts] and food frequency questionnaire [FFQ]. Protein and energy intake on 1st, 2nd and 3rd post operative day was calculated and compared with pre-calculated optimum protein and caloric requirement. Mean caloric intake on 1st post operative day was 583 k/cal, on 2nd post operative day 679 kcal and on 3rd post operative day was 820 k/cal which were 70%, 65% and 68% respectively less than the optimum requirement. Whereas mean protein intake was 13 grams on the 1st post operative day and 13.2 and 22.3 grams on the 2nd and 3rd day respectively which was 85%, 83% and 72% less respectively on first, second and third post operative day. The results suggest that the energy and protein intake of patients was below estimated requirements. Attention must be paid to malnutrition and nutrition in general in the hospital wards.

Epidermodysplasia Verruciformis

complications

Association of cutaneous malignancy with epidermodysplasia verruciformis: a clinicopathological study.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 25-30

Keywords: Skin Neoplasms-virology; Keratosis, Seborrhic; Carcinoma, Squamous Cell-virology; Keratosis, Actinic; Prospective Studies; Papillomavirus Infections

Abstract: To find out presence of nonmelanoma skin cancer [NMSC] in a series of 13 patients with diagnosis of epidermodysplasia verruciformis [EDV]. This prospective descriptive study detailed the clinical presentation of patients with EDV associated with nonmelanoma cutaneous malignancy between 2007 and 2010 presenting to Dermatology OPD Pakistan Institute of Medical Sciences, Islamabad. Patients were diagnosed on clinical basis. Patients with all ages and both sexes were included. Skin biopsies were taken from lesions with suspicion of malignancy, stained with hematoxylin and eosin and studied in collaboration with histopathologist. Different histopathological findings were recorded and results analyzed. 13 cases were studied for presence of NMSC. NMSC were found in 3 [23%] out of 13 patients. Actinic keratosis was found in 2 patients and one patient had seborrhic keratosis with suspicious lesions. The clinically suspicious lesions should always be biopsied, as cutaneous malignancy is a well-known, frequent and serious complication of EDV and there is high potential in these patients to develop premalignant conditions.

Esophageal Neoplasms

epidemiology

Esophageal cancer in Yemen.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 182-185

Keywords: Adenocarcinoma-pathology; Carcinoma, Squamous Cell-epidemiology; Carcinoma, Squamous Cell-pathology; Neoplasm Staging; Retrospective Studies; Sex Distribution; Sex Factors; Socioeconomic Factors; Biopsy; Age Factors

Abstract: To document the age and gender distribution, histopathologic type as well as grading characteristics of Esophageal Cancer [EC] in Yemen. A case series. Department of Pathology, Sana'a University, Sana'a, Yemen, from January 2005 to December 2011. Three hundred twenty five cases of EC were included for review. The diagnoses were made on hematoxylin and eosin stained sections and the cases were categorized into Squamous Cell Carcinoma [SCC] and adenocarcinoma [ADC]. Out of the 325 EC cases, 163 [50%] were SCC [females 67%, males 33%] and 158 [49%] were ADC [females 30%, males 70%]. The rest of the cases were 2 adenosquamous carcinoma and 2 non-Hodgkin's lymphoma. The mean age, for SCC was 60 years while the mean age for ADC was 65 years. The peak incidence for SCC was found in the age groups of fifth and sixth decades for females and in fifth and seventh decades for males. The maximum number of patients with ADC was seen in sixth and seventh decades for both gender. Well-differentiated histological grading accounted for 247 [77%] for both genders and types. The moderately differentiated and poorly differentiated accounted, for 17% and 6% respectively. The EC in Yemen had a predominance of SCC in female patients and predominance of ADC in male patients which was usually of a well-differentiated grade.

Exercise

physiology

[The effects of 8 weeks of interval combined exercise training on risk factors of asthma, insulin resistance and some of the major physiological indices in overweight and obese adolescents]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 67-77

Keywords: Asthma-prevention and control; Physical Education and Training; Insulin Resistance-physiology; Chemokine CCL11; Overweight; Obesity; Oxygen Consumption

Abstract: Eotaxin, which is an important chemokine in asthma, was recently reported to be increased in obesity in mice and humans. The purpose of this study was to investigate the effect of exercise training on plasma eotaxin levels, insulin resistance, maximal oxygen consumption [Vo2max] and some of the major physiological factors in overweight and obese adolescents. In this experimental study, 28 healthy obese and overweight male adolescents were randomly selected. We divided the obese subjects into two groups: exercise group [N = 13] and control group [N=15]. The exercise group performed combined exercise training, 4 days a week [70 min/d] for 8 weeks. Vo2max, adiposity, insulin resistance, lipid profile and eotaxin were measured before and after the completion of exercise training. Independent T-test and Pearson's correlation coefficient were used for data analysis. $p < 0.05$ was considered significant. The results showed that 8 weeks of interval combined exercise training increased eotaxine level and Vo2max, and decreased insulin resistance, percentage of body fat, weight, BMI, WC, and plasma levels of triglycerides in obese male adolescents [$P < 0.05$]. There was no significant relationship between primary level of eotaxine with other factors [$P < 0.05$]. In spite of increased eotaxine level after 8 weeks of interval combined exercise training, We observed positive effects on some of the physiological indices [TG, %BF, insulin resistance, central obesity, BMI and Vo2max] in overweight and obese adolescents.

Fatty Acids

therapeutic use

Protective effect of royal jelly on fertility and biochemical parameters in bleomycin-induced male rats.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 209-216

Keywords: Fertility Agents, Male; Bleomycin-adverse effects; Fatty Acids-pharmacology; Rats, Wistar; Treatment Outcome; Oxidative Stress-drug effects; Evaluation Studies as Topic

Abstract: Bleomycin [BL] is a glycopeptide antibiotic obtained from the bacterium *Streptomyces verticillus* which is routinely used for treatment of human cancers. Royal jelly [RJ] is a production from the hypo pharyngeal, mandibular and post cerebral glands of nurse bees. RJ consists of 66% water, 15% sugars, 5% lipids, and 13% proteins, essential amino acids and vitamins. The aim of present study was to evaluate protective effect of royal jelly on sperm parameters and malondialdehyde [MDA] production in rat. Forty adult male wistar rats [220+/-20gr] were randomly divided into 4 groups [n=10]. Control group [CG] received normal saline 10 ml/kg twice a week with Intraperitoneal [I.P] for 48 days [0.3 ml/rat]. Royal Jelly group [RJG] received jelly [100 mg/kg daily] for 48 days orally. Bleomycin group

[BLG] received BL [10 mg/kg twice a week] with I.P for 48 days. Royal Jelly+ Bleomycin group [RJ+BLG] received royal Jelly [100 mg/kg /day] orally concomitant with BL administration. Sperm count, motility, and viability were investigated and chromatin quality and DNA integrity were also analyzed. Serum testosterone and MDA concentrations were measured as well. BL caused decline significantly [$p < 0.05$] sperm count, sperm viability, motility as well as testosterone concentration compared to control group while significant [$p < 0.05$] increases in immature sperm, sperm with damaged DNA and MDA concentration were announced in BL in comparison with CG and RJ+BLG. Royal jelly improved Bleomycin-induced toxicity on sperm parameters and testosterone and MDA concentrations. The present results support the idea that BL adversely affects sperm parameters and MDA and the RJ with antioxidant properties has positive effects on these parameters.

Femoral Neoplasms

surgery

Partial-limb salvage after persistent infection in the distal femoral prosthesis: straight-plasty - a novel technique.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 213-215

Keywords: Prostheses and Implants; Prosthesis-Related Infections-surgery; Limb Salvage-methods; Postoperative Complications; Reconstructive Surgical Procedures-methods; Treatment Outcome

Abstract: A 35 years old female had giant cell tumour [GCT] of the distal femur for which wide resection and distal femoral endoprosthesis replacement was performed. Massive infection of prosthesis required removal and replacement of the prosthesis with nail antibiotic cement spacer, which also proved to be futile. Ultimately the whole of the infected thigh had to be excised. The limb could be preserved partially using straight-plasty instead of amputation. Patient is well rehabilitated and doing well at a follow-up of 3 years.

Fontan Procedure

Off-pump Bidirectional Glenn shunt using clamp and sew technique.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S67-S74

Keywords: Surgical Instruments; Vena Cava, Superior-surgery; Cardiopulmonary Bypass; Pulmonary Artery-surgery; Treatment Outcome; Postoperative Complications; Suture Techniques; Vascular Surgical Procedures-methods

Abstract: To evaluate the efficacy of performing Bidirectional Glenns [BDG] using "clamp and sew technique". Quasi-experimental study. Armed Institute of Cardiology / National Institute of Heart Diseases, Rawalpindi from 1[st] January 2011 to 31[st] December 2013. All patients subjected to BDG using clamp and sew technique during study period were included. The salient operative steps included. 1] Dissection of superior vena cava, azygous vein and pulmonary arteries 2] Clamping and division of superior vena cava at cardiac end 3] Clamping of ipsilateral branch pulmonary artery and its anastomosis to the divided superior vena cava. Observed variables included oxygen saturations and internal jugular venous pressure before, during and after the procedure, postoperative ventilation requirements, ICU stay, neuro-cognitive assessment, pleural drainage and mortality. A total of 27 patients were included. 85.2% patients had unilateral BDG while 14.8% patients had bilateral BDG. Mean internal jugular venous pressure on clamping superior vena cava was 29.21 +/- 6.13 mmHg [range 19-23 mmHg] and mean clamp time was 14.32 +/- 3.39 minutes with a range of 11-21 minutes. Mean Glenn pressure was 14.29 +/- 2.53 [range 12-18 mmHg]. Mean postoperative Oxygen saturation was 86.07 +/- 2.71% which was significantly increased as compared to preoperative oxygen saturation of 71 +/- 5.16% [$p < 0.001$]. Mean ICU stay was 70.45 +/- 8.94 hours [38-210 hours]. No neuro-cognitive impairment was observed and there was no 30 day in hospital mortality. Off-pump BDG with clamp and sew technique is a safe procedure in selective patients. It avoids the need for cardiopulmonary bypass and high cost associated with it.

Food Microbiology

A survey on antibacterial drug usage in dairy farms in Tehran province during 2004-2005.

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Journal of Veterinary Research 2014; 69 (1): 41-48

Keywords: Anti-Bacterial Agents-therapeutic use; Milk; Data Collection; Drug Resistance, Microbial; Questionnaires;

Animals, Domestic; Drug Utilization; Veterinary Drugs-standards; Public Health

Abstract: Antibacterial drug use in food-producing animals may be associated with risks to public health. The present survey was carried out due to lack of data on the status of antibacterial drug usage in Tehran Province dairy farms. The purpose of the present study was to investigate the status of antibacterial drug usage in these farms and implementation of the points from public health view. A total of 120 dairy farms in four regions of Tehran province including East [Damavand], South-East [Varamin and Shar-e-Rey], South-West [Shariar and Islamshar] and West [Karaj and Savojbolagh], were surveyed by direct interview using a questionnaire. The mean consumption rate of oxytetracycline and penicillin + streptomycin, 100% and 93.25%, respectively, were the most frequently used antibacterial products in these dairy farms in terms of variety, and a wide range of other antibacterials also showed high percentages of usage. Regarding intramammary formulations, cloxacillin, Dry Cow [DC], with a mean of 82.5%, was shown to be the most frequently used intramammary products in terms of variety. In 47.4% of farms, the orders for antibacterial drugs were issued by non-veterinarians. Also, in a considerable percentage of dairy farms the milk collected from animals receiving antibacterial drugs for mastitis [27.5%] or other infectious diseases [24.2%] were being entered into the milk reservoirs to be used for humans. The principles of rational antimicrobial therapy as well as withdrawal/ milk discard times are not implemented in a great percentage of these dairy farms. This situation may be due to lack of knowledge among dairymen regarding drug use and public health, and inadequate supervision of the veterinary offices of Tehran province.

Gallstones

ultrasonography

[Comparison of specificity and sensitivity of ultrasonography and computed tomography with endoscopic retrograde cholangio pancreatography in diagnosis of biliary tract stones]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 71-75

Keywords: Gallstones-radiography; Cholelithiasis-complications; Cholangiopancreatography, Endoscopic Retrograde; Sensitivity and Specificity; Mass Screening; Tomography, X-Ray Computed

Abstract: Cholelithiasis have concomitant with biliary tract stones [BTS] in about 10-15% of the affected patients. This study was carried out to compare the specificity and the sensitivity of ultrasonography and computed tomography [CT scan] with the endoscopic retrograde cholangio pancreatography [ERCP] for detecting of the biliary tract stones and to evaluate the efficacy of the ERCP therapy. In this descriptive study, 135 patients suspected of BTS whom were candidate for the ERCP were gone under investigation. Ultrasonography of the gallbladder, liver, biliary tract, oral and IV contrast of abdominal CT scan and the ERCP were conducted for each patient. ERCP was considered as key criteria to define BTS. The specificity and sensitivity of the ultrasonography and CT scan and the success rate of the therapeutic ERCP was estimated. BTS were observed in 112 patients by ERCP method. The specificity and sensitivity of the ultrasonography was 72.3% and 73.9%, respectively. The specificity and sensitivity of the CT scan was 50.8% and 91.3%, respectively. The success rate of the therapeutic ERCP was estimated as 76.9%. Ultrasonography as a non-invasive, non-expensive and well sensitivity method which is recommended in patient screening of biliary tract stones in compare to ERCP and CT scan.

Gamma Rays

[Evaluation of the natural gamma radiation level in residential zones and determination of annual effective exposure dose in the residents of Hamadan province, Iran, 2012]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 30-44

Keywords: Background Radiation; Environmental Exposure-analysis; Family Characteristics; Radiation Dosage; Radiation Monitoring-methods; Air Pollutants, Radioactive-analysis; Air Pollution, Indoor-analysis; Radiation, Ionizing; Cross-Sectional Studies; Data Collection; Cities

Abstract: Human is always exposed to natural background ionizing radiation which may have harmful effects; therefore, measurement of the natural background radiation is important. In this study, was measured the dose of effective natural background gamma radiation in indoor residential zones of Hamadan Province. In this cross-sectional study, we selected four stations along the main geographic directions and one in the center of city for measurement of the indoor dose rate in each of the cities in Hamadan Province. Based on the household numbers, some houses were selected randomly in every station and natural background indoor dose was measured by using RDS-110 survey meter. Then, using the results of our previous study about measuring the level of outdoor natural gamma radiation in this province, we determined the level of annual effective exposure dose from natural gamma radiation in Hamadan residents. In Hamadan province cities, maximum and minimum indoor natural background radiation [gamma ray] belonged to Razan City [1.41+/-0.079 mSv] and Asadabad City [0.955+/-0.044 mSv], respectively. Mean annual equivalent indoor dose in Hamadan Province was 1.20+/-0.070 mSv. Also the maximum indoor natural background

radiation dose [gamma ray] in the buildings with the age of more and less than 25 years were 1.42+/-0.219 mSv and 1.44+/-0.149 mSv, respectively. According to the results of this study and our previous study about outdoor gamma natural background radiation, the annual effective dose in Hamadan Province residents was 0.83 mSv. According to the results of this study, it seems that annual effective equivalent dose due to indoor gamma radiation in Hamadan Province exceeded the mean external exposure amount reported by UNSCEAR [0.5 mSv]. Also the annual effective dose due to gamma background radiation in Hamadan Province residents is 0.83 mSv, which is higher than the global average [0.48 mSv] reported by UNSCEAR - 2000. Therefore epidemiological studies to assess the prevalence of chronic diseases associated with natural radiation exposure among Hamadan Province residents are recommended.

Genital Neoplasms, Female

epidemiology

Frequency and clinicopathological presentation of gynaecological malignancies.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 201-205

Keywords: Genital Neoplasms, Female-pathology; Genital Neoplasms, Female-diagnosis; Ovarian Neoplasms; Carcinoma, Squamous Cell-diagnosis; Hospitals, Teaching; Adenocarcinoma-epidemiology

Abstract: To describe the frequency and clinicopathological presentation of malignancies of the female genital tract presenting to a tertiary care hospital. This descriptive study was carried out at Department of Obstetrics and Gynaecology, Unit A of Khyber Teaching Hospital, Peshawar from January 2008 to December 2012. A total of 4657 patients were admitted during the study period and all the patients having genital tract malignancies were included. Detailed history was taken and relevant examinations and investigations were carried out. Surgical procedures were performed where needed and specimens were sent for histopathology. Clinical and surgical staging was also carried out. All the details were noted down on a semi-structured proforma. There were 43 cases of gynaecological malignancies with mean age of 43.74+/-15.51 years. Ovarian cancer was the most common [n=22, 51.22%] followed by uterine cancer [n=10, 23.33%]. The majority of patients diagnosed with ovarian cancers [n=9/22, 40.94%] were nulliparous, whereas the majority of uterine and cervical cancers were multiparous [n=7/10, 70.0%] and grand multiparous [n=7/9, 77.78%], respectively. Ovarian cancers mostly presented with an abdominal mass [n=16/22, 72.7%] while uterine and cervical cancer presented with irregular cycles [n=7/10, 70.0%] and post coital bleeding [n=4/10, 40%]. Advanced stage cancer cases were 19/43 [44.22%]. Serouscystadeno carcinoma was the most common ovarian malignancy [n=16/22, 72.73%] while endometrioid adenocarcinoma [n=9/10, 90%] was the most common uterine carcinoma and squamous cell carcinoma was the most common cervical carcinoma [n=7/9, 77.88%]. Conclusions: Ovarian cancer was the most commonly encountered malignancy though all gynaecological malignancies are rare.

Gestational Age

[Comparison of diagnostic value of fetal cerebellar hemisphere circumference measurement and routine ultrasonography parameters for determination of the gestational age]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 51-57

Keywords: Diagnostic Techniques, Obstetrical and Gynecological; Cerebellum-anatomy and histology; Ultrasonography, Prenatal; Cerebellum-embryology; Cerebellum-ultrasonography; Reproducibility of Results; Prenatal Care

Abstract: Recently, ultrasonographic assessment of gestational age has assumed an integral role in prenatal care. The aim of this study was to compare the diagnostic value of fetal cerebellar hemisphere circumference measurement with those of other parameters of routine ultrasonography for estimation of gestational age. This was a descriptive and analytical study and included 318 pregnant women with gestational ages of 14 to 41 weeks and distinct LMP in Imam Reza Hospital in Kermanshah. The parameters of BPD, HC, AC, FL, TCD and CHC were measured by Siemens G50 ultrasound system, and gestational age was estimated. Data were analyzed by Spearman correlation coefficient. SPSS 20 software was used for statistical analysis. Based on LMP, mean +/- SD of gestational age was 29.18+/-8.86. But considering the parameters of BPD, HC, AC, FL, TCD and CHC we found mean+/-SD of 28.94+/-8.96, 28.93+/-9.01, 28.76+/-8.96, 28.87+/-8.98, 28.88+/-9.01 and 28.76+/-8.99 weeks respectively. Spearman correlation coefficients between LMP and other parameters of routine ultrasonography were more than 0.99 and significantly were correlated with one another. Comparison of the diagnostic value of fetal cerebellar hemisphere circumference measurement with those of other parameters of routine ultrasonography for estimation of gestational age did not show any significant differences. We can use measurement of fetal cerebellar hemisphere circumference with other parameters of routine ultrasonography.

Glycoproteins

diagnostic use

[Glycodelin expression in human breast cancer]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 76-81

Keywords: Breast Neoplasms-diagnosis; Neoplasm Metastasis; Lymph Nodes; Immunohistochemistry

Abstract: Glycodelin expression in normal and cancerous human breast tissue and its relation with age, tumor type, microscopic grade and metastasis to axillary lymph nodes recently were noticed. This study was done to evaluate the glycodelin expression in breast cancer. In this descriptive study, 96 Paraffin-embedded blocks of malignant breast cancer by immunohistochemistry method were considered to evaluate the expression of glycodelin. Patients age, tumor size, tumor type, microscopic grade and metastasis to axillary lymph nodes were recorded for each subject. Glycodelin was found in 30.45% of invasive carcinoma of the breast with axillary lymph node metastasis. Glycodelin was expressed in 72.7% of carcinoma of the breast without lymph nodes metastasis [P<0.05]. There was a significant relation between glycodelin expression with microscopic grade 1 of tumor and metastasis to less than 4 of lymph nodes [P<0.05]. Glycodelin expression can be evidence for lack of axillary lymph node metastasis of breast cancer.

Glycyrrhiza

adverse effects

A case of hypokalaemia and dependent oedema induced by liquorice.

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JPPI-Journal of Postgraduate Medical Institute 2014; 28 (2): 225-227

Keywords: Hypokalemia-etiology; Hypertension-etiology; Consumer Product Safety; Edema-etiology

Abstract: Excessive intake of liquorice can cause hypokalaemia and hypertension and generally, the onset and severity of symptoms depend on the dose and duration of liquorice intake, as well as individual susceptibility. We describe a patient with hypokalaemia caused by long term consumption of liquorice. The case emphasizes the importance of considering a detailed patients' history, which often lead the treating physician to the correct clinical diagnosis.

Hair

growth and development

Foods for healthy hair as prescribed in Unani medicine.

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Hamdard Medicus 2013; 56 (2): 20-23

Keywords: Dietary Supplements; Nutrition Disorders-complications; Medicine, Unani

Abstract: Diet plays an important role in treatment of various diseases caused by alteration of humours like Dam [blood] Balgham [phlegm], Safra [yellow bile] and Sauda [black bile] as in Unani medicine. The cure lies only in the supplementation of diet with particular nutritional substances. As regards the hair care, we nourish it from the root with the help of different foods.

Health Promotion

Social wellbeing: a positive energy for wellness in medical students.

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JPPI-Journal of Postgraduate Medical Institute 2014; 28 (2): 165-171

Keywords: Students, Medical-psychology; Questionnaires; Factor Analysis, Statistical; Burnout, Professional-prevention and control; Stress, Psychological-prevention and control; Public Sector; Private Sector; Universities

Abstract: The objective of the study was to compare the level of social awareness amongst medical students of public and private medical universities of Karachi - Pakistan. It was a cross sectional, questionnaire based study which randomly recruited 800 medical students from three government and five private medical colleges. Their responses on various aspects of social wellness were graded from 0-4 [never, sometimes, mostly and always]. Non-parametric methods were employed for the comparison of social wellness between the students of two types of institutes. Factor analysis was run to extract common factors in our setup. Students from public and private medical universities [public MU/private MU] acquired significantly similar scores on communication wellness. Both group of students reported that they had network of close acquaintances. Students from public institutes not only showed a significant problems solving attitude to help their fellows but also exhibited significant frankness and fairness while dealing with their social bounds. On the other hand the private MU students contributed more social time and money to community projects. Strategies should be made to involve public MU students in community projects. Private MU students need to be taught to care for their social bounds and enhance activities to share their beings with friends and family.

Hearing Loss, Noise-Induced

epidemiology

Prevalence of noise induced hearing loss among dentists working in Karachi, Pakistan.

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Pakistan Oral and Dental Journal 2014; 34 (1): 174-177

Keywords: Dental Clinics; Data Collection; Cross-Sectional Studies; Questionnaires; Occupational Diseases-epidemiology; Hearing Loss, Noise-Induced-diagnosis; Dentists; Occupational Exposure

Abstract: Dentists are exposed to noise of varying intensities while working in dental clinics. This paper discusses the different sources and characteristics of noise in the dental clinics. Questionnaire surveys from three hundred and thirty-three dentists [male and female] were collected for a cross-sectional study conducted in Karachi, Pakistan. The collected data were analyzed using SPSS version 17. The study concludes that noise originating from the dental tools appears to have an effect on the dentists and contributes to their headache, irritation, tinnitus and in some cases hearing damage. Further investigation is required to study the possible risks of induced hearing loss due to these dental tools.

Heart Failure

mortality

Validation of the Seattle heart failure model [SHFM] in heart failure population.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 153-156

Keywords: ROC Curve; Reproducibility of Results; Sensitivity and Specificity; Sex Distribution; Time Factors; Validation Studies as Topic; Predictive Value of Tests; Natriuretic Peptide, Brain

Abstract: To determine the effectiveness of Seattle Heart Failure Model [SHFM] in a Pakistani systolic heart failure cohort in predicting mortality in this population. Cohort study. The Armed Forces Institute of Cardiology - National Institute of Heart Diseases, Rawalpindi, from March 2011 to March 2012. One hundred and eighteen patients with heart failure [HF] from the registry were followed for one year. Their 1-year mortality was calculated using the SHFM software on their enrollment into the registry. After 1-year predicted 1-year mortality was compared with the actual 1-year mortality of these patients. The mean age was 41.6 A+/- 14.9 years [16 - 78 years]. There were 73.7% males and 26.3% females. One hundred and fifteen patients were in NYHA class III or IV. Mean ejection fraction in these patients was 23 A+/- 9.3%. Mean brain natriuretic peptide levels were 1230 A+/- 1214 pg/mL. Sensitivity of the model was 89.3% with 71.1% specificity, 49% positive predictive value and 95.5% negative predictive value. The accuracy of the model was 75.4%. In ROC analysis, AUC for the SHFM was 0.802 [p < 0.001]. SHFM was found to be reliable in predicting one-year mortality among patients with heart failure in the Pakistani patients.

Heart Septal Defects, Ventricular

surgery

Surgical closure of ventricular septal defect - experience at Armed Forces Institute of Cardiology.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S100-S104

Keywords: Heart Defects, Congenital-surgery; Hematologic Tests; Echocardiography; Postoperative Complications; Thoracic Surgery; Evaluation Studies as Topic

Abstract: To evaluate the results of surgical closure of ventricular septal defect [VSD] with special focus on immediate complications and mortality. Quasi experimental study. Pediatric cardiac surgical department of Armed Forces Institute of Cardiology / National Institute of Heart Diseases [AFIC/NIHD] from 1st January 2011 to 31st Dec 2012. All patients undergoing surgical closure of VSD were included in the study. All patients underwent detailed pre-operative assessment including detailed examination, blood tests, chest x-ray, echocardiography and doppler. The surgery was performed under general anesthesia. VSD was closed using polytetrafluoroethylene [PTFE] patch with prolene interrupted sutures. Good post operative care was ensured. The patients were discharged on 7[th] post-operative day and advised follow up after one week. A total of 230 consecutive patients underwent VSD closure with male to female ratio of 2.2:1 and mean age was 5.7+/-6.5 years. Mean height was 94.8 +/- 31.4 cms and mean weight was 15.3 +/- 12.6 kgs. Per membranous VSDs were most common accounting for 67.4% of cases. Indications for surgery were moderate to large VSDs [77.8%], associated with other congenital heart diseases [CHDs] [8.3%], coronary cusp prolapse with or without aortic regurgitation [13.5%] and infective endocarditis [0.4%]. In one case aortic valve replacement was also done for severe aortic regurgitation due to gross right coronary cusp prolapse. There were 10 [4.3%] deaths in study population and their mean age was 3.5 +/- 5.5 years. In 02[0.9%] patients, permanent pacemaker was also implanted. Open heart surgery for VSD is safe with low mortality in experienced hands.

Heart-Assist Devices

Successful implantation of percutaneous left ventricular assist device [impella 2.5] in AFIC/NIHD - first time in Pakistan.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S114-S117

Keywords: Shock, Cardiogenic-surgery; Percutaneous Coronary Intervention; Heart Ventricles-physiopathology; Heart Ventricles-surgery; Registries; Equipment Design

Abstract: Impella 2.5 is a miniaturized percutaneously inserted left ventricular assist device [LVAD] that can be placed via a retrograde approach across the aortic valve using a femoral arterial access. It helps in reducing the cardiac workload and provides circulatory assistance and protection to the myocardium and vital organs in patients with severe left ventricular systolic dysfunction. It has been used in patients with heart failure, cardiogenic shock [CS], and high-risk patients undergoing percutaneous intervention [PCI]. We report here our experience using an Impella 2.5 catheter in a patient with high-risk percutaneous intervention [PCI].

Hematoma, Epidural, Spinal

diagnosis

Spontaneous spinal epidural hematoma: a case report and review of the literature.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 48-52

Keywords: Laminectomy; Diagnosis, Differential; Decompression, Surgical; Early Diagnosis; Muscle Rigidity; Prognosis; Review Literature as Topic

Abstract: Spontaneous spinal epidural hematoma [SSEH] is a rare emergency with potentially serious sequel. We report a case of SSEH to emphasize the importance of early recognition and urgent surgery for this challenging emergency. A 10-year-old boy presented with gradual onset of neck and back pain, vomiting, and nuchal rigidity followed by rapidly progressive paraparesis, abdomen and lower extremities hyperesthesia and sphincter dysfunction. MR imaging demonstrated epidural hematoma of cervico-thoracic spinal segments [C7-T3]. Emergent decompressive

laminectomy with hematoma evacuation was performed the third day after paraplegia onset. Neurological improvement was obvious but slow, and the patient was discharged walking with aid 10 days after surgery. Two months later he got full functional recovery. We conclude that SSEH is a rare but disabling or even fatal clinical challenge. Early diagnosis and prompt surgery improve the neurological and functional outcome. Initial nonspecific symptoms can lead to a delay in diagnosis, especially in younger children. Relevant physicians should pay attention to the symptoms of this rare entity and SSEH should be one of differential diagnoses of rapidly evolving spinal cord syndrome.

Hematuria

etiology

[Causes of hematuria in infants and children]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 132-135

Keywords: Kidney Diseases-etiology; Glomerulonephritis; Urinary Tract Infections; Urinary Calculi

Abstract: Hematuria is one of the common causes of pediatric nephrology and urology diseases and is reported in 0.5-2% of children. This study was performed to determine the causes of hematuria in infants and children. This descriptive study was done on 200 infants, children and adolescents in one month to 18 year old ages with chief complaint of hematuria in Hamadan, Iran. Patients were evaluated by urinalysis, urine culture, measurement of calcium, creatinine and uric acid in random urine sample and abdominal sonography. Microscopic and gross hematuria was detected in 79.5% and 20.5% of patients, respectively. Hematuria was idiopathic in 74 [37%] of patients. Urinary tract stones [18%], urinary tract infections [15.5%], hypercalciuria [13%], hyperuricosuria [10%], urinary tract anomalies [5.5%] and glomerulonephritis [1%] were diagnosed as causes of hematuria. In 56% of patients, hematuria was caused by three common etiologies of stone, urinary tract infections and crystalluria.

Hepatic Encephalopathy

blood

Ammonia levels and the severity of hepatic encephalopathy.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 160-163

Keywords: Ammonia-blood; Severity of Illness Index; Hepatic Encephalopathy-diagnosis; Hepatic Encephalopathy-etiology; Hyperammonemia-blood; Liver Cirrhosis-complications

Abstract: To evaluate the correlation between ammonia levels with the severity of HE in patients coming to the tertiary care hospital with liver cirrhosis and hepatic encephalopathy [HE]. Descriptive, analytical study. Shifa International Hospital, Islamabad, from January 2011 to February 2012. A total of 135 patients with liver cirrhosis and HE had serum ammonia levels measured on admission. The diagnosis of HE was based on clinical criteria, and its severity was graded according to the West Haven Criteria for grading of mental status. Ammonia levels were correlated with the severity of HE using Spearman rank correlation. Out of 20 patients with normal ammonia levels, 13 [65%] were in HE I-II, 6 [30%] were in grade-III, while 1 [5%] patient was in grade-IV HE. Out of 45 patients with mild hyperammonemia, 27 [60%] were in grade I-II, 12 [26%] were in grade-III and 6 [13%] were in grade-IV HE. Out of 34 patients with moderate hyperammonemia, 9 [26%] were in grade I-II, 18 [53%] were in grade-III, and 7 [20%] were in grade-IV HE. Out of 36 patients with severe hyperammonemia, 31 [86%] patients were in grade-IV HE [p < 0.001]. Ammonia levels correlated with the severity of hepatic encephalopathy. Greater the ammonia level, severe is the grade of hepatic encephalopathy.

Hepatitis C

complications

Hepatitis C in haemorrhagic obstetrical emergencies.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 178-181

Keywords: Emergencies-epidemiology; Postpartum Hemorrhage-epidemiology; Pregnancy Complications, Infectious-epidemiology; Pregnancy Complications, Infectious-virology; Pregnancy Outcome; Premature Birth-etiology; Prospective Studies; Risk Factors; Socioeconomic Factors; Infant, Low Birth Weight; Infant, Newborn; Maternal Welfare; Obstetrics

Abstract: To determine the maternal health and fetal outcome in hepatitis C with obstetrical haemorrhagic emergencies. An observational study. Department of Obstetrics and Gynaecology Unit-I, Liaquat University of Medical and Health Sciences Hospital, Hyderabad, Sindh, from January 2009 to December 2010. All the women admitted during the study period with different obstetrical haemorrhagic emergencies were included. On virology screening, hepatitis C screening was done on all. The women with non-haemorrhagic obstetrical emergencies were excluded. Studied variables included demographic characteristics, the nature of obstetrical emergency, haemorrhagic conditions and maternal and fetal morbidity and mortality. The data was analyzed on SPSS version 20. More frequent obstetrical haemorrhagic emergencies were observed with hepatitis C positive in comparison with hepatitis C negative cases including post-partum haemorrhage in 292 [80.88%] and ante-partum haemorrhage in 69 [19.11%] cases. Associated morbidities seen were disseminated intravascular coagulation in 43 [11.91%] and shock in 29 [8.03%] cases with hepatitis C positive. Fetal still birth rate was 37 [10.24%] in hepatitis C positive cases. Frequency of maternal morbidity and mortality and perinatal mortality was high in obstetrical haemorrhagic emergencies with hepatitis C positive cases.

Mucocutaneous manifestations in hepatitis C patients.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 40-45

Keywords: Hyperpigmentation-epidemiology; Lichen Planus, Oral-epidemiology; Vasculitis-epidemiology; Erythema-epidemiology; Hepacivirus-genetics

Abstract: To determine the frequency and nature of mucocutaneous manifestations in hepatitis C virus [HCV] positive patients. Two hundred and five HCV positive patients presenting at the outpatient and inpatient departments of Services Hospital, Lahore were evaluated for mucocutaneous manifestations. Relevant data regarding history, clinical examination including cutaneous system and investigations were documented and analyzed. Mean age of patients was 36.6+/-11.0 years. There were 84 [41%] males and 121 [59%] females. 73.7% cases were exposed to antiviral therapy. Dermatological manifestations were present in 88.3% patients with HCV infection. Pruritus was the most common finding seen in 39.5% followed by hyperpigmentation of skin 34.1%, lichen planus 18%, lingual/buccal pigmentation 13.2%, melanonychia 12.7% and urticaria 6.8%. Less frequent features were palmar erythema, photosensitivity and cutaneous vasculitis. Dermatological manifestations may appear as an earliest sign of hepatitis C infection. Therefore, vigilant detection and careful investigation can prevent the complications and further spread of this dreadful disease.

Hepatitis C, Chronic

drug therapy

Association between baseline parameters and end of treatment response to combination of conventional interferon and ribavirin in patients with chronic hepatitis C.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 149-153

Keywords: Interferons-therapeutic use; Ribavirin-therapeutic use; Antiviral Agents-therapeutic use; Treatment Outcome; Drug Therapy, Combination; Retrospective Studies; Viral Load; Association

Abstract: To study the association between baseline parameters and end of treatment response [ETR] to conventional interferon treatment in patients with chronic hepatitis C. This retrospective analytical study was conducted in Gastroenterology department of Lady Reading Hospital Peshawar from January 2012 to June 2012. A total of 222 patients with chronic hepatitis C, on combination of conventional interferon and ribavirin therapy were included in the study who reported with ETR. Various baseline parameters included sex [male vs. female], age [< 40years vs. >40years], weight [<70kg vs. >70kg], viral load [<800000IU/ml vs. >800000IU/ml] and ALT quotient [<3 vs. >3]. These variables were compared with ETR to see for any significant association. Two hundred and twenty two patients were included in the study out of which 94[42.3%] were male and 128[57.7%] were females. 121[54.5%] of the patient achieved ETR while 101[45.5%] failed to achieve ETR. Among various variables tested weight <70kg [59% vs. 43%] and ALT Quotient >3 [70% vs.50%] were significantly associated with ETR with a p value of 0.01 and p value of 0.013 respectively while there was no statistically significant association between other parameters and ETR. High baseline ALT and baseline low body weight are significantly associated with better ETR. Among these weight is a modifiable factor and obese patients should be advised to lose weight before embarking them on anti viral therapy in order to improve their chances of viral clearance.

Hernia, Inguinal

surgery

Laparoscopic repair of massive inguinal hernia containing the urinary bladder.

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Urology Annals 2014; 6 (2): 159-162

Keywords: Laparoscopy; Cystocele-surgery; Hernia, Inguinal-complications; Diagnosis, Differential; Nephrostomy, Percutaneous-methods; Testicular Hydrocele-etiology; Urography

Abstract: Inguinal herniation of the urinary bladder is an extremely rare occurrence involving less than 5% of inguinal hernias reported in literature. These hernias require a high index of suspicion for their diagnosis and pose significant challenges to the operating surgeon. The majority of these hernias have been repaired by an open technique. We report two cases managed laparoscopically.

One stage repair of giant inguinal hernia.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 218-218

Keywords: Reconstructive Surgical Procedures-methods; Treatment Outcome

Histocompatibility Antigens Class II

Association of HLA-class II and IgE serum levels in pediatric asthma.

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IJI-Iranian Journal of Immunology 2014; 11 (1): 21-28

Keywords: Immunoglobulin E-blood; Asthma-genetics; Enzyme-Linked Immunosorbent Assay; Alleles; Reference Values; Child

Abstract: Pediatric bronchial asthma is associated with considerable morbidity. The study was carried out to examine the association of Human Leukocyte Antigen [HLA]- Class II with the disease as we found no similar study on Asian Indian population. To define the HLA-Class II antigens in Asian Indian pediatric patients with asthma. A total of 103 children with asthma and 152 controls were analysed for HLA Class II [DRB1, DQB1 and DPB1] by PCR-SSP [Sequence Specific Primers] method. Total serum IgE levels were determined by ELISA assay. A positive family history was recorded in 59 patients [57%] and 13 [8.5%] of healthy controls. Serum IgE levels were more than normal range in 72% of the patients and 33% of healthy subjects with mean values of 4877 and 627 IU/ml, respectively. DRB1*04 and DQB1*03 showed significant positive relations while DRB1*15 showed a negative association with asthma. DQB1*02 was more common in healthy individuals but was not statistically significant. A positive association of the DR4/DQB1*03 and a negative association of DRB1*15 was seen with extrinsic bronchial asthma. However, more studies are required on larger populations to confirm the association of HLA Class II alleles in Indians before a particular allele can be labeled as being protective or causative for asthma.

Hospitals

standards

[Assessment of performance of the hospitals of Kurdistan University of Medical Sciences by use of Pabon Lasso Model [2007-2011]].

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 114-123

Keywords: Quality Indicators, Health Care; Efficiency, Organizational-standards; Bed Occupancy; Outpatients; Models, Organizational; Models, Statistical

Abstract: One of the useful methods to assess hospital performance is Pabon Lasso Model. The aim of this study was to assess performance of the hospitals of Kurdistan University of Medical Sciences by Pabon Lasso Model from 2007 to 2011. In this cross sectional study we used turnover rate, bed occupancy rate and the average duration of hospitalization as our indicators to assess the performance of 12 hospitals of Kurdistan University of Medical Sciences

by Pabon Lasso Model from 2007 to 2011. We used Excel software for data analysis. In this study we found a bed occupancy rate of 62.5% and a bed turnover rate of 79.2 times. The average duration of hospitalization was 3.4 days. One [8%] hospital was located in zone 1, four [33%] hospitals in zone 2, five [42%] hospitals in zone 3 and two [17%] hospitals in zone 4. According to the results of this study it can be suggested that the development of outpatient services, transmission of beds between the hospitals and prevention of development and extension of medical center can be considered as the main strategies for increasing the efficiency of the hospitals.

Houseflies

pathogenicity

The role of house fly [*Musca domestica*] in transmission of pathogenic strains of *E.coli*.

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Journal of Veterinary Research 2014; 69 (1): 9-15

Keywords: Escherichia coli Infections-transmission; Feces-microbiology; Disease Vectors

Abstract: Colibacillosis is an infectious disease caused by *E. coli*. This infection is spread by the feces and other secretions of infected animals and humans. Non-biting Muscid flies characteristically visit manure and decaying organic materials to feed and oviposit and may contribute to disease transmission. This paper reviews the role of house flies [*Musca domestica*] in *E.coli* transmission at poultry farms. In this study, 2000 house flies [*Musca domestica*] were collected from 2 commercial laying hen farms around Karaj. They were examined for the presence of the bacteria. In an adjacent study, laboratory-reared flies were experimentally exposed to *E. coli* [ATCC10536] strain and the infected samples were examined at regular intervals. The *E. coli* was detected in the dissected gastrointestinal tract of laboratory-exposed flies for up to 72 h. post exposure, whereas after that time the infected flies and the untreated control flies were negative. The results showed that considering the ability of mechanical vector during 72 hours, the *E. coli* transmission is possible in short time.

Humanities

Multiple ingredients and not just spoonful of humanities.

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Urology Annals 2014; 6 (2): 180-180

Keywords: Education, Medical; Students, Medical; Curriculum; Universities

Hyperkeratosis, Epidermolytic

genetics

Bullous ichthyosiform erythroderma: case presentation.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 86-88

Keywords: Hyperkeratosis, Epidermolytic-pathology; Keratin-1; Keratin-10; Dermatitis, Exfoliative; Ichthyosis

Abstract: Bullous Ichthyosiform Erythroderma [BIE] is a rare disorder of keratinization [mutation in either keratin 1 or 10]. It typically presents with fragile skin, which gives way to gradual evolution of hyperkeratosis. Flaccid blisters, peeling and superficial erosions at sites of minor trauma or friction are apparent within the first few hours of life. Yellow-brown, waxy, ridged or corrugated scale builds up in skin creases, sometimes forming spiny [Hystrix] outgrowths. Cobblestone-like keratoses occur at other sites such as the dorsal hands and feet and over the trunk. We report an 11-year-old boy with a generalized hyperkeratosis on the neck, trunk, extremities and scalp.

Hypopigmentation

diagnosis

Idiopathic acquired leukonychia.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 222-224

Keywords: Nail Diseases-congenital; Nail Diseases-diagnosis; Hypopigmentation-etiology

Abstract: A rare case of 29 years old healthy male patient with persistent progressive total whitening of all the finger and toe nails [Idiopathic acquired leukonychia] since the age of 20 years is being presented here. The nail changes were of great concern in terms of social embarrassment to the patient. Idiopathic acquired leukonychia is a rare chromatic disorder of the nails not associated with other abnormalities and discernible etiology. To the best of our knowledge, probably it is the second case report from India after the first one reported from Mumbai earlier. Hence it is presented here for its rarity.

Immunophenotyping

Flow cytometric immunophenotyping of bone marrow in cats diagnosed with hematopoietic disorders.

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Journal of Veterinary Research 2014; 69 (1): 33-39

Keywords: Flow Cytometry; Bone Marrow-immunology; Hematologic Neoplasms-diagnosis; Bone Marrow Cells-cytology; Myelodysplastic Syndromes; Lymphocyte Subsets; Cats; Myeloid Cells; Antibodies, Monoclonal; Granulocytes-immunology

Abstract: Cytological examination of bone marrow in cats, due to the large number of cells and various growth phases is somewhat complicated. The use of flow cytometric techniques and monoclonal antibodies are appropriate methods in the diagnosis of hematopoietic malignancies. The purpose of the present study is to determine cell-surface antigens for various developmental stages of feline bone marrow cells in hematopoietic disorders using flow cytometric. In this study, bone marrow cells from 4 cats with hematopoietic disorders and 2 clinically healthy cats, were labeled with 5 types of anti-feline MAbs included: CD21-like [Cr-Br], T lymphocyte subpopulation, CD-172a, Granulocyte, Pan-Leukocyte [CD45-like] and then analyzed using flow cytometric. The results revealed changes in immunophenotyping and light scatter properties compared with normal cases. The percentage of CD45, Granulocyte and CD172a markers in the bone marrow of a cat with erythroleukemia were lower compared with normal bone marrow. In a cat with myelodysplastic syndrome, scatter plot indicated an increase in the immature myeloid cells and a decrease in mature myeloid cells. It was concluded that cytological examination of bone marrow with studying dispersion studies on cells using flow cytometric and usage of a panel of antibodies such as CD21-like[Cr-Br], T lymphocyte subpopulation, CD-172a, Granulocyte, Pan-Leukocyte [CD45-like] could support the diagnosis of feline hematopoietic abnormalities.

In Vitro Oocyte Maturation Techniques

Effect of leptin on in vitro nuclear maturation and apoptosis of buffalo [bubalus bubalis] oocyte.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 43-50

Keywords: Leptin-pharmacology; Apoptosis; Embryo Culture Techniques; Social Control, Formal; Buffaloes-embryology; Embryonic Development; Oocytes-ultrastructure; Nuclear Transfer Techniques

Abstract: Leptin, as a 16 kDa adipokine, is a pleiotropic cytokine-like hormone that primarily secreted from adipose tissue. It also involves in the regulation of energy homeostasis, neuroendocrine function, immunity, lipid and glucose homeostasis, fatty acid oxidation, angiogenesis, puberty and reproduction. The aim of this study was to investigate the effects of in vitro addition of leptin to in vitro maturation [IVM] medium on buffalo oocyte maturation and apoptosis. In this experimental study, Ovaries from apparently normal reproductive organs of slaughtered adult buffaloes [Bubalus bubalis] with unknown breeding history were collected from Urmia Abattoir, Urmia, Iran, and were transported immediately to the laboratory in a thermos flask containing sterile normal saline with added antibiotics. Oocytes were aspirated from 2-8 mm visible follicles of the ovaries using an 18-G needle attached to a 10 ml syringe. IVM medium included tissue culture medium-199 [TCM-199], 10% fetal bovine serum [FBS], 22 microg/ml sodium pyruvate, 0.5 IU/ml ovine follicle-stimulating hormone [oFSH], 0.5 IU/ml ovine luteinizing hormone [oLH], 1 microg/ml oestradiol, 50 microg/ml gentamycin, and leptin [0 [control], 10, 50, and 100 ng/ml]. The good quality buffalo oocytes [batches of 10 oocytes] were placed in a culture plate containing six 50 microl droplets of maturation medium, covered with sterilized

mineral oil, and then incubated at 38.5°C with 5% CO₂ in air for 24 hours. The maturation of oocytes was evaluated under a stereomicroscope by detecting the first polar body extrusion of oocytes. FITC-Annexin V - propidium iodide [PI] staining method was used to detect oocyte apoptosis. From a total of 115 collected ovaries, 1100 oocytes were recovered among which 283 oocyte were suitable for IVM. In the groups of leptin treated with 0 [control], 10, 50 and 100 ng/ml, the percentage of oocytes maturation was 74.65, 83.81, 77.85, and 75.40%, while the percentage of oocytes apoptosis was 9.83, 9.54, 9.93, and 10.42%, respectively. Our results showed that addition of 10 ng/ml leptin to buffalo IVM medium increased oocyte maturation, significantly, as compared with that in control group. However, addition of leptin to IVM medium had no significant influence on buffalo oocyte apoptosis. Our findings suggested that addition of 10 ng/ml leptin to IVM medium of buffalo oocyte can improve oocyte nuclear maturation. Furthermore, we showed that there is no relation between in vitro addition of leptin to buffalo oocyte IVM medium and oocyte apoptosis.

Induced Pluripotent Stem Cells

transplantation

[Generation of induced pluripotent stem cells from mesenchymal stem cells of human umbilical cord vein]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 78-87

Keywords: Umbilical Cord-cytology; Mesenchymal Stem Cells; Microscopy, Electron, Scanning Transmission; Transcription Factors; Embryonic Stem Cells; Plasmids

Abstract: The aim of this study was to generate induced pluripotent stem cells from human umbilical cord vein mesenchymal stem cells by use of plasmid vector. In this experimental study using type IV collagenase enzyme, we extracted and cultured mesenchymal stem cells obtained from human umbilical cord vein wall. Using electroporation method, these cells were transfected with plasmid vector which carried self-renewal transcription factors of OCT4 and SOX2. After 9 days we observed the induced pluripotent stem cells like colonies. The nature of these cells were evaluated by immunocytochemistry and alkaline phosphatase activity of embryonic stem cells. Immunocytochemical analysis showed that these cells express the pluripotency markers such as OCT4, SSEA4, TRA1-60, TRA1-81, and also had alkaline phosphatase activity. This study revealed that transient expression of self-renewal genes of OCT4 and SOX2 could lead to development of induced pluripotent stem cells like colonies from umbilical cord vein mesenchymal stem cells.

Influenza A Virus, H1N1 Subtype

immunology

Association of pandemic H1N1 influenza and pityriasis rosea - a case report.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 79-82

Keywords: Pityriasis Rosea-etiology; Influenza, Human-complications; Orthomyxoviridae; Pityriasis Rosea-virology; Disease Outbreaks; Polymerase Chain Reaction

Abstract: Pityriasis rosea [PR] is an inflammatory papulosquamous disease of unknown etiology. Different viral infections have been implicated as causative agents for PR. We herein report an adult male patient who clinically manifested as pityriasis rosea [PR] during an episode of infection caused by pandemic H1N1 influenza virus, in whom the clinical progression and regression of both the diseases were in tandem.

Insulin Resistance

[Association of homeostasis model assessment of insulin resistance with lipid profiles in type 2 diabetes]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 89-93

Keywords: Homeostasis; Diabetes Mellitus, Type 2-pathology; Diabetes Mellitus, Type 2-metabolism; Cardiovascular Diseases-etiology; Anthropometry; Reference Values; Dyslipidemias; Lipids-blood; Insulin-blood

Abstract: Insulin resistance [IR] is one of the factors affecting dyslipidemia in type 2 diabetes which increases the risk of cardiovascular diseases. This study was done to determine the association of homeostasis model assessment of insulin resistance with lipid profiles in type 2 diabetes. This descriptive study was conducted on 72 patients with type 2 diabetes in Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran during 2011. Anthropometric indices, fasting serum glucose, serum insulin and lipid profiles were measured and IR index and atherogenic lipid parameters were calculated. The mean of lipid profiles and parameters were compared across the IR tertiles. The association of homeostasis model assessment and insulin resistance in each tertile with lipid profiles was determined. The mean \pm -SD of IR index was 0.9 \pm -0.3, 2.1 \pm -0.4 and 4.4 \pm -1.6 in the 1th, 2th and 3th tertiles, respectively. In the 3th tertile, serum triglyceride and atherogenic lipid parameters were significantly high and serum HDL-C level was non-significantly low than normal reference range. IR index in the 2th and 3th tertiles was significantly related to serum Triglyceride [P<0.05]. IR index in level of >2.8, was inversely associated with HDL-C and directly associated with atherogenic lipid parameter. There is association between Insulin resistance with lipid metabolic abnormality in type 2 diabetic patients.

Interferon-alpha

adverse effects

Pegylated-interferon induced interstitial pneumonitis.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 219-220

Keywords: Hepatitis C, Chronic-drug therapy; Antiviral Agents-adverse effects; Antiviral Agents-therapeutic use; Lung Diseases, Interstitial-blood; Lung Diseases, Interstitial-chemically induced; Lung Diseases, Interstitial-diagnosis; Tomography, X-Ray Computed; Treatment Outcome

Interleukin-11

therapeutic use

Randomized clinical trial of human interleukin-11 in dengue fever-associated thrombocytopenia.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 164-168

Keywords: Dengue-complications; Thrombocytopenia-drug therapy; Thrombocytopenia-immunology; Treatment Outcome; Double-Blind Method; Enzyme-Linked Immunosorbent Assay; Severity of Illness Index; Dengue-diagnosis

Abstract: To assess the effectiveness of recombinant human [rh] IL-11 to increase platelets count in patients suffering from Dengue fever [DF]. Randomized double blind placebo control study. Farooq Hospital, Lahore, from July to October 2011. Forty hospitalized patients suffering from Dengue fever having platelets count \leq 30000 per micro liter were randomly categorized into two groups, rhIL-11 [test] and distilled water [placebo] groups. The efficacy outcomes [as indicated by step up in platelets count at 48 hours] for the treatment group were compared with the outcomes for the placebo group. The data revealed that the increase in platelet response with recombinant human interleukin 11, 1.5 mg subcutaneously is significantly more brisk than the placebo group. The platelets response in patients with severe thrombocytopenia was greater in the treatment group [50%] at 48 hours as compared to the placebo group [20%] [p=0.047]. Response rate was slightly greater among males [6/10, 60%] than females [8/16, 50%]; moreover, three-fourth [75%] female responders were in the placebo group, compared to half [50%] male responders in the treatment group. Results of the study suggest that treatment of severe thrombocytopenia accompanying DF with recombinant human interleukin11 may be a useful therapeutic option.

Interleukin-17

genetics

Interleukin-17 gene expression and serum levels in acute rejected and non-rejected liver transplant patients.

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IJI-Iranian Journal of Immunology 2014; 11 (1): 29-39

Keywords: Gene Expression; Liver Transplantation; Enzyme-Linked Immunosorbent Assay; Graft Rejection-genetics; Polymerase Chain Reaction; RNA, Messenger; Graft Survival/genetics

Abstract: Interleukin-17 [IL-17], as a potent proinflammatory cytokine, has a critical role in post liver transplant outcomes. However, there is not much information about the effects of IL-17 cytokine on acute liver rejection. To evaluate the role of IL-17 in post-liver transplant acute rejection. Ninety seven adult liver transplant patients who enrolled in this cross sectional study were divided into Non- Acute Rejected [Non-AR] and Acute Rejected [AR] patient groups. Three blood samples were collected from each patient in days 1, 4 and 7 post liver transplantation. The IL-17 mRNA levels were evaluated using an in-house real time PCR protocol. IL- 17 protein levels were also analyzed in Non-AR, AR and also control groups using ELISA method. The IL-17 mRNA expression level continuously increased in AR patients in all days of follow-up post liver transplantation. IL-17 expression was, however, down regulated after day 4 post-transplant follow-up in Non-AR patients. Both IL-17 mRNA expression and protein levels were also significantly increased in AR patients compared with Non-AR ones. Based on these findings, significant increase of IL-17 mRNA and protein levels in AR patients highlights the important role of IL-17 in acute liver rejection.

Intubation, Intratracheal

methods

External laryngeal pressure by left little finger as an aid to facilitate visualization of the larynx during endotracheal intubation in children.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 8-13

Keywords: Laryngoscopy-methods; Hospitals, Teaching; Intubation, Intratracheal; Surgical Procedures, Elective

Abstract: The best laryngeal view can be obtained when external laryngeal manipulation is undertaken by the anesthesiologist to improve glottis visualization and enhance endotracheal intubation. This study aimed to evaluate the effectiveness of using anesthesiologist own left little finger to optimize laryngeal view during endotracheal intubation in small children. The study was conducted in Basra Teaching Hospital over a period from February 2013 to October 2013. Children below 5 years, ASA class I undergoing elective surgical procedures under general anaesthesia with endotracheal intubation were included in the study. The glottis view was assessed by direct laryngoscopy. The same patient was assigned into two groups; group A are those whose larynx is manipulated with the aid of an assistant using external pressure and direction on the larynx, while in group B, external laryngeal manipulation was undertaken by the anesthesiologist's left little finger to aid visualization of the larynx and the time to obtain the best view was recorded in both groups. Out of 320 patients, seventy five patients who were included in the analysis have variable glottis view grading, a grade IIb was obtained in 54 cases, III in 19 cases, and grade IV in 2 cases. Grade I view was obtained in seventy two patients in group B vs 54 patients in group A [$p < 0.05$]. The time spent to obtain grade I view was significantly less in group B than in group A [$p < 0.05$]. In this study, the glottis was manipulated to obtain an optimal view using the left little finger for patients in whom the epiglottis could not be visualized with standard laryngoscopy to improve the laryngoscopic view. Furthermore, the use of this technique routinely in every patient regardless of grade makes the technique more easy and familiar.

Islet Amyloid Polypeptide

Islet amyloid polypeptide is not a target antigen for CD8+ T-cells in type 2 diabetes.

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IJI-Iranian Journal of Immunology 2014; 11 (1): 1-12

Keywords: CD8-Positive T-Lymphocytes; Insulin-Secreting Cells; Diabetes Mellitus, Type 2-immunology; Evaluation Studies as Topic; Peptide Fragments; HLA-A Antigens; B-Lymphocytes

Abstract: Type 2 diabetes [T2D] is a chronic metabolic disorder in which beta-cells are destroyed. The islet amyloid polypeptide [IAPP] produced by beta-cells has been reported to influence beta-cell destruction. To evaluate if IAPP can act as an autoantigen and therefore, to see if CD8+ T-cells specific for this protein might be present in T2D patients. Peripheral blood mononuclear cells [PBMC] were obtained from human leukocyte antigen [HLA]-A2+ T2D patients and non-diabetic healthy subjects. Cells were then screened for peptide recognition using ELISPOT assay for the presence of IFN-gamma producing CD8+ T-cells against two HLA Class I-restricted epitopes derived from IAPP [IAPP5-13 and IAPP9-17] and common viral antigenic minimal epitopes Flu MP 58-66, CMV495-503, EBV280-288 and HIV77-85 as controls. A total of 36.4% of patients and 56.2% of healthy subjects showed a response against IAPP5-13 peptide. No significant difference in response against this peptide was noted between the patients and the healthy donors. With respect to peptide IAPP9-17, although healthy subjects showed a higher mean number of spot forming cells than the patients, the difference was not significant; 36.4% of patients and 37.5% of controls responded to this peptide. The response of healthy subjects to the common viral peptides was stronger than that of the patients, though the result was not significant. It is unlikely that IAPP would be a target for CD8+ T-cells in diabetic patients; however, the trend observed toward a lower response of T2D patients against IAPP and common viral peptides may imply a decreased immune response in these patients.

Keratosis, Seborrheic

diagnosis

Sign of Leser-Trelat: an association with benign swellings.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 83-85

Keywords: Association; Scrotum-pathology; Neck-pathology; Tumor Markers, Biological; Skin Neoplasms-pathology

Abstract: Sign of Leser-Trelat [SLT] is defined by sudden eruption of numerous seborrheic keratosis or rapid increase in the number of pre-existing seborrheic keratosis. It has been reported as a paraneoplastic manifestation in literature but its position as a paraneoplastic manifestation has both strong opponents and proponents. We hereby, report a case of a 49-year-old male who presented to us with SLT-like lesions in association with benign swellings of neck and scrotum.

Ketoconazole

pharmacology

Open comparative study of efficacy and safety of ketoconazole soap and oral ketoconazole in tinea versicolor.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 63-67

Keywords: Antifungal Agents-pharmacology; Ketoconazole-administration and dosage; Tinea Versicolor-drug therapy; Treatment Outcome; Soaps; Safety; Random Allocation; Administration, Topical; Administration, Oral

Abstract: To compare the efficacy and safety of 2% ketoconazole soap in treatment of tinea versicolor [TV] and to compare it with stat 400mg dose of ketoconazole. Patients of TV confirmed by potassium hydroxide [KOH] mount were divided by block randomization into 2 groups. Group 1 received 400mg of oral ketoconazole single dose and a non-medicated soap for daily bath. Group 2 received 2% ketoconazole soap for daily bath. The lather from the soap while bathing was to be left on the skin for 3 minutes. Patients were assessed at the end one month and KOH repeated from index lesion. Twelve patients out of 25 completed the study, 6 in each group. Four patients [66%] were mycologically cured in group 1 while two patients [34%] were mycologically cured in group 2. All these patients were compliant with the usage of soap. Ketoconazole soap is at best an adjunct in the treatment of TV. It might however be useful in the prophylactic management of patients with chronic TV as bathing is almost a daily routine in most patients especially in tropics. Further studies are required in this aspect.

Kidney Transplantation

A study to evaluate the effect of ratio of donor kidney weight to recipient body weight on renal graft function.

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Urology Annals 2014; 6 (2): 139-141

Keywords: Tissue Donors; Transplants; Kidney-anatomy and histology; Ambulatory Surgical Procedures; Creatinine-blood; Prospective Studies; Evaluation Studies as Topic; Graft Survival

Abstract: To study the effect of the ratio of donor kidney weight [dkw] to recipient body weight [rbw] on short and long term graft function in live donor kidney transplant patients. It was a prospective study of 79 live donor kidney transplant recipients. Patients were divided into three groups depending on the ratio of dkw in grams to rbw in kilograms. Serum creatinine in milligrams percent on the day of surgery, 7[th] day, 1 month, 6 months, 1 year, and 3 years after the surgery was recorded and their means compared. The comparison showed that the decrease in mean creatinine level was more in group three patients as compared with group 2 and one patients at 7 days [1.04, 1.44 and 1.59 in group 3, 2 and 1 respectively] and 30 days [1.12, 1.36 and 1.45 in group 3, 2 and 1 respectively], showing that higher dkw/rbw ratio is beneficial with respect to the early graft function. However this decrease was not statistically significant [P value -0.256 and 0.358 respectively on 7[th] and 30[th] day]. Furthermore long-term function was not different among these three groups. The ratio of dkw to rbw does not have a significant effect on long-term graft function inspite of an early improvement in the function with increased dkw to rbw ratio.

Lactoferrin

genetics

Characterization of single nucleotide polymorphisms [SNPs] in the 5'-flanking region of bovine lactoferrin gene in the local and Holstein cattle of Iran.

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Journal of Veterinary Research 2014; 69 (1): 49-55

Keywords: Mastitis; Bovine-genetics; Polymorphism, Single-Stranded Conformational; Haplotypes-genetics; Polymorphism, Single Nucleotide; Gene Expression; Transcription Factors; Cattle-genetics; Computational Biology; Genotype

Abstract: Lactoferrin [Lf], an iron binding glycoprotein, has a variety of physiological roles and its foremost is antimicrobial properties. Therefore, the lactoferrin gene can be considered as a potential candidate gene for resistance to mastitis. This study was carried out to determine the haplotype frequency of the 5'-flanking region of bovine lactoferrin gene in local and Holstein cattle breeds of Iran using PCR-SSCP and DNA sequencing. Genomic DNA was isolated from 100 blood samples of two cattle breeds [50 Local, 50 Holstein]. Two new primer pairs were designed from Lf sequence to amplify a part of 5'-flanking region of the gene. The amplified fragment was screened by single strand conformation polymorphism [SSCP] and DNA sequencing. The multiple alignments were carried out for the nucleotide sequences of different SSCP patterns. In silico analysis of identified single nucleotide polymorphisms [SNPs] within the 5'-flanking region of bovine Lf gene was screened, to identify any association on transcription factor binding affinity. Analysis of the whole samples revealed three SSCP patterns [A, B and C] for amplified fragment that C haplotype was the only variant identified in local breed samples. The bioinformatics analysis revealed that the T to G trans version at position -602 created an AML-1 transcription binding site in combined genotype A. In -586 position, T to C transition abolished binding site of AML-1 transcription factor. Therefore, to apply Lf gene for marker-assisted selection, additional studies are required to evaluate the functional role of these identified polymorphic sites on gene expression and somatic cell counts in cattle.

Leadership

Leadership styles of dental college principals in Lahore, Pakistan.

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Pakistan Oral and Dental Journal 2014; 34 (1): 100-104

Keywords: Faculty; Education, Dental-organization and administration; Orientation; Questionnaires; Clinical Competence; Organizational Objectives; Schools, Dental-organization and administration

Abstract: Leadership has many dimensions. Bolman and Deal synthesized the diverse body of leadership theory into four cognitive perspectives, or frames, which they labeled structural, human resource, political and symbolic. Effective

educational leaders use multiple frames according to need, and consistently use the political frame. This study was undertaken to determine leadership styles of dental college principals in Lahore, using Bolman and Deal's leadership frames model, and to relate the leadership style to effectiveness of leadership and management. A questionnaire was administered to 43 faculty members in two dental colleges. Scores for the four leadership frames were calculated and related to effectiveness of leadership and management. Faculty perceived dental college principals to be strongest in the structural frame, followed closely by the human resource and symbolic frames, suggesting a multi-frame leadership orientation. The political frame was perceived as the weakest, but with high variance in ratings. The principals were perceived to be significantly more effective in management compared to leadership. There were no significant relationships between leadership frames and effectiveness of leadership and management.

Leishmaniasis, Cutaneous

diagnosis

Is slit-skin smear an alternate to histopathology in the diagnosis of cutaneous leishmaniasis?

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Classified Skin Specialist

JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 34-39

Keywords: Diagnostic Tests, Routine; Leishmaniasis, Cutaneous-pathology; Biopsy; Reproducibility of Results; Diagnostic Techniques and Procedures

Abstract: To determine how effective is slit-skin smear as a diagnostic test in comparison with the histopathology. This was a validation study, carried out in Combined Military Hospital [CMH] Kohat from 1st September 2011 to 30th June 2012. The study population was the patients who were clinically diagnosed as cutaneous leishmaniasis. Slit-skin smears were performed in all and a biopsy was sent for histopathology. The results were analyzed by cross tabs and chi square test. A total of 50 patients were included. They were all adult males. Leishman-Donovan [LD] bodies were seen in histopathology slides in 31 patients [62%] and were not detected in 19 patients [38%]. The slit-smear showed LD bodies in 18 smears [36%] and negative in 32 smears [64%] [p=0.048]. Histopathology is statistically superior investigation than slit-skin smear in the diagnosis of cutaneous leishmaniasis.

Lip

anatomy and histology

Evaluation of the nasolabial angle of Khyber Pakhtunkhwa sample.

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Pakistan Oral and Dental Journal 2014; 34 (1): 80-82

Keywords: Esthetics; Face-anatomy and histology; Cephalometry-methods

Abstract: Esthetic features are different from one race to another, and this should be considered during the treatment planning. The great variance in soft tissue drape of the human face complicates accurate assessment. The nose-lip-chin relationships are exceedingly important in determining the facial esthetics. One important soft tissue parameter in orthodontic diagnosis is the nasolabial angle. The purpose of this study was to establish norms for nasolabial angle in the local population. Normative data for the nasolabial angle was produced from a sample of 50 [25 male and 25 female] adults [18-25 yrs] with well-balanced faces. Mean and standard deviation values from this pooled sample demonstrated a nasolabial angle of 105.8° +/- 3.95°. No statistically significant difference was demonstrated between the values for men and women in this study, but men did have a slightly larger nasolabial angle.

Lipoid Proteinosis of Urbach and Wiethe

genetics

Lipoid proteinosis in two Indian brothers - a case report from South Bengal.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 89-92

Keywords: Lipoid Proteinosis of Urbach and Wiethe-sdiagnosis; Extracellular Matrix Proteins-genetics; Basement Membrane-ultrastructure; Genes, Recessive; Skin-pathology; Periodic Acid-Schiff Reaction

Abstract: Lipoid proteinosis is a rare autosomal recessive disorder with variable phenotype, caused by defect in

extracellular matrix protein-1 and is characterized by deposition of periodic acid-Schiff-positive, diastase resistant material in skin, mucous membrane and internal organs. There are only few reports regarding lipoid proteinosis in literature and in this part of the world. Here, we report a case of lipoid proteinosis in a 29-year-old male with positive family history and widespread distribution involving skin and internal organs. Histopathological finding was consistent with clinical diagnosis of lipoid proteinosis.

Lupus Erythematosus, Systemic

complications

Cutaneous manifestations of systemic lupus erythematosus - an experience from Bahawal-Victoria Hospital, Bahawalpur.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 15-20

Keywords: Skin Diseases-epidemiology; Skin Diseases, Vascular-etiology; Photosensitivity Disorders-etiology; Lupus Erythematosus, Discoid-pathology; Hospitals, Teaching; Oral Ulcer-etiology

Abstract: To document the frequency of cutaneous manifestation of systemic lupus erythematosus [SLE]. It was a case-series collected from Dermatology Department and all four Medical Units of Bahawal-Victoria Teaching Hospital of Quaid-e-Azam Medical, Bahawalpur. A total of 100 patients with diagnosis of SLE and fulfilling the inclusion criteria were included in the study. All the patients were evaluated for the cutaneous manifestations of SLE. All the information was collected in a specially designed proforma and analyzed with the help of SPSS version 10. The mean age of the patients was 25.97+/-4.64 years. 92% patients were female and 8% were male. Out of 100 patients, 85% patient presented with cutaneous manifestations. Photosensitivity was seen in 40 [40%] patients, discoid rash in 35 [35%], malar rash in 25 [25%], and oral ulcers in 24 [24%]. SLE is predominantly seen among female patients of young age. Photosensitivity is most common presentation, followed by discoid rash.

Malocclusion, Angle Class II

Soft tissue analysis in Class I and Class II skeletal malocclusions in patients reporting to Department of Orthodontics, Khyber College of Dentistry, Peshawar.

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Pakistan Oral and Dental Journal 2014; 34 (1): 87-90

Keywords: Malocclusion, Angle Class I-surgery; Mandible-surgery; Orthodontics, Corrective; Cephalometry; Face-anatomy and histology

Abstract: The main objective of this research was to analyze soft tissue paradigm of patients with Skeletal Class I and Class II malocclusions in adult male and female groups of patients reporting to Department of Orthodontics, Khyber College of Dentistry. In the present study 100 patients were selected, 50 of Class I and 50 of Class II with equal gender distribution in both classes having age range of 15 -30 years. Soft tissue interpretation was done by cephalometry. The results show more convex profile among Class II patients. Both upper and lower lips were anteriorly positioned. No gender variability was found regarding nasolabialangle, Z- angle and Ricketts E-line. The review study reveals that different races have their own norms which provide helpful guide-lines in formulating the treatment plan.

Mandibular Condyle

injuries

Etiology of mandibular condylar fractures; a study from tertiary care hospital of Lahore.

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Pakistan Oral and Dental Journal 2014; 34 (1): 42-45

Keywords: Mandibular Fractures-etiology; Accidents, Traffic; Accidents, Occupational; Athletic Injuries; Cross-Sectional Studies

Abstract: It is a cross sectional study conducted in a tertiary care hospital. Patients of condylar fracture reporting to oral and maxillofacial trauma center were evaluated radiographically [OPG, PA view and Lateral Oblique View] as well

as clinically to record the etiology of mandibular condylar fractures. A total of 70 patients of 3 to 45 years of age were included in this study. The frequency of condylar fractures was higher in male of all age groups except for 11-20 years where females comprised of 55.5% of the cases. Among males, the highest frequency of fractures occurred in the third decade of life. Regarding the etiology of mandible condylar fractures, falls [45.71%] and RTA [40%] were found to be the most predominant causative factors, followed by industrial and occupational accidents [6%], Sports injuries [6%] and assault injuries [3%]. Falls were the etiologic factor in most of the cases which explains the association of falls with the mechanism of condylar injury. Road traffic accidents were the second common cause. Type 2 fractures which are low neck fractures with displacement were seen to be the most frequent.

Mandibular condyle fracture- effect of treatment on occlusal relationship.

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Pakistan Oral and Dental Journal 2014; 34 (1): 30-33

Keywords: Mandibular Fractures-surgery; Dental Occlusion, Traumatic-etiology; Outcome and Process Assessment [Health Care]; Fracture Fixation, Internal-methods; Mandibular Condyle-surgery; Range of Motion, Articular; Prospective Studies

Abstract: The incidence of fractures involving the mandibular condyle are stated by most authors to be the second-most common type of fracture of the mandible with male-female ratio 2:1. Condylar fracture may result in restricted mouth opening, restricted movement of the jaw and malocclusion, Malocclusion following condylar trauma may result from alteration in the condylar growth center or union of the fractured segments in a position other than that existing prior to injury. Therefore, the aim of the treatment should be to achieve normal static and dynamic occlusal relationships after treatment. The purpose of this study was to see the improvements in the occlusal relationships after the treatment of the fractured mandibular condyle. Two different treatment modalities surgical and nonsurgical were used to assess their impact on occlusion. The study followed a prospective comparative design and was carried out at the Department of Oral and Maxillofacial Surgery, Children Hospital, Lahore, Pakistan on sixty patients with unilateral condylar fractures. Thirty patients were treated by nonsurgical method and thirty by surgical method. At different intervals of their post-operative visits, patients were evaluated in terms of occlusion to assess the difference between the two groups. Patients treated by nonsurgical method, i.e., closed reduction had greater percentage of malocclusions [44%] at the final post-operative visit i.e. one year, as compared with patients treated by surgical treatment [8.3%] $p=0.005$. Based on this study, more consistent occlusion can be expected when fractures of the condyle are treated by the open reduction and internal fixation technique.

Mandibular Fractures

pathology

Characteristics of symphysis and parasymphysis mandibular fractures.

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Pakistan Oral and Dental Journal 2014; 34 (1): 46-49

Keywords: Accidents, Traffic; Bone Plates; Fracture Fixation, Internal-instrumentation; Mandibular Fractures-surgery; Age Factors; Surgery, Oral; Mandibular Fractures-etiology

Abstract: This descriptive study was conducted to determine the most common site of mandible fractures. 200 patients with fracture mandible who reported to Department of Oral and Maxillofacial Surgery from April 2012 to September 2012 formed study group. Data concerning age, gender, mechanism of injury and site of fracture evaluated and recorded on specially designed proforma. Orthopantomogram [OPG] and where necessary postero- Anterior and right and left lateral oblique views of the mandible were used to diagnose the fracture site. Fracture mandible was predominantly common in males [84%] as compared to females [16%] with male to female ratio of 5.25:1. The age range was 2-65 years with mean age of 21.45 S.D +/-12.59 years. The most common age group involved was 21-30 years [30%] and road traffic accident was the common mechanism of injury [57%] followed by fall [31.5%]. Parasymphysis was the most common site when mandible was fractures at a single site i.e., 43%, while parasymphysis and angle fracture combination was observed in 31%. The study revealed that majority of the patients were young adult males. The most common etiological fracture was road traffic accident and isolated parasymphysis was the most common fracture site.

Maxillofacial Injuries

epidemiology

Analysis of maxillofacial injuries spread over one year period in Karachi sample.

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Pakistan Oral and Dental Journal 2014; 34 (1): 50-53

Keywords: Accidents, Traffic-statistics and numerical data; Accidental Falls-statistics and numerical data; Alcohol Drinking-epidemiology; Mandibular Fractures-epidemiology

Abstract: This descriptive case series study assessed the spectrum of maxillofacial injuries seen at the Emergency Department of Abbasi Shaheed Hospital, Karachi, Pakistan from March 2009 to February 2010. A total of 1295 patients with maxillofacial injuries were included in the study, of whom 875 [67.6%] were male and 420 [32.4%] female. Injuries were most common 340 [26.25%] in first decade. The most common cause was road traffic collision [611] patients and fall was second most common cause [415] patients. The mandible was the most common bone fractured [309] patients, followed by dentoalveolar [142] patients. There were 73 patients with fractured maxilla. Isolated soft tissue injuries occurred in 578 patients most commonly occurring in the lower third of the face. Most of the maxillofacial injuries were received between 1500 and 2100 hrs, [665] and Saturdays were the busiest days with [242] patients. The collection of data over the one from emergency department regarding the maxillofacial fractures including soft tissues injuries helps us how to manage on early basis and also may guide us regarding the time and day of the week which is busiest time of the emergency department.

Medicine, Unani

Contemporary drug development [CDD] to substantiate the efficacy of Unani medicine.

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Presently Department

Hamdard Medicus 2013; 56 (2): 5-11

Keywords: Pharmaceutical Preparations; Primary Health Care; Herbal Medicine; Treatment Outcome

Abstract: Unani System of Medicine holds that the restoration of equilibrium of various elements and faculties of the human body depends on six essential factors called Asbab-e-Sitta-e-Zarooriya, which are called essential factors, for the reason that if anyone of those is withdrawn, life becomes at risk, sooner or later, and their adequate availability and utilization will ensure health, any derangement in their adequacy will lead to disorders. It is generally believed that herbs are safer than the pharmaceutical drugs, as they are obtained from natural sources and resources. In Unani system, herbs have been used since time immemorial as primary Health Care for the treatment of various ailments. The herbal medicine has been largely used in developing countries and is also increasingly used among the western countries for various ailments ranging from cosmetics to cancer. Research works have been carried out in quantitative as well as qualitative terms on herbal medicine at advance levels to provide safe and best remedies to the patients without any side effect, but Unani Medicine is intensely required for making deliberation on heavy metals for addressing its quality and safety profile for its prolong use in the light of traditional disposition without any obstacle.

Pharmacological and toxicological investigation of coded Unani formulation UNIM-211.

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Hamdard Medicus 2013; 56 (2): 47-55

Keywords: Treatment Outcome; Diabetes Mellitus, Experimental-drug therapy; Rats; Blood Glucose-drug effects

Abstract: The Pharmacological and toxicological investigation of the aqueous extract of coded compound Unani formulation UNIM-211 was undertaken to evaluate its efficacy and safety in experimental animals. Hypoglycemic activity of the drug extract was evaluated in alloxan induced diabetic rats. Drug extract only at a dose of 3 gm/kg significantly reduced the blood glucose level after 8 days of treatment. The hypoglycemic effect of drug extract was compared with standard hypoglycemic agent glibenclamide. The drug extract is found to be less effective in lowering the blood glucose level in diabetic rats when compared with glibenclamide. The acute toxicity study carried out in albino mice revealed that it tolerated a dose of 10 gm/kg of drug extract and animals showed no abnormal sign and symptoms and no overnight mortality when observed for 24 hours after drug treatment. The investigation of subacute toxicity revealed that the aqueous extract of the drug at doses of 1 gm/kg and 3 gm/kg showed no change in the parameters of liver function test and lipid profiles, but a significant increase in blood urea level was observed at both the doses of the drug. The haematological studies revealed no significant change in percent haemoglobin, ESR, but a significant change in TLC and DLC was observed at a dose level of 3 g/kg. The organ to body weight ratio of liver, heart and spleen remained unaltered but a significant increase in the organ to body weight ratio of kidney at a dose of 3 g/kg was observed. These results show that the drug is effective in lowering alloxan induced blood glucose level only at high dose, and it is quite safe except some adverse effect on kidney.

Melatonin

pharmacology

Melatonin preserves the morphology of parotid gland damaged by streptozotocin induced diabetes.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 128-132

Keywords: Diabetes Mellitus, Experimental-complications; Diabetes Mellitus, Experimental-drug therapy; Salivary Glands-drug effects; Antioxidants-pharmacology; Prospective Studies; Rats; Parotid Gland-anatomy and histology

Abstract: This study investigated the injurious effects of Streptozotocin [STZ] induced diabetes on histology of rat salivary gland along with amelioration of these effects by the antioxidant melatonin. This prospective experimental study was conducted in the department of Anatomy, Basic Medical Sciences Institute, JPMC, Karachi for a period of 6 weeks from November to December, 2012. 45 male albino rats were divided into 3 groups, containing 15 animals each. Group A was treated as control, group B and C received 37 mg/kg STZ Intraperitoneally [i/p] once at the start of experiment, whereas group C additionally received 10mg/100ml of melatonin [MEL] 3-days prior to STZ administration. After sacrificing the animals, the parotid glands were processed for histological examination and viewed under the light microscope. The histological findings demonstrated changes in the parotid gland morphology of group B animals, such as the presence of lipid vacuoles in the serous acini and degeneration of the acinar cells. There was a significant reduction in the severity of these changes in melatonin treated group C. Serum glucose was significantly increased in both group B and C as compared to control. Total serum cholesterol was significantly increased in group B as compared to group A and C. STZ altered the histology of parotid gland by lipid infiltration and degeneration of acini. Melatonin suppressed the progression of damage induced by STZ due to its antioxidant properties and also reduced total serum cholesterol levels, but it could not decrease STZ induced hyperglycemia.

Mitral Valve

surgery

Is declotting a better procedure than Redo MVR for stuck mitral valve?

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S53-S58

Keywords: Cardiopulmonary Bypass-instrumentation; Reoperation; Postoperative Period; Evaluation Studies as Topic; Retrospective Studies; Echocardiography, Doppler; Heart Valve Diseases-surgery; Heart Valve Diseases-ultrasonography; Surgical Instruments; Surgical Procedures, Minimally Invasive; Treatment Outcome

Abstract: To evaluate and compare the outcome of declotting versus Redo Mitral Valve replacement for stuck mitral valve in the early postoperative period. Retrospective interventional study. Armed Forces Institute of Cardiology and National Institute of Heart Diseases [AFICNIHD] Rawalpindi from 1[st] Jan, 2010 to 31[st] Oct, 2013. A total of 36 patients were selected. Group A [n = 28] underwent declotting and group B [n = 08] were treated by redo mitral valve replacement [MYR]. Diagnosis of prosthetic valve obstruction was made on the basis of history, clinical examination, echocardiography and fluoroscopy. All patients were operated under general anesthesia and cardiopulmonary bypass [CPB]. Total clamp and CPB time were recorded. Post operatively, patients were evaluated with daily progress parameter. The hemodynamic status, isotropic support, ventilation time, intensive care ward and total hospital stay were also recorded for comparison. Two-dimensional echocardiography was done before extubation and at discharge. Mortality rate was also compared in the two groups. No statistical difference was found on the basis of gender, age, interval between initial mitral valve replacement [MVR] and redo operation or declotting, anticoagulation status, New York Heart Association [NYHA] functional class, international normalized ratio [INR] level, trans thoracic echocardiography and luoroscopy. The mean CPB time and cross clamp time was significantly less in group A than group B. Similarly mean ventilation time in group A was significantly less than in group B. The mean ITC stay was and mean hospital stay was not statistically significant. The mortality rate in group A and B was 7.14% and 50% respectively which was statistically significant. Prosthetic valve thrombosis is a life threatening complication after mechanical mitral valve replacement with high mortality without timely and effective surgical intervention. Declotting, being a less aggressive surgical technique is recommended because of better outcome in terms of morbidity and mortality in the early post-operative period.

Mitral Valve Prolapse

Heart rate variability from 24 hours versus 72 hours holter monitoring in patients with mitral valve prolapse.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S44-S48

Keywords: Heart Rate; Arrhythmias, Cardiac/diagnosis; Electrocardiography, Ambulatory; Echocardiography; Cardiac Electrophysiology; Myocardial Infarction; Cross-Sectional Studies

Abstract: To compare recorded heart rate variability from 24 hours with that recorded from 72 hours holter monitoring in patients with mitral valve prolapse. Cross sectional study. Department of Clinical Cardiac Electrophysiology Armed Forces Institute of Cardiology/National Institute of Heart Diseases, Rawalpindi from May 2007 to March 2008. Patients from 15 to 38 years of age with confirmed diagnosis of mitral valve prolapse on 2 dimensional echocardiography were included. Patients with acute myocardial infarction [MI], Ischemic heart disease, diabetes mellitus or hypertension were excluded. Total 37 patients were included in the study through non-probability consecutive sampling. All these patients underwent 72 hours holter monitoring using Reynolds medical holter monitors 'life card CF'. Statistical time domain measures of heart rate variability i.e. standard deviation of all NN intervals [SDNN], standard deviation of the averages of NN intervals [SDANN] and square root of the mean of the squares of differences between adjacent NN intervals [RMSSD]. Mean values of SDNN, SDANN and RMSSD from 24 hours holter monitoring were 141.62 ms, 125.16 ms and 28.40 ms whereas those recorded from 48 hours of holter monitoring were 136.94 ms, 122.37 ms and 26.46 ms respectively. Difference between none of the variables from the two recordings was significant. Heart rate variability remains the same irrespectively of the length of holter monitoring.

Molar

anatomy and histology

Intercanine and intermolar widths in angle class I, II and III malocclusions.

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Pakistan Oral and Dental Journal 2014; 34 (1): 83-86

Keywords: Dental Arch-pathology; Malocclusion, Angle Class III-pathology; Malocclusion, Angle Class II-pathology; Malocclusion, Angle Class I-pathology; Dentition, Mixed; Analysis of Variance

Abstract: Malrelation along the transverse plane is one of the most common causes of malocclusion and can be assessed by considering the intercanine and intermolar widths. An endeavour was undertaken to find the intercanine and intermolar widths on 76 dental casts of the individuals having Class I, Class II division 1, Class II division 2, Class III and Class II subdivision malocclusions, visiting orthodontic department of Sardar Begum dental college and hospital, Peshawar. Results were obtained using SPSS version 20 which showed the mean maxillary intermolar widths of 34.6mm*, 34.5mm, 30.9mm, 34.7 mm and 34.18mm for Class I, Class II division 1, Class II division 2, Class III and Class II subdivision groups respectively. Mean maxillary intercanine widths were found to be 24.16mm, 24.5mm, 24.6mm, 23.9mm and 23.05mm for Class I, Class II division 1, Class II division 2, Class III and Class II subdivision groups respectively. Similarly mean mandibular intermolar widths were 32.8mm, 33.02mm, 30.3mm, 33.1mm and 32.8mm for Class I, Class II division 1, Class II division 2, Class III and Class II subdivision groups respectively. While mean mandibular intercanine widths were found to be 19.2mm, 19.06mm, 20.34mm, 19.54mm and 18.75mm for the Class I, Class II division 1, Class II division 2, Class III and Class II subdivision groups respectively. ANOVA analysis showed no sta-tistical significant differences in the intermolar and intercanine widths among the five malocclusion groups.

Mouth Neoplasms

Awareness and knowledge about oral cancer in adult patients visiting Islamic International Dental Hospital, Islamabad, Pakistan.

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Pakistan Oral and Dental Journal 2014; 34 (1): 113-117

Keywords: Awareness; Health Knowledge, Attitudes, Practice; Questionnaires; Risk Factors; Data Collection; Chi-Square Distribution; Early Detection of Cancer

Abstract: The aim of this study was to assess the level of awareness about oral cancer among patients who visited Islamic International Dental Hospital, Islamabad, Pakistan. It was quantitative study that employed descriptive cross-sectional design. The Quantitative study design was selected because it was less time consuming and cost effective.

This study included a pre-existing questionnaire. The pre-existing questionnaire was in English and Urdu language [national language of Pakistan]. It included 15 questions regarding patient knowledge about the spread of disease, etiology, prognosis, sign and symptoms, risk factors and treatment of the disease. All patients aged 18 years and above visiting [random sampling] Islamic International Dental Hospital, Islamabad during the specified period of time. [Between 20th June - July 2011] were approached and invited to participate in the study. Maximum sampling of 100 patients including 60 male patients and 40 female patients were done. The respondents were then selected on the basis of filling the inclusion criteria. Pearson chi-square test and descriptive statistics such as frequency distribution and cross-tabulation were used to analyze the data through SPSS. Level of significance was set at 0.05 or smaller than this value. The final results show that 54% of the participants were only aware of the knowledge and awareness regarding oral cancer. A significant number of patients [29%] were found after going through all the data that were collected to be totally unaware or ignorant of the actual price that had to be paid for tobacco smoking. Lastly, only about 17% of the respondents had intermediate knowledge about mouth cancer. Regarding risk factors 95% expressed awareness that smoking and smokeless tobacco [including betel nut, pan and chalia] were cause of oral cancer and the P-value was also found to be significant [0.053]. It was concluded that information regarding oral cancer knowledge was good.

genetics

Dynamics of Kirsten Ras and isoforms of protein kinas in the progression of oral potentially malignant to malignant lesions.

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Pakistan Oral and Dental Journal 2014; 34 (1): 61-65

Keywords: Protein Isoforms; Carcinoma, Squamous Cell-genetics; Oncogenes; DNA Mutational Analysis; Gene Amplification; Genetic Predisposition to Disease; Mouth Mucosa; Cell Cycle-genetics; Prognosis; Reverse Transcriptase Polymerase Chain Reaction

Abstract: Oral premalignant lesions and oral squamous cell carcinoma are significant health problems influenced by different predisposing factors and genetic alterations. The clinical and histological features alone cannot accurately predict whether potentially premalignant lesions of the oral mucosa will remain stable, regress or progress to malignancy. Methodology included extraction of RNA from paraffin embedded tissue samples, RT-PCR followed by PCR in 53 biopsy specimens of premalignant and malignant lesions. Results of this study indicate that Akt levels show a continuous rise from pre-malignant lesions to grade II. [Akt1: Premalignant lesions 0.06 + 0.01 and in moderately differentiated Grade II OSCC 0.12 + 0.03; Akt2: Premalignant lesions 0.03 + 0.00 and moderately differentiated Grade II OSCC 0.13 + 0.03 and Akt3: Premalignant lesions 0.02 + 0.00 and moderately differentiated Grade II OSCC 0.06 + 0.01. KRas expression also increases as the grade of the cancer increases [pre-malignant lesions 0.02 + 0.02 and Grade II OSCC 0.17 + 0.01]. Blocking these genes at the level of premalignant lesions may help to decrease the chances of progression into oral squamous cell carcinoma.

Mouthwashes

Effect of an essential oil mouth rinse [listerine] on interproximal plaque regrowth compared to chlorhexidine and sterile water: a randomized controlled, three periods cross-over, clinical trial.

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Pakistan Oral and Dental Journal 2014; 34 (1): 91-95

Keywords: Chlorhexidine-pharmacology; Dental Plaque-drug therapy; Cross-Over Studies; Oral Hygiene; Dental Plaque Index; Periodontal Diseases-drug therapy; Confidence Intervals

Abstract: Mechanical plaque control is the most effective way in preventing periodontal diseases. However, due to some drawbacks in the mechanical methods, chemical plaque control methods have been recommended. The aim of this study was to examine the efficacy of an Essential Oil mouth rinse [Listerine] on plaque formation in interproximal areas as compared to Chlorhexidine and Sterile water. The study was an observer-blind, 4-day plaque regrowth, cross over study. The study was conducted at the faculty of dentistry, University of Western Cape. 60 dental students aged 16-34 years with a minimum of 20 natural teeth participated voluntarily in the study. Exclusion criteria were established. An informed consent was taken prior to the start of the study. The students used one mouth rinse for 4 days as the only oral hygiene method and then plaque was scored using Silness and Loe plaque index. The same technique was used for the 2nd and 3rd experimental period with the other two mouth rinses with an identical wash out phase of two weeks. The mean plaque index scores for the Listerine mouth wash were 0.94 +/- 0.18, for Chlorhexidine 0.54 +/- 0.09 and for sterile water were 1.54 +/- 0.08. Mean percentage of full mouth plaque free surfaces for the use of Listerine mouth wash was 25 +/- 4.32, 54 +/- 5.84 and 13 +/- 4.46 for Chlorhexidine and sterile water respectively. Mean percentage for interproximal plaque free surfaces [IPFS] for different mouth rinses were also calculated and were 22 +/- 4.84 for Listerine mouth rinse, 42 +/- 5.18 for Chlorhexidine and 9 +/- 3.78 for sterile water. Analysis of variance and construction of 95% confidence intervals showed that both Chlorhexidine and Essential Oils significantly reduced plaque as compared to sterile water. The findings of this study suggest that although Essential Oils can reduce plaque formation but their effectiveness is lesser than Chlorhexidine.

Myelodysplastic Syndromes

drug therapy

Myelodysplastic syndrome following essential thrombocytopenia in hypertension a case report.

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Hamdard Medicus 2013; 56 (2): 42-46

Keywords: Myelodysplastic Syndromes-pathology; Treatment Outcome; Thrombocytopenia-complications

Abstract: Myelodysplastic Syndrome [MDS] is a disorder of haemopoietic stem cell. Since, it has not been commonly observed in Pakistan, this case study is to understand the scientific and therapeutical comprehension of MDS. An 81 year old male hypertensive patient was presented in a private hospital of Islamabad, Pakistan, with anemia. On medical investigation the physician prescribed him, multi-vitamins OD for a month; injection G-CSF 300 mcg once a week; Molgramostim 300 microg on every alternate day for 3 weeks; Thalidomide 100 mg OD with Alprazolam 0.5 mg at night for 4 weeks and 5'-azacytidine for a month. Clinical and pharmaceutical inaccuracies were observed. Moreover; the high cost and long term therapy are major obstacles to cure this disease. Therefore, affordable method and short-term effective therapy and reduced cost of drugs will help to cure the disease in more efficient way and in less time with more promising results.

Myiasis

pathology

Oral myiasis: a case series of 11 patients treated at Khyber College of Dentistry Hospital, Peshawar.

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Pakistan Oral and Dental Journal 2014; 34 (1): 57-60

Keywords: Myiasis-drug therapy; Myiasis-etiology; Myiasis-diagnosis; Larva; Mouth Neoplasms

Abstract: In order to determine the clinical presentation and management f 11 patients suffering from Oral myiasis a descriptive case series study was carried out at Khyber College of Dentistry, Peshawar, from June 2008 to December 2011. 11 patients of Oral Myiasis reported over a time period of 5 years. Thorough history was taken from each patient followed by complete clinical examination, relevant radiographs were advised where necessary. Surgical debridement was carried out followed by larvae removal with the help of maggot oil. Two patients were advised systemic therapy with Ivermectin. Mean age of the patient at the time of presentation was 39.72 years SD + 21.5. Majority of patients were males [64%]. Anterior maxilla was found to be the predominant site. Head and neck malignancies were found to be the most common cause of Myiasis. Thus Oral myiasis is a rare but serious condition, involving necrotic and suppurative wounds in patients with deranged systemic conditions. Treatment includes cleaning, debridement, removal of larvae and systemic therapy with Ivermectin.

Myocardial Infarction

surgery

Efficacy and safety of transradial approach in primary PCI for STEMI.

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Armed Forces Institute of Cardiology

PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S27-S30

Keywords: Percutaneous Coronary Intervention; Outcome and Process Assessment [Health Care]; Treatment Outcome

Abstract: To determine the efficacy and safety of transradial approach in primary percutaneous intervention in acute ST segment elevation myocardial infarction. Descriptive study Emergency reporting [ER] department of Armed Forces Institute of Cardiology National Institute of Heart Diseases [AFIC/NIHD] from Dec 2011 to Dec 2013 Retrospective data of 354 patients had been collected through records. All the patients presented with acute myocardial infarction to emergency reporting [ER] department of Armed Forces Institute of Cardiology National Institute of Heart Diseases were included in the study. All the patients underwent primary coronary intervention through transradial route. All patients received IIB IIIA inhibitors bolus and infusion. The primary end points were procedure success and local access site hematoma and secondary end points were major bleeding requiring blood transfusion and door to balloon

time. The mean age of the patient was 64 +/- 18 years, there were 251 [70.9%] males and female were 103 [29.1%]. Radial access site cannulation time was 194 +/- 22 sec and door to balloon time was 78 +/- 14 min. Procedural success was 349 [98.6%]. Forearm hematoma was noted in 4 [1.12%]. No major bleeding requiring transfusion was noted. Primary percutaneous intervention [PPCI] via transradial [TR] route in acute STEMI patients can be achieved with high success and low complications in our population. The clinical outcome is matching with local and international data.

Nalbuphine

therapeutic use

Efficacy of nalbuphine in preventing hemodynamic response to laryngoscopy and intubation.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 211-216

Keywords: Intubation, Intratracheal-adverse effects; Tachycardia-prevention and control; laryngoscopy-adverse effects; Tachycardia-etiology; Arterial Pressure-drug effects; Analgesics, Opioid-therapeutic use; Double-Blind Method

Abstract: To determine the efficacy of nalbuphine in preventing increase in heart rate and mean arterial pressure in response to laryngoscopy and tracheal intubation. This double blind randomized controlled trial was conducted on 100 ASA [American Society of Anesthesiologists] grade I-II patients scheduled for general anesthesia. Patients were randomly allocated to receive either saline [group I, control group, n=50] or nalbuphine 0.2 mg kg⁻¹ [group II, study group, n=50] as a bolus dose 5 minutes before laryngoscopy. Anaesthesia was then induced with propofol [2mg kg⁻¹] and atracurium [0.6mg kg⁻¹] and or tracheal intubation was then performed within 30 seconds. Heart rate [HR] and mean arterial pressures[MAP] were recorded before the administration of the study drug, baseline value [T-0], 3 minutes after study drug administration [T-1], immediately after tracheal intubation [T-2] and then after every 1 minute up to 5 minutes [T3-7] and then after 10 minutes of intubation [T-8]. The Nalbuphine group showed significantly lesser rise in HR compared to control group after laryngoscopy and or tracheal intubation that continued till 10 minutes after intubation [p-value from ?0.0001-0.0297]. The Nalbuphine group also showed significantly lesser rise in MAP compared to control group after laryngoscopy and or tracheal intubation that continued till 5 minutes after intubation [p-value from ?0.0001-0.0152]. At 10 minutes post intubation though the rise in MAP was still lesser in Nalbuphine group than control group but it was not significant [p-value=0.0540]. Nalbuphine 0.2 mg kg⁻¹ prevents a marked rise in heart rate and mean arterial pressure associated with laryngoscopy and or tracheal intubation.

Nephrectomy

instrumentation

Robotic-assisted radical nephrectomy for renal angiomyolipoma with inferior vena cava thrombus extension.

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Urology Annals 2014; 6 (2): 176-178

Keywords: Angiomyolipoma-surgery; Robotics; Kidney Neoplasms-surgery; Vena Cava, Inferior-surgery; Surgical Instruments

Abstract: Renal angiomyolipoma with inferior vena caval venous extension is rare with only 40 cases reported in the literature. We report a case of a 35-year-old lady with angiomyolipoma with inferior vena caval thrombus that was managed surgically with robotic-assisted radical nephrectomy.

methods

Laparoscopic radical and partial nephrectomy: the clinical efficacy and acceptance of the techniques.

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Urology Annals 2014; 6 (2): 101-106

Keywords: Laparoscopy-methods; Kidney Diseases-surgery; Kidney Neoplasms-surgery; Treatment Outcome

Abstract: The laparoscopic approach has been established as the surgical procedure of choice for radical nephrectomy during the recent years. The advantages of the laparoscopic radical nephrectomy in comparison to the open approach are well-documented. The oncological results of the laparoscopic approach are similar to the open procedure while the post-operative morbidity is lower. Laparoscopic partial nephrectomy seems to gain ground to its open counterpart, as the accumulation of experience in the technique grows. In this review, a PubMed search in the latest literature on radical and partial laparoscopic nephrectomy took place and the outcome of the search is presented. Several issues about the surgical techniques and clinical efficacy are discussed. In addition, the preliminary experience in laparoscopic nephrectomy of one of the authoring institutions is also presented.

Neuroendocrine Tumors

diagnosis

Primary neuroendocrine tumor of the testis.

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Urology Annals 2014; 6 (2): 173-175

Keywords: Testicular Neoplasms-diagnosis; Immunohistochemistry; Neoplasm Metastasis; Orchiectomy; Microscopy, Electron

Abstract: Testicular neuroendocrine tumor is rare. It accounts for less than 1% of all testicular neoplasms. More than 60 cases have been published in the literature. A 27-year-old man presented with left testicular mass and underwent radical orchidectomy. Histological examination showed neuroendocrine tumor, confirmed by immunohistochemistry and electron microscopy. The patient showed no evidence of metastasis over 1-year follow-up post-orchidectomy in spite of extensive tumor necrosis.

Nevus, Sebaceous of Jadassohn

pathology

A clinical and histopathological study of nevus sebaceous.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 31-33

Keywords: Nevus, Sebaceous of Jadassohn-diagnosis; Skin Neoplasms-pathology; Hamartoma-pathology; Evaluation Studies as Topic; Sebaceous Glands-pathology

Abstract: To study the clinical and histopathological features of nevus sebaceous [NS]. We selected 20 cases of nevus sebaceous for clinical and histopathological evaluation. Regarding the clinical appearance of lesions verrucous plaques were seen in 60% patients, papules in 25% and patches in 15%. All of the lesions showed abortive/immature hair follicles characterized by cords of undifferentiated, basaloid cells resembling the embryonic stages of hair follicle. NS is a hamartoma consisting of various elements indigenous to the organ and not merely the sebaceous units.

Obesity

complications

Cutaneous manifestations in obesity.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 21-24

Keywords: Skin Diseases-epidemiology; Case-Control Studies; Quality of Life; Evaluation Studies as Topic; Early Diagnosis

Abstract: To study the frequency of various dermatoses in obese patients and their comparison with the control group of normal weight individuals. The duration of study was one year starting from March 2011 to March 2012. A total of 93 obese [BMI >30kg/m²] and 93 normal weight [BMI 18.5-24.9 kg/m²] individuals were included in the study. All the individuals underwent a complete medical and dermatological evaluation. All of them were evaluated for the presence of metabolic syndrome, as well. Common dermatoses seen in obese patients were acanthosis nigricans,

striae, acrochordons, and various infections. Out of these acanthosis nigricans, acrochordons and striae had statistically significant relationship with obesity as compared to control group [$p < 0.05$]. All the manifestations were also compared for diabetes, dyslipidemia and metabolic syndrome. Obesity is associated significantly with certain dermatoses. Understanding and thorough knowledge of these disorders is necessary both for the physicians as well as for a dermatologist, as many of these conditions are treatable, leading to an improved life quality. Early recognition of these lesions may also warn the patients for a need of weight reduction.

Obsessive-Compulsive Disorder

genetics

[Evaluation of imprinting pattern in patients with obsessive- compulsive disorder [OCD] in Sanandaj]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 21-29

Keywords: Genomic Imprinting; Family; Chi-Square Distribution; Questionnaires; Cross-Sectional Studies

Abstract: Obsessive-compulsive disorder is [OCD] one of the serious problems which imposes high economic and social expenses on the society. The aim of this study was to identify a probable transmission pattern in the families of the patients with OCD. This cross sectional study included 150 patients in the psychiatric centers in Sanandaj. Diagnosis of the disorder was confirmed by a psychiatrist. History of signs and symptoms of OCD in the maternal and paternal relatives of the patients, including the type, severity and duration of the signs and symptoms were recorded in a questionnaire for every patient. We used descriptive statistics to determine relative and absolute frequencies, and chi-square test to analyze the relationship among the nominal variables. The results of this study showed that contamination and pathological doubt were the most frequent patterns. Washing was the most frequent pattern of obsession which was observed in 42% of the patients. The family history of OCD were 18% in paternal and 44.7% in maternal relatives. 35.3% of the patients had no family history of OCD. The results indicated that family history of OCD, especially maternal, is important and OCD is more likely to occur in the subjects with family history of this disorder. However more studies are needed to identify the exact genetic pattern.

Obstetric Labor, Premature

etiology

Risk factors of preterm labour and the use of progesterone in prevention of preterm birth.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 189-195

Keywords: Risk Factors; Progesterone-therapeutic use; Premature Birth-prevention and control; Outcome Assessment [Health Care]; Maternal Age; Treatment Outcome

Abstract: To find out the risk factors of preterm labour and to study the use of progesterone for the prevention of preterm birth. An interventional study was conducted for a period of one year on patients admitted with threatened preterm labour. The outcome measures included preterm birth at less than 37 completed weeks of gestation, fetal and neonatal outcome. The patients were started on two injections of 250 mg hydroxyprogesterone daily for the first 3 days. They were discharged on two injections [250 mg each] at three days interval for 2 weeks and were invited for a follow-up visit in antenatal clinics. Out of 4670 pregnant women with singleton pregnancy, 567 [12.14%] presented with confirmed preterm labour. Risk factors for spontaneous preterm labour included maternal age less than 25 years [$n=367$, 64.67%], history of preterm birth [$n=236$, 41.62%], uterine anomalies [$n=23$, 4.06%] and cervical anomalies [$n=4$, 0.71%]. Injectable Progesterone was associated with arrest of early labour pains and prolongation of pregnancy. Neonatal outcome including respiratory distress syndrome [$n=23$, 4.06%], necrotizing enter colitis [$n=4$, 0.71%] and admission to neonatal Intensive Care Unit [$n=6$, 1.06%] were noted. Due to beneficial effects of Injectable progesterone, the pregnancy was observed to be prolonged by 4 or more than 4 weeks [$n=405$, 71.43%]. Preterm birth can be prevented if risk factors of preterm labour are fully assessed and managed properly. Progesterone is associated with beneficial effects in prolonging pregnancy and preventing preterm delivery.

Oligospermia

therapy

Therapeutic evaluation of a Unani formulation in cases of oligospermia.

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Hamdard Medicus 2013; 56 (2): 87-94

Keywords: Medicine, Unani; Sperm Count; Semen; Treatment Outcome

Abstract: Most Common cause of infertility is oligospermia i.e. sperm counts below 20 million/ml, ejaculated volume below 1 ml, failure of liquefaction etc. In present study 50 cases of oligospermic men in their fertile age i.e. 25-55 years were registered, for study. All cases were free from any hormonal, organic or systemic pathology, hence they were considered to suffer with idiopathic oligospermia. The Unani formulation containing 5 ingredients was given in dosage of 10 gm powder twice daily for 40 days, and it was observed that the overall improvement in semen quantity, quality and sperm count etc., were found to be significantly improved.

Oral Health

education

Oral health-related knowledge, attitude, and practice among school children from rural and urban areas of district Sheikhpura, Pakistan.

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Pakistan Oral and Dental Journal 2014; 34 (1): 109-112

Keywords: Health Knowledge, Attitudes, Practice; Socioeconomic Factors; Social Class; Schools; Rural Population; Urban Population; Child; Cross-Sectional Studies

Abstract: Good oral health is the major aspect of general health but the practitioners in the field of dental surgery have reported it is one of the most ignored part among general community. Good oral health practices started at earlier age lead to healthy gums and teeth later in life. In present research, the knowledge, attitude and practice of oral health among school children were studied. Descriptive statistics and tests of significance [t-test and F-test] show that oral health Knowledge, Attitude and Practice [KAP] among study participants were poor and needed to be improved. Findings of the present study also showed that utilization of dental service was mainly for pain relief. Significant gender differences were found where girls had scored higher in all the three aspects of KAP. Parent education and income level of the family were also found significant factors. Children from high socioeconomic status had scored higher in all the three dimensions of KAP scores. Similarly, children of educated parents had higher scores. But it is important to note that generally the level of score in KAP was less than 50%, which is not a good indication. Comprehensive oral health educational programs for both children and their parents, especially for less educated and lower socioeconomic group families, are required to improve the prevention and control of oral diseases.

Oral Submucous Fibrosis

genetics

Expression of integrin alphavbeta6 [alphavbeta6] in oral submucous fibrosis: a potentially malignant condition of oral cavity.

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Pakistan Oral and Dental Journal 2014; 34 (1): 66-73

Keywords: Transforming Growth Factor beta1-metabolism; Cell Differentiation; Myofibroblasts; Immunocytochemistry; Biological Assay; Coculture Techniques; Phenotype; Antigens, Neoplasm; Integrins-biosynthesis

Abstract: Oral submucous fibrosis [OSF] is a chronic progressive fibrosing disorder of the oral cavity. A common finding in tissue fibrosis is that stromal fibroblasts become 'activated' myofibroblasts and express α -smooth muscle actin [SMA]. TGF- β 1 is considered to have a central role in inducing this myofibroblastic phenotype, and its expression is increased in numerous fibrotic conditions. The epithelial-specific integrin α v β 6 is not detectable on normal oral keratinocytes but is upregulated during tissue remodelling. α v β 6 is a key activator of TGF- β 1 through its interaction with the latency-associated peptide [LAP] of the cytokine. The objective of the study was to

investigate the role of alphavbeta 6 integrin in the pathogenesis of OSF. We used immunochemistry to examine expression of alphavbeta 6 in 41 cases of OSF compared with 14 cases of fibroepithelial hyperplasia, and found significantly higher expression in OSF [$p=0.009$]. We carried out a TGF- β 1 bioassay using a keratinocyte cell line genetically modified to express high levels of alphavbeta 6 [VB6], and found that inhibition of alphavbeta 6 significantly reduced TGF- β 1 activation [$p<0.0001$]. Co-culture of HFFF2 fibroblasts with VB6 cells induced myofibroblast transdifferentiation, producing a marked increase in SMA expression. This was inhibited using anti- alphavbeta 6 antibodies, confirming that myofibroblast generation was alphavbeta 6-dependent. In conclusion, these data show that alphavbeta 6-dependent TGF- β 1 activation promotes myofibroblast transdifferentiation, and may be responsible, in part, for the chronic fibrosis seen in OSF.

Orthotic Devices

[Long-term effects of foot orthoses on leg muscles activity in individuals with pesplanus during walking]

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Bu Ali Sina University - Physical Education and Sport Sciences Faculty

Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 88-98

Keywords: Foot Deformities-therapy; Foot Deformities-rehabilitation; Walking; Muscle, Skeletal-physiopathology; Analysis of Variance; Leg; Foot; Adaptation, Biological

Abstract: Foot orthoses are widely prescribed to treat a range of lower extremity problems. Long-term biomechanical effects of foot orthoses are not clearly documented in the literature. The aim of this study was to examine long-term effects of foot orthoses on leg muscles activity in individuals with pesplanus during walking. In this clinical trial we selected 45 subjects after clinical examination. The subjects were divided into three equal groups: experimental pesplanus, control pesplanus and a healthy control group [with normal feet]. In the pre-test stage, electrical activity of leg muscles including tibialis anterior, peroneus longus, medial gastrocnemius and soleus were recorded at stance phase of walking, while all subjects walked barefoot along a 14m line. Experimental pesplanus group wore the custom-made orthoses for a period of six months. Then experimental pesplanus and control pesplanus groups underwent post-test. One-way ANOVA was used for data analysis. After six months of utilizing foot orthoses, the tibialis anterior activity significantly decreased in contact sub-phase [$P=0.006$]. The medial gastrocnemius activity showed a significant decrease in midstance sub-phase in the post-test [$P=0.007$]. Also, the soleus muscle had decreased activity in contact [$P=0.033$] and midstance [$p=0.023$] sub-phases in the post-test. According to the results of this study, we found that long term use of foot orthoses could change muscle activation and result in secondary adaptation.

Ovarian Failure, Premature

genetics

Premature ovarian failure: a critical condition in the reproductive potential with various genetic causes.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 1-12

Keywords: Ovarian Failure, Premature-pathology; Amenorrhea-pathology; Amenorrhea-genetics; Phenotype; Gonadal Hormones-metabolism; Gonadotropins-metabolism; Sex Chromosome Aberrations; Chromosomes, Human, X

Abstract: Premature ovarian failure [POF] is identified as a heterogeneous disorder leading to amenorrhea and ovarian failure before the age of 40 years. The first known symptom of the disease is having irregular menstrual periods. The phenotype appearance of POF depends significantly on the variations in hormones. Low levels of gonadal hormones [estrogens and inhibins] and increased level of gonadotropins [luteinizing hormone [LH] and Follicle stimulating hormone [FSH]] [hypergonadotropic amenorrhea] are well documented as causes of POF. There is an association between the failure of germ cell development and complete ovarian failure, and consistently decreased number of germ cells is more likely associated with partial ovarian failure resulting in secondary amenorrhea. A literature review on recent findings about POF and its association with genomic alterations in terms of genes and chromosomes. POF is a complex heterogeneous disorder. Some of POF cases are carriers of a single gene mutation inherited in an autosomal or X-linked manner while a number of patients suffer from a chromosome abnormality like Turner syndrome in mosaic form and manifest secondary amenorrhea associated with ovarian dysgenesis. Among many of the known involved genes in POF development, several are prove to be positively associated to the disease development in different populations. While there is a promising association between X chromosome anomalies and specific gene mutations with POF, genome-wide analysis could prove a powerful tool for identifying the most important candidate genes that influence POF manifestation.

Ovarian Follicle

transplantation

Assessment of ovarian tissues autografted to various body sites followed by IVM in mouse.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 199-204

Keywords: In Vitro Oocyte Maturation Techniques; Oogenesis; Ovarian Follicle-growth and development; Oocytes-cytology; Transplantation, Heterotopic; Mice

Abstract: Ovarian tissue transplantation is emerging technologies for fertility preservation. In addition, in vitro maturation [IVM] of oocytes retrieved from ovarian tissues may overcome the fertility defects in certain cases. The aim was to evaluate the best site for ovarian tissue transplantation in mice. Also, feasibility of IVM of oocytes retrieved from auto grafted ovarian tissues was freshly assessed. Hemi-ovaries from 6 weeks old mice were auto grafted into kidney capsule [K] versus the back muscle [B] and leg muscle [L] in a mouse auto graft model which was stimulated with gonadotrophins. Then ovarian grafts were recovered and processed histologically for follicle assessment compared with control, also the ability of oocytes to mature with IVM was studied 14 days after transplantation. Total follicle count was significantly higher in K-graft [3.5+/-3.17] and the antral follicles were only observed in K-site model. The number of retrieved immature oocytes as well as successful IVM in K-grafts was significantly higher than other groups [p=0.008, p=0.016]. The kidney capsule is a promising site for ovarian tissue auto graft in mice. This resulted in better follicular survival and IVM outcomes.

Ovary

anatomy and histology

Association of body mass index and dietary habits with ovarian and uterine morphology with sub fertile polycystic ovarian syndrome.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 133-138

Keywords: Body Mass Index; Food Habits; Uterus-anatomy and histology; Fertility-physiology; Polycystic Ovary Syndrome; Questionnaires; Association; Fast Foods-adverse effects; Cross-Sectional Studies

Abstract: To correlate ovarian and uterine morphology in sub fertile patients having polycystic ovarian syndrome with their body mass index [BMI] and eating habits One hundred subjects were included in this cross sectional study having ages between 20-40 years with history of subfertility for the past two years. BMI [kg/m²] was measured according to WHO protocol. Ovarian volume, follicle count and size, uterine area, endometrial thickness were measuredsonographically and noted. Dietary habits were recorded by a structured questionnaire from all participants According to BMI two groups of 50 subjects each were formed; group I= 25.6 +/- 4.7 kg/m² and group II= 28.6 +/- 5.7 kg/m². The follicular count was 14.41+/- 2.18 and 12.75+/- 2.80; the follicular size [in mm] was 8.23+/-0.41and 3.29+/- 0.25 [p-value 0.023 and 0.001]. The uterine area [in cm²] and endometrial thickness [in cm] was 86.9+/-25.7 and 117.2+/-29 [p-value 0.001 and0.05]. The ovarian volume [OV] estimated by trans-abdominal scan [TAS] was10.87+/- 2.49 cm³ and 14.33+/-3.17 cm³ [p-value=0.022]. The trans-vaginal scan[TVS] showed OV; 11.44+/-2.36 cm³ and 14.79+/-2.19 cm³ [p-value=0.034]. A weak positive correlation of BMI with OV [TVS] was observed [r=0.05]. The ovarian volume in those women who consumed fast food frequently was significantly raised as compared to those who rarely ate fast food; the difference was 14.57+/-3.75 vs. 9.62+/-2.43 [p value 0.00]. With increasing body mass index the ovarian volume, uterine area and endometrial thickness increases. However the follicular count and follicular size is reduced with higher BMI.

Palate

injuries

Pattern and management of palatine bone fractures.

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Pakistan Oral and Dental Journal 2014; 34 (1): 21-24

Keywords: Bone Plates; Fracture Fixation, Internal-methods; Dental Arch-surgery; Palate-surgery; Surgery, Oral

Abstract: The aim of this study was to determine pattern of palatal fractures, review management options and find out other injuries associated with it. This retrospective study was carried out in the Department of Oral and Maxillofacial Surgery, Khyber College of Dentistry, Peshawar over a period of three years. All the patients having maxillofacial injuries were evaluated for the presence of palatal fractures. Orthopantomogram [OPG] and Para Nasal sinus [PNS] views were advised to each patient. CT scan and 3D CT scan were advised in cases with pan facial trauma and comminuted fractures. All the data were entered in specially designed proforma. A diagnosis of palatal fracture was made after correlating clinical and radiographic signs. The pattern of palatal fractures was determined along with associated facial injuries. A total of 65 cases of palatal fractures were found in this study. Majority of patients [33.8%] were in the 3rd decade of life. Regarding the pattern of fracture, majority [65%] were sagittal fractures. Most of these fractures [54%] occurred with maxillary Le Fort fractures, regarding management, 9% of the cases were treated with open reduction while 81% were managed with closed reduction techniques. Palatal fracture is often overlooked and is a cause of post op malocclusion in trauma patients. Patients with palatal bone fractures were mostly males in their 3rd decade of life. Sagittal fractures were common and the Le Fort fractures were associated with it. Closed reduction was done in most of the cases of palatal bone fractures.

Papillon-Lefevre Disease

diagnosis

Papillon-Lefevre syndrome: a case report of two siblings and review of the literature.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1); 93-95

Keywords: Keratoderma, Palmoplantar; Tooth, Deciduous-pathology; Mutation; Cathepsin C-genetics; Aggressive Periodontitis-genetics; Siblings; Review Literature as Topic

Abstract: Papillon-Lefevre syndrome is a rare autosomal recessive genodermatosis which is characterised by periodontitis, palmoplantar keratoderma and predisposition to pyogenic infections and occurs due to cathepsin C gene mutation [located on chromosome11].The loss of primary teeth usually occurs by the age of 4 years and secondary teeth by second decade. The disorder is associated with significant cosmetic and functional disability.

Patient Readmission

Readmission to paediatric intensive care unit: frequency, causes and outcome.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 216-217

Keywords: Intensive Care-statistics and numerical data; Intensive Care Units, Pediatric; Hospital Mortality; Incidence; Length of Stay; Quality Indicators, Health Care; Treatment Outcome

Abstract: Readmission to intensive care units is considered to be an important quality indicator in ICU settings. This study was carried out at the paediatric intensive unit [PICU] and step down units of paediatric ward at the Aga Khan University Hospital, Karachi, Pakistan, to assess the frequency, common causes and outcome of patients readmitted in PICU within 48 hours after discharge from unit. During the study period, 1022 patients were admitted in PICU, out of which 24 [2.34%] patients required readmission. Male to female ratio was 1.2:1. The mean length of stay on paediatric floor before readmission was 24 hours. Fifteen [62%] patients were readmitted due to worsening of primary condition while 9 [38%] developed new problems. Respiratory problems accounted for 15 [62.5%] of readmissions, followed by cardiovascular 4 [16.5%] and sepsis related causes 3 [12.5%]. The mortality rate of readmitted patients was 21% [5/24] in this study as compared to overall PICU mortality of 122 [11.93%].

Patient Satisfaction

Effect of demographic characteristics on patient's satisfaction with health care facility.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 154-160

Keywords: Delivery of Health Care-standards; Demography; Cross-Sectional Studies; Questionnaires; Data Collection; Tertiary Healthcare

Abstract: To assess the patients' satisfaction level and effect of demographic characteristics on patients' satisfaction with health care facility in a tertiary care hospital. This Descriptive Cross sectional survey was conducted from June through October, 2012 in Out Patients Department of Punjab Social Security Hospital [PESSI], Rawalpindi. Participants were interviewed by trained inter viewers [students of 4th year MBBS class] using pre tested questionnaires. The patients were interviewed for their satisfaction and experience in the healthcare facility regarding interaction with doctors, paramedical staff, and facilities in the institution. Demographics like age, gender, educational status, marital status and monthly income were recorded. A five point scale of Strongly Agree [5], Agree [4], Uncertain [3], Disagree [2], and Strongly Disagree [1] was used. The percentage score was calculated for each patient and patient satisfaction was measured in terms of mean percent score. In sample of 110 patients, age of patient showed significant [p-value= 0.033] relationship with satisfaction score, with maximum satisfaction level [79.86%] in older age patients of > 55 years. Gender and occupation of patient did not show significant effect on satisfaction score. The illiterate or less educated [p-value = 0.003] and married patients were significantly [p-value= 0.003] more satisfied. Patients with less monthly income were significantly [p-value < 0.001] more satisfied. Older and less educated patients with lower income bracket were more satisfied with healthcare facility as compared to younger, highly educated patients and having higher income levels.

Peer Group

Peer assisted learning as a formal instructional tool.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 169-172

Keywords: Education, Medical, Undergraduate-methods; Students, Medical-psychology; Teaching-methods; Faculty, Medical; Focus Groups; Learning; Models, Educational

Abstract: To explore the utility of peer assisted learning [PAL] in medical schools as a formal instructional tool. Grounded theory approach. King Edward Medical University, Lahore, from July 2011 to December 2011. A study was designed using semi-structured in-depth interviews to collect data from final year medical students [n=6], residents [n=4] and faculty members [n=3], selected on the basis of non-probability purposive sampling. The qualitative data thus generated was first translated in English and transcribed and organized into major categories by using a coding framework. Participants were interviewed two more times to further explore their perceptions and experiences related to emergent categories. An iterative process was employed using grounded theory analysis technique to eventually generate theory. PAL was perceived as rewarding in terms of fostering higher order thinking, effective teaching skills and in improving self efficacy among learners. PAL can offer learning opportunity to medical students, residents and faculty members. It can improve depth of their knowledge and skills.

Penaeidae

genetics

Molecular investigation of banana shrimp [*P. merguensis*] populations from Persian Gulf and Oman sea using microsatellite markers.

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Journal of Veterinary Research 2014; 69 (1): 85-93

Keywords: Genetic Variation; Penaeidae-classification; Genetic Drift; Polymerase Chain Reaction

Abstract: Molecular investigation of important commercial shrimp species is one of the main goals to find out the pure populations and brood stocking of marine resources. The purpose of the present study was to study the population of *P. merguensis* and determining the extent of genetic diversity of this species. Samples were collected from three major distribution areas in the Persian Gulf and Oman Sea. Molecular investigation was carried out using microsatellite markers. Only five out of the eight primers of *P. merguensis* produced good amplified PCR products with fixed annealing temperature. The rest of the primers were either not easily amplified or produced nonspecific bands. Seven alleles were found to be unique to each of the three populations of *P. merguensis*. Occurrences of heterozygosity deficiency were found at most loci. These heterozygosity deficiencies in observed heterozygosity in comparison to expected heterozygosity may be due to inbreeding, genetic drift and consequences of illegal overharvesting of *P. merguensis* in the studied areas as well. Deviation from Hardy-Weinberg Equilibrium in both studied species was significant in most microsatellite loci [p<0.001]. We observed deviation from HWE in most loci with heterozygosity deficits. The genetic variation results showed that the pairwise *Fst* values were significant between studied populations. The assignment test revealed high gene flow between Hormoz and Jask and restricted genetic flow between Guatr and Hormoz populations. It seems that the changes in immigration patterns of populations between Hormoz, Jask and Guatr areas depend on the influence of Persian Gulf currents or the life cycle of *P. merguensis* in studied areas. Alternatively, the presence of ecological barriers such as mangrove forests may result in restricted genetic flow between Guatr and both Hormoz and Jask populations.

Percutaneous Coronary Intervention

Procedural outcome of primary PCI inst-segment elevation myocardial infarction at Afic and Nihd Rawalpindi - Pakistan.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S80-S85

Keywords: Myocardial Infarction-surgery; Myocardial Infarction-physiopathology; Myocardial Infarction-radiography; Angioplasty, Balloon, Coronary-adverse effects; Angioplasty, Balloon, Coronary-mortality; Hospital Mortality; Treatment Outcome

Abstract: To determine the procedural outcome of primary percutaneous coronary interventions [PCI] in ST segment elevation myocardial infarction. A quasi-experimental study. Armed Forces Institute of Cardiology and National Institute of Heart Diseases, a tertiary care cardiac institute from November 2011 to September 2013. Total 228 patients who underwent primary percutaneous intervention [primary PCI] were included in this study. A pre designed performa was prospectively filled which included demographic and procedural variables. Procedural success and in hospital mortality were recorded. The mean age was 59 +/- 10.88 years. There were 205 [89.9%] males, 80 [35.1%] patients were found to be diabetic, 47 [20.6%] hypertensive, and 90 [39.5%] patients were smokers. Family history of ischemic heart disease was positive in 51 [22.4] patients. Anterior, inferior and lateral myocardial infarction were present in 137 [60.1%], 90 [39.5%] and 1 [0.4%] patients respectively. The Median time from the onset of symptoms to the arrival in the hospital was 122.5 +/- 142.57 and median door to balloon time was 60 +/- 22.88 min. Left anterior descending [LAD] was the commonest infarct related artery accounting for culprit artery in 138 [60.5%] followed by right coronary artery [RCA] and left circumflex artery [LCX] in 72 [31.6%] and 18 [7.9%] cases respectively. Procedural success was achieved in 222 [97.4%] patients. Six [2.6%] patients died in the hospital. High success rate with low mortality rates can be achieved in our set up. However more studies and long term follow up is required to validate our results.

Peritoneal Dialysis, Continuous Ambulatory

methods

A novel method for salvage of malfunctioning peritoneal dialysis catheter.

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Urology Annals 2014; 6 (2): 147-151

Keywords: Catheterization-adverse effects; Equipment Failure; Device Removal-methods; Kidney Failure, Chronic-therapy; Laparoscopy-methods; Surgical Procedures, Minimally Invasive-methods; Treatment Outcome

Abstract: Continuous ambulatory peritoneal dialysis [CAPD] has been widely used as an effective therapy in the management of patients with end-stage renal disease. Long-term use of CAPD needs methods with low incidence of catheter-related complications. Moreover, some complications may cause failure of fluid drainage and treatment interruption. We have innovated and studied a new minimal-invasive method of malfunctioning peritoneal catheter repair. Thirty-five patients agreed to undergo catheter rescue operation by this new method during 2004 and 2012. Under local anesthesia and light sedation, access to the abdominal cavity was made, the catheter and wrapped omentum grasped and the tip of catheter was released, debris were removed and the catheter was directed toward the pelvic floor with a finger guide. The patients were followed after catheter salvage up to the end of study [April 2012]. PD catheter function restored to the normal level in 28 [80%] of patients, and PD was started 1-2 days after the procedure. All patients had an uneventful recovery. PD catheter function was restored to the normal level in 28 [80%] patients, and PD was started 1-2 days after the procedure. Of these patients, 10 [35%] died of reasons unrelated to catheter or catheter complications; 7 [25%] were ultimately referred for kidney transplant; 8 [29%] continued PD up to the end of this study with no problem, and only 3 [11%] due to catheter complications. Catheter function did not restore to the normal level in seven patients [20%]; however, six patients continued PD for 1-18 months with the catheter. Comparing the advantages and disadvantages of this method to the previous laparoscopically repaired catheter, we concluded that this new method is efficient, and is a suitable way for malfunctioning PD catheter salvage.

Phenylketonurias

genetics

[The frequency of the most common Mediterranean mutation in phenylketonuria patients in Kermanshah Province]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 58-66

Keywords: Mutation; Epidemiology; Phenylalanine Hydroxylase-genetics; Phenylketonurias-prevention and control; Early Diagnosis; Mediterranean Region; Europe

Abstract: Phenylketonuria [PKU] is one of the major causes of mental retardation which is caused by mutations in the phenylalanine hydroxylase [PAH] gene. Early diagnosis and timely treatment can prevent the complications of this disorder. IVS10-11G>A mutation in [PAH] gene, has been known as the major mutation in Iran, Mediterranean region and Southern Europe. The aim of this study was to determine the frequency of IVS10-11G>A mutation in Kurdish patients with PKU in Kermanshah Province and compare it with the frequencies found in the studies in other parts of Iran. From 2010 to 2011, we identified 27 unrelated families with classical PKU from different parts of Kermanshah Province. The DNA fragments containing the exon 11 of the PAH gene and its flanking intronic sequences were amplified and sequenced. The frequency of IVS10-11G>A mutation was 7.4% which was found in two homozygous PKU patients. These patients had classic PKU phenotype and their parents were 4th degree relatives. The findings of this study supported the results of our previous study. It seems that there is a distinct difference in PAH characters of mutations between Kermanshah and the other parts of Iran. Therefore, study of the PAH gene mutations in other parts of Iran and use of these studies for future plans, including screening of carriers are recommended.

Phytotherapy

Cytotoxic and antibacterial activities of ethanolic extract of *Leea indica* leaves.

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Khulna University - Pharmacy Discipline

Hamdard Medicus 2013; 56 (2): 12-19

Keywords: Plant Extracts-pharmacology; Artemia; Plant Leaves-chemistry; Cytotoxins; Anti-Bacterial Agents-pharmacology; Plants, Medicinal

Abstract: *Leea indica* [Burm. f.] Merr. [Family: Leeaceae], a widely available evergreen shrub is traditionally used for different diseases in rural areas of Bangladesh. The ethanolic extract of leaves was investigated for its possible cytotoxic and antibacterial activities. Cytotoxic activity was tested using brine shrimp lethality bioassay and antibacterial activity was investigated by disc diffusion assay with selected bacterial strains. The extract displayed considerable cytotoxicity towards brine shrimps, the LC₅₀ being 15.52 microg/ml. In antibacterial test, it showed substantial inhibition against the tested bacterial strains. The zones of inhibition were in the range between 8 mm and 14 mm at the doses of 400 microg/disc and 600 microg/disc. The results demonstrate that the ethanolic extract of the leaves possesses cytotoxic activity as well as antibacterial activity that justify the traditional uses of the plant.

Pistacia

[Efficiency of *Pistacia atlantica* seed extract as natural coagulant in the removal of Reactive Red 198 dye from aqueous solution]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 124-134

Keywords: Triazines-isolation and purification; Naphthalenesulfonates-isolation and purification; Water Pollutants, Chemical-isolation and purification; Seeds; Plant Extracts; Textile Industry; Efficiency

Abstract: Textile dyes and other dyes used in various industries are among the largest organic compounds which can be a major hazard to the health and environment. Therefore treatment of wastewater before discharging it into the environment is necessary. In the present study we investigated the efficiency of *Pistacia atlantica* seed extract in a batch system for removal of Reactive Red-198 dye from aqueous solutions. This is a basic- applications study conducted in laboratory. The effects of independent variables such as coagulant dose [0.1-1 ml L⁻¹], initial dye concentration [50, 100, 150 and 200 mg/l] and pH [2-12] were investigated. To measure the residual concentration of dye we used a spectrophotometer at the wavelength of 520 nm. Excel software was used for data analysis. The optimum pH for Reactive Red-198 removal by coagulation using *Pistacia atlantica* seed extract was 12, with a coagulant dose of 0.5 mL. The highest removal rates were 83.12, 84.20, 87.36 and 88.49% at initial dye concentrations of 50, 100, 150 and 200 mg/L respectively, which could be result of precipitation, co-precipitation and adsorption mechanisms. According to the results of this study, *Pistacia atlantica* seed extract was an inexpensive coagulant, and also quite effective in the removal of Reactive Red-198 dye from aqueous environments.

Pituitary Neoplasms

pathology

A FSH-secreting pituitary macroadenoma causing a testosterone deficiency syndrome.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 99-104

Keywords: Follicle Stimulating Hormone-blood; Adenoma-pathology; Testosterone-deficiency; Estradiol-blood; Estradiol-deficiency; Testosterone-blood; Gonadotrophs-pathology; Review Literature as Topic; Luteinizing Hormone-blood

Abstract: FSH-secreting pituitary adenomas can affect sexual and reproductive function. In this article, we have reported the case of a 32-year-old male with secondary infertility. The patient had sexual and reproductive disturbances. The test results of the blood samples indicated obviously decreased testosterone [T] and estradiol [E2] levels. Based on previous hormonal results, the patient received pituitary stimulation and human chorionic gonadotropin [hCG] tests. Both follicle stimulating hormone [FSH] and luteinizing hormone [LH] showed low response during the pituitary stimulation test. The results of the hCG test indicated that T/E2 could recover to a normal level. In addition, this patient was diagnosed with pituitary macroadenoma, which was supported by the pituitary MRI. The man's sexual and reproductive functions recovered following surgery. The pathological results confirmed that the tumor tissue was an FSH-secreting pituitary adenoma by immunohistochemical staining. The purpose of this report was to review the relative literature and discuss the influence of FSH-secreting pituitary adenomas on hormones through the hypothalamus-pituitary-testis axis.

Plants, Medicinal

Pharmacologically active nephroprotective plants a review.

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Hamdard Medicus 2013; 56 (2): 56-76

Keywords: Kidney Diseases-prevention and control; Euphorbia; Moringa oleifera; Metals, Heavy-toxicity

Abstract: Renal diseases have always remained a major area of concern for physicians and researchers since long time. It is the ninth leading cause of death in developed countries. Renal diseases leading to renal failure has increased up to two folds over the last two decades. This is due to the over use of drugs and adulteration of food items by heavy metals and aflatoxins. Heavy metals are proven to be renal toxics. Several studies have been carried out to establish the efficacy of Nephroprotective medicinal plants. A review of the work already undertaken has been carried out and summarized here. This paper will provide a base line for researchers in this field for further studies. In this review, a summary on pharmacologically active nephroprotective medicinal plants such as, Moringa oleifera Linn., Smilax china Linn. and Euphorbia hirta etc. have been included. Since a review was already available till 2005, so in this paper the experimental studies which have been conducted from 2005 to 2012 have been included.

Pneumoconiosis

epidemiology

Prevalence of pneumoconiosis among coal miners of Cherat, district Nowshera - Pakistan.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 139-144

Keywords: Coal Mining; Respiratory Function Tests; Cross-Sectional Studies; Occupational Diseases-epidemiology; Occupational Exposure; Pneumoconiosis-radiography

Abstract: The objective of this study was to assess the prevalence of pneumoconiosis among coal miners. This cross-sectional study was conducted among 400 coalminers of Cherat, District Nowshera, KPK, Pakistan, from July 2012 to June 2013. Coal miners who worked for more than six months were included. Medical camps were arranged in study areas in which Pulmonary Function Tests and CXR was conducted to estimate the prevalence of pneumoconiosis. The demographic variables were also noted on a semi structured proforma. The medical examinations of coal miner's revealed that approximately 71% [n=284] of coal miners have sign and symptoms of occupational respiratory health problems. The coal miners showed an increased prevalence of coal workers pneumoconiosis [49.50%] i.e. about 47% [n=188] on Chest X-rays [P/A View] and 52.50% [n=210] on Pulmonary Function Tests has findings of coal workers pneumoconiosis. Only 31.75% [n=127] of coal miners have normal

pulmonary function tests and 35% [n=140] have normal chest x-ray findings during medical assessment. The prevalence of the pneumoconiosis was high [49.50%] among the Cherat coal miners; and needs proper consideration and attention from the health sector and mining department in order to reduce the high burden of pneumoconiosis among coal miners.

Polyps

pathology

[Anatomical and histopathological distribution of gastrointestinal polyps in Gorgan, Iran [1999-2008]]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 114-119

Keywords: Polyps-epidemiology; Gastrointestinal Neoplasms; Colon, Sigmoid; Cross-Sectional Studies; Hospitals, Teaching; Colonoscopy; Adenoma-epidemiology

Abstract: Gastrointestinal polyps have pre-carcinomatous potential. In regard to increasing rate of gastrointestinal cancers and the relation between polyps with cancers, this study was done to determine the anatomical and histopathological distribution of gastrointestinal polyps in Gorgan, Iran. This cross-sectional study was conducted on 290 patients with gastrointestinal polyps were undergoing colonoscopy or endoscopy in 5th Azar teaching hospital in Gorgan, northern Iran during 1999-2008. The diagnosis was confirmed by histopathologic method. Gender and age was recorded for each patient. 56.6% of patients were males 19.3% of polyps was diagnosed in the sixth decade of patient's age. The most frequent pathological type of gastrointestinal polyps was adenoma [54.1%] followed by hyperplastic [19.7%], acute inflammatory [13.8%] and young polyps type [11.4%]. Tubular type with 63% was the most common type of adenoma polyp followed by various villous [19.1%] and tubulovillous [17.9%]. 87.2% and 12.8% of polyps were in colon and stomach, respectively. The most frequent anatomical position of polyps was rectum [30%] followed by sigmoid with 26/1%. Adenoma polyp in colon was the most common type in gastrointestinal tract.

Postoperative Nausea and Vomiting

prevention and control

[Effect of metoclopramide and ondansetron plus dexamethason on postoperative nausea and vomiting in cholecystectomy laparoscopic surgery]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 9-13

Keywords: Metoclopramide-therapeutic use; Dexamethasone-therapeutic use; Ondansetron-therapeutic use; Cholecystectomy, Laparoscopic-adverse effects; Drug Therapy, Combination; Postoperative Nausea and Vomiting-drug therapy; Double-Blind Method

Abstract: Nausea and vomiting are common complications after surgery which creates spasm, hypoxia and pulmonary aspiration. This study was done to determine the effect of ondansetron, metoclopramide associated with dexamethasone on postoperative nausea and vomiting in cholecystectomy surgery using Laparoscopic method. In this double blind clinical trial study, 100 patients with ASA class I and II undergoing laparoscopic cholecystectomy divided randomly into two groups. The patients in the first group were received metoclopramide [10mg/kg/bw] with dexamethasone [8mg/kg/bw] and the second group were received ondansetron [4mg/kg/bw] with dexamethasone [8mg/kg/bw] intravenously 5 min before the final stage of surgery. Premedication and induction of anesthesia in patients were equal 5 minutes to 4 hours after surgery, postoperative nausea and vomiting were recorded for each patient. The rate of nausea in the first and the second groups were recorded 38% and 28%, respectively. The rate of vomiting in the first and the second groups were recorded 30% and 16%, respectively. These values were not significant. Ondansetron with dexamethasone non significantly reduced postoperative nausea and vomiting after laparoscopic cholecystectomy in comparison with metoclopramide with dexamethasone.

Postpartum Hemorrhage

prevention and control

Prophylactic use of misoprostol in management of third stage of labour and prevention of atonic uterus.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 196-200

Keywords: Misoprostol-therapeutic use; Treatment Outcome; Oxytocin-therapeutic use; Labor Stage, Third; Developing Countries

Abstract: To assess the prophylactic use of misoprostol in management of third stage of labour and prevention of atonic uterus, and comparing it with conventional i/v syntocinon use in third stage of labour. This quasi experimental study was conducted at department of obstetrics and gynecology unit A, Mardan Medical Complex Hospital Mardan, from May 2011 to May 2012. Two hundreds labouring females were included in the study and divided into 2 groups, a control group [100 women who received 5 units syntocinon] and a study group [100 women who received 800 ug rectal misoprostol] immediately after delivery of the baby. Duration of third stage of labour, blood loss after delivery were recorded and compared between the two groups. Side effects of both drugs were also noted. There was not any significant difference in blood loss and duration of third stage of labour in both groups. The frequency of atonic PPH [postpartum hemorrhage] in study and control groups was also similar. Misoprostol can be used for the management of third stage of labour and it can reduce atonic PPH. It efficacy and safety is similar to that of syntocinone.

PPAR gamma

genetics

Prevalence of the "Pro12Ala" mutation of ppar-gamma2 gene in an Arabic Iraqi population.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 14-23

Keywords: Arabs-genetics; Gene Frequency; Alleles; Polymorphism, Restriction Fragment Length

Abstract: Pro12Ala is a common functional mutation of PPAR-gamma2 gene whose frequency varies widely worldwide. In Iraq, there are no studies of the frequency of Pro12Ala. The aim of this study is to find out the frequency of Pro12Ala [rs1801282] in an Iraqi population and to compare it with those of other populations. Pro12Ala was genotyped in 95 healthy unrelated Arabic native Iraqi adult subjects using PCR-Restriction Fragment Length Polymorphism [PCR-RFLP]. Its frequency was compared to those of other populations. Genotype frequencies were within Hardy-Weinberg Equilibrium [HWE]. Allelic frequencies were 90.53% for the C [Pro] allele and 9.47% for the G [Ala12] allele. The homozygous wild type genotype [Pro12Pro] frequency was 81.05%. The heterozygous mutant genotype [Pro12Ala] was evident in 18.95% of subjects with no cases of [Ala12Ala]. Allelic and genotypic frequencies were statistically different from those of Ukrainian [p=0.007 and 0.017], Chinese [p=0.041 and 0.034], and African Americans [p=0.000 and 0.000]. Iraqis have relatively high prevalence of Pro12Ala mutation which differs from several populations confirming the need for understanding the genetic background of each population.

Prebiotics

A comparison of the effects of commercial prebiotic [safmannan, biomos and fermacto] on performance, egg quality and antibody titer of Avian Influenza and Newcastle disease in laying hens.

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Journal of Veterinary Research 2014; 69 (1): 79-84

Keywords: Influenza in Birds-prevention and control; Influenza in Birds-immunology; Newcastle Disease-prevention and control; Newcastle Disease; Ovum; Random Allocation

Abstract: Effects of different sources of prebiotic on performance and immune response in laying hens were evaluated in this study. The aim of this experiment was to compare the effects of commercial prebiotics on performance, egg quality and antibody titer against Newcastle disease [ND] and Avian Influenza [AI] in laying hens. The experiment was performed for 11 weeks [from 33 to 44 weeks of age] on 240 laying hens [the LSL strain], in a completely randomized design with 4 treatments, and 5 replicate for each treatment and 12 birds for each replicate.

Treatments were: 1] control; 2] control +Safmannan; 3] control +Bio-Mos and 4] control +Fermacto. The results showed that feed intake, feed conversion ratio and egg production percentage were not affected by different sources of prebiotic. However, egg weight and egg mass were significantly increased [$p<0.05$] by adding prebiotic, in comparison with control diet. Egg specific gravity and shell thickness were increased [$p<0.05$] by prebiotic addition. The results of experiment showed that antibody titers against AI and ND were significantly increased [$p<0.05$] by prebiotics compared with control group. The results showed that the effects of different sources of prebiotic on performance and immune response of laying hen are similar. However, inclusion of prebiotic in the diet results in improvement of the performance and antibody titer against Influenza and Newcastle.

Pregnadienediols

pharmacology

Comparative efficacy of topical mometasone furoate 0.1% cream vs topical tacrolimus 0.03% ointment in the treatment of atopic dermatitis.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 57-62

Keywords: Tacrolimus-pharmacology; Dermatitis, Atopic-drug therapy; Administration, Topical; Skin Cream; Ointments; Severity of Illness Index

Abstract: To compare the efficacy of mometasone furoate and tacrolimus in the treatment of atopic dermatitis. Sixty patients of atopic dermatitis were treated with mometasone furoate 0.1% [$n=30$] and tacrolimus 0.03% [$n=30$]. Both treatments were applied twice daily for 12 weeks. Patients were followed up monthly. The disease severity assessed by SCORAD index. A 4-point scale was used to measure the level of response to treatment. Before treatment the respective mean SCORAD was 30.57 \pm 13.62 and 30.90 \pm 17.17 in group A and B and at the end of treatment decreased to 11.87 \pm 12.04 and 11.20 \pm 13.85, respectively [$p>0.05$]. Percent reduction of severity from baseline to final follow-up was 69.20 \pm 23.41 in group A and 74.77 \pm 23.30 in group B [$p=0.360$]. At final follow-up 56.7% of group A and 63.3% of group B achieved excellent response, 13.3% of group A and 16.7% of group B achieved good response. We conclude that both treatments, mometasone furoate and tacrolimus, are effective in the treatment of atopic dermatitis.

Pregnancy Complications

epidemiology

Dermatoses in pregnancy: Specific dermatoses vis-a-vis others, in a tertiary hospital in Kolkata.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 46-50

Keywords: Skin Diseases-epidemiology; Pregnancy Trimester, Third; Eczema, Dyshidrotic-epidemiology; Early Diagnosis; Skin Diseases-epidemiology

Abstract: To document the frequency of specific and other dermatoses in pregnancy. Two hundred and twenty five consecutive pregnant patients irrespective of the duration of pregnancy and gravidity reporting to our skin OPD were enrolled in the study. Out of them, 218 patients who gave consent were included in the study. The specific dermatoses of pregnancy were subclassified into four main groups - atopic eruption of pregnancy [AEP], polymorphic eruption of pregnancy [syn. pruritic urticarial papules and plaques of pregnancy] [PEP], pemphigoid gestationis [PG], intrahepatic cholestasis of pregnancy [ICP]. 39 [68.4%] patients belonged to AEP, 14 [24.5%] to PEP, and 1 [1.8%] to PG and 3 [5.2%] to ICP. About half of the patients with AEP were found to have raised IgE level. Five STD patients were reported in the first trimester, 2 in second and 7 in third trimester. Patients reported with molluscum contagiosum [4], genital herpes [4], condyloma acuminata [3], primary chancre [1] and condyloma lata [1]. One patient with molluscum contagiosum was HIV positive. Among the non STD other dermatoses in pregnancy, scabies topped the list affecting in all trimesters. Fungal infections [tinea and pityriasis versicolor] was a close second. One case each of pompholyx, psoriasis, and leprosy reported to us. Early diagnosis of specific dermatosis of pregnancy may prevent harmful effect on mother and fetus.

Pregnancy Rate

Effect of perturbation on pregnancy rates before intrauterine insemination treatment in patients with unexplained infertility.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 77-84

Keywords: Infertility-therapy; Insemination, Artificial-methods; Parturition; Birth Rate; Prospective Studies; Live Birth

Abstract: The aim of this study was to determine the relationship between marital violence and distress level among women with a diagnosis of infertility. In this prospective randomized study, a total of 180 patients were included in the study. Amongst these, perturbation of the uterine cavity was carried out in 79 patients prior to insemination. One patient in the perturbation group was later excluded because insemination could not be performed due to cycle cancellation. There were no significant differences in demographic characteristics between the study and control groups. When the pregnancy rates of both groups were evaluated, 14[17.8%] patients in the study group achieved pregnancy. Three [3.8%] had a biochemical pregnancy, 1[1.3%] miscarried and 10[12.7%] had live births. In the control group, a total of 24[23.8%] pregnancies were achieved, amongst which one [1%] had a biochemical pregnancy, 3[3%] miscarried and 20[19.8%] resulted in live births. There was no significant difference between groups in terms of total pregnancy and live birth rates [$p>0.05$]. There was a 21% total pregnancy loss rate. There was no significant difference between the control and study groups in terms of pregnancy loss rates [$p>0.05$]. This study on a homogenous group of unexplained infertile patients determined that the addition of perturbation to a controlled ovarian hyperstimulation plus intrauterine insemination [COH+IUI] treatment protocol did not affect pregnancy rates.

Prostatectomy

economics

Impact of surgical case order on perioperative outcomes for robotic-assisted radical prostatectomy.

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Urology Annals 2014; 6 (2): 142-146

Keywords: Robotics-economics; Laparoscopy-methods; Prostatectomy-methods; Treatment Outcome; Ambulatory Surgical Procedures; Hospital Costs; Perioperative Period; Evaluation Studies as Topic; Retrospective Studies; Review Literature as Topic

Abstract: Since its introduction, there have been many refinements in the technique and implementation of robotic-assisted radical prostatectomy [RARP]. However, it is unclear whether operative outcomes are influenced by surgical case order. We evaluated the effect of case order on perioperative outcomes for RARP within a large health maintenance organization. We conducted a retrospective review of RARP cases performed at our institution from September 2008 to December 2010 using a single robotic platform. Case order was determined from surgical schedules each day and surgeries were grouped into 1[st], 2[nd] and 3[rd] round cases. Fourth round cases [$n = 1$] were excluded from analysis. We compared clinicopathological variables including operative time, estimated blood loss [EBL], surgical margin rates and complication rates between groups. Of the 1018 RARP cases in this cohort, 476 [47%] were performed as 1[st] round cases, 398 [39%] 2[nd] round cases and 144 [14%] 3[rd] round cases by a total of 18 surgeons. Mean operative time was shorter as cases were performed later in the day [213 min vs. 209 min vs. 180 min, $P < 0.0001$] and similarly, EBL also decreased with surgical order [136 mL vs. 134 mL vs. 103 mL, $P = 0.01$]. Transfusion rates, surgical margin rates and complication rates did not significantly differ between groups. Patients undergoing RARP later in the day were much more likely to have a hospital stay of 2 or more days than earlier cases [10% vs. 11% vs. 32%, $P = 0.01$]. Surgical case order may influence perioperative outcomes for RARP with decreased operative times and increased length of hospital stay associated with later cases. These findings indicate that select perioperative factors may improve with ascending case order as the surgical team "warms up" during the day. In addition, 3[rd] round cases can increase hospital costs associated with increased lengths of hospital stay. Knowledge of these differences may assist in surgical planning to improve outcomes and limit costs.

methods

Extraperitoneal robot-assisted laparoscopic radical prostatectomy: initial experience.

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Urology Annals 2014; 6 (2): 130-134

Keywords: Robotics; Prostate-Specific Antigen; Laparoscopy-methods; Treatment Outcome; Prostatic Neoplasms-surgery

Abstract: To report our initial experience and technique of performing robot-assisted laparoscopic radical prostatectomy [RALP] with the extraperitoneal approach. Twenty-seven patients, between September 2010 to January 2012, were included in the study. All patients underwent extraperitoneal robot-assisted radical prostatectomy. Patients were placed supine with only 10-15 Trendelenburg tilt. The extraperitoneal space was developed behind the posterior rectus sheath. A five-port technique was used. After incision of endopelvic fascia and ligation of the deep venous complex, the rest of the procedure proceeded along the lines of the transperitoneal approach. The mean patient age, prostate size and Gleason score were 67 +/- 1.8 years, 45 +/- 9.55 g and 6, respectively. The mean prostate-specific antigen [PSA] was 6.50 ng/mL. The mean time required for creating extraperitoneal space, docking of robot and console time were 22, 7 and 94 min, respectively. The mean time to resume full oral feeds was 22 +/- 3.45 h. There were no conversions from extraperitoneal to transperitoneal or open surgery in our series. Pathological stage was pT1, pT2a and pT3b in 11 [40.74%], 14 [51.85%] and two [7.4%] patients, respectively. Two patients had positive surgical margins and two had biochemical recurrence at the last follow-up. Our mean follow-up was 12 +/- 3.30 [2-17] months. The overall continence rate was 83.33% and 92.4% at 6 and 12 months, respectively. Extraperitoneal RALP is an efficacious, minimally invasive approach for patients with localized carcinoma of the prostate.

Prosthesis-Related Infections

microbiology

Microbial spectrum of cardiac implantable electronic device infections - a tertiary cardiac center experience.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S63-S66

Keywords: Pacemaker, Artificial-adverse effects; Pacemaker, Artificial-microbiology; Mycobacteria, Atypical; Methicillin-Resistant Staphylococcus aureus; Echocardiography; Defibrillators, Implantable-adverse effects; Antibiotic Prophylaxis

Abstract: The objective of the study was to determine the microbiological spectrum of cardiac implantable electronic device [CIED] infections. Case series Armed Forces Institute of Cardiology / National Institute of Heart Diseases AFIC/NIHD from January 2011 to Nov 2013. A total of 15 pus samples from patients with possible CIED infection out of 814 patients with implantable CIEDs were processed. Thirteen patients with positive cultures out of fifteen were included in the study. Clinical evidence of CIED infection included signs of inflammation and purulent drainage. A CIED infection was microbiologically confirmed based on culture yield. Blood cultures were carried out in all patients with suspected CIED infection along with trans-oesophageal echocardiography [TOE], wherever clinically indicated to exclude bacteremia and lead endocarditis. Sixty nine percent of patients with culture proven CIED infection were females and 31% were males. The mean age of patients was 61 years [range 53-70 years]. Devices included 11 PPMs, 1 ICD and 1 CRT. The most frequent organisms were gram-positive [77% of isolates]; with Coagulase-negative Staphylococci [CoNS] predominating in particular Methicillin Resistant Staphylococcus epidermidis [MRSE] in 46.4% cases followed by Methicillin Sensitive Staphylococcus epidermidis [MSSE] in 15%. Non tuberculous Mycobacterium fortuitum was isolated from pus in two patients; with PPM and ICD implants respectively. MRSA was isolated in only 01 PPM infection with evidence of lead endocarditis on TOE. Pseudomonas species was isolated from pus in one patient with CRT implant. CIED infections are more often caused by Staphylococci predominantly CoNS, although atypical Mycobacteria can be implicated.

Psoriasis

blood

Comparison of mean platelet volume in patients with psoriasis and healthy individuals.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 4-7

Keywords: Platelet Activation; Blood Platelets; Arthritis, Psoriatic-blood; Cardiovascular Diseases

Abstract: To compare mean platelet volume in patients with psoriasis and healthy individuals. This case control study was conducted in outpatients department and indoor of department of Dermatology, DHQ Hospital, Faisalabad. The duration of study was six months. Thirty consecutive patients of psoriasis, 20 to 60 years of age and thirty age and gender matched healthy individuals were selected. 2cc venous blood sample from each subject was sent to the pathology laboratory of DHQ Hospital. Mean platelet volume [MPV] was measured as a part of blood complete analysis in Medonic M series Haematology analyser. MPV was found higher in the patients of psoriasis as compared to the healthy individuals. The mean value of MPV in the case group was 8.24+/-1.22 fl, whereas in the control group, it was 7.29+/-0.77 fl [p<0.05]. The study demonstrated that mean platelet volume is increased in patients with psoriasis as compared to healthy individuals. Such patients are at an increased risk of cardiovascular complications.

Psychotic Disorders

diagnosis

Early psychosis symptoms.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 198-202

Keywords: Patient Acceptance of Health Care; Psychiatric Status Rating Scales; Community Mental Health Services; Cross-Sectional Studies; Delivery of Health Care; Questionnaires; Retrospective Studies; Schizophrenia-diagnosis; Schizophrenic Psychology; Socioeconomic Factors; Time Factors; Age of Onset

Abstract: To determine the prodromal symptoms of schizophrenia in the pathways to help-seeking. A cross-sectional study. The Department of Psychiatry, the Aga Khan University, Karachi, from 2008 to 2009. A total of 93 patients were interviewed in the pathways to care of schizophrenia. The diagnosis was based on ICD-10 criteria. The pathways to care were assessed through a semi-structured questionnaire. The onset, course and symptoms of psychosis were assessed through Interview for Retrospective Assessment at Age at Onset of Psychosis [IROAS]. Fifty five [59%] participants were male while 41% [n=38%] were female. Using IROAS, 108 symptoms were identified as concerning behaviour. Alternatively, 60 [55%] concerning behaviours were reported in the open-ended inquiry of the reasons for help seeking as assessed by the pathways to care questionnaire with a statistically significant difference between most symptoms category. The difference was most pronounced [p < 0.001] for depressed mood [66%], worries [65%], tension [63%], withdrawal/mistrust [54%] and loss of self-confidence [53%]. Thought withdrawal [22%] and passivity [15%] were elicited only through structured interview [IROAS]. When symptoms were categorized together, about 83% of the subjects presented with affective and non-specific prodromal symptoms. Roughly, 10% of the subjects presented with positive symptoms and 3% presented with the negative symptoms of psychosis. The non-specific, affective symptoms appear to predominate the prodromal phase of the illness. Prodromal symptoms of schizophrenia include non-specific, affective symptoms. Attention needs to be paid on identifying the prodromal symptoms and change in social functioning in order to identify those who are at risk of longterm psychosis.

Pulpotomy

methods

Comparative study of efficacy of formocresol and calcium hydroxide pulpotomy in primary molars.

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Pakistan Oral and Dental Journal 2014; 34 (1): 126-130

Keywords: Calcium Hydroxide-pharmacology; Formocresols-pharmacology; Dental Pulp-drug effects; Dental Pulp Cavity; Root Resorption-etiology

Abstract: Comparative study of formocresol and calcium hydroxide pulpotomy procedure has a particular importance in this part of the subcontinent where low socioeconomic status is debilitating and does not allow many persons to undergo an expensive therapy like Mineral Trioxide Aggregate therapy, laser therapy and electro cauterization modality of pulpotomy. The purpose of this study was to compare the efficacy of two different vital pulp therapy techniques both clinically and radiographically in cariously exposed primary molars, utilizing calcium hydroxide and formocresol as the material for pulpotomy. It was a Quasi-experimental study. The sampling technique was a non-randomized convenience sampling. The study was conducted and completed in one year 28, Military Dental Centre, La-hore. The study was carried out using clinical and radiological criteria of follow up for evaluating the success of the two techniques by selecting 60 subjects, all Pakistanis. The sample comprised of subjects within 4 to 6 years age bracket selected alternatively according to gender. Formocresol and Calcium hydroxide pulpotomy was performed after amputation and proper hemostasis of the coronal pulp chamber and the selected patients were divided into two groups. The patients selected for formocresol pulpotomy were placed in Group F and the patients for calcium hydroxide pulpotomy were placed in Group C. Follow up of the cases were performed at 03 months, 06 months and 01 year period and the results in terms of success and failure were recorded in the stipulated data form and analyzed by SPSS version 17 for Windows. Sixty cariously exposed primary molars required vital pulp therapy. Thirty primary molars [50%] in Group F and thirty primary molars [50%] in Group C. 27 teeth [90%] treated with formocresol and 17 teeth [56.7%] with calcium hydroxide were classed as clinically and radiographically successful at the end of one year. The results showed a significant difference in the efficacy of the two groups [$p=0.004$]. It was concluded that there was a significant difference in the efficacy of the two medicaments projecting higher rate of success with formocresol as compared to calcium hydroxide both clinically and radiographically.

Real-Time Polymerase Chain Reaction

Real time polymerase chain reaction in diagnosis of chronic myeloid leukemia.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 190-193

Keywords: Leukemia, Myelogenous, Chronic, BCR-ABL Positive-diagnosis; Leukemia, Myelogenous, Chronic, BCR-ABL Positive-genetics; Cytogenetics-methods; In Situ Hybridization, Fluorescence; Cross-Sectional Studies; Molecular Sequence Data; Philadelphia Chromosome; RNA, Messenger; Sensitivity and Specificity; Tumor Markers, Biological-blood

Abstract: To compare the sensitivity and specificity of Real Time Polymerase Chain Reaction [RT-PCR] with conventional cytogenetics in diagnosis of chronic myeloid leukemia. A cross-sectional, analytical study. The Armed Forces Institute of Pathology [AFIP], Rawalpindi, from December 2010 to January 2012. A total number of 40 patients were studied, in which all were diagnosed as CML on peripheral blood and bone marrow aspiration. The subjects were tested for the presence of Philadelphia [Ph] chromosome by cytogenetics and BCR-ABL fusion gene by RT-PCR. 2-3 ml of venous blood was collected, half in sodium heparin [anti-coagulant] for cytogenetics and half in EDTA for PCR. For cytogenetics, cells were cultured for 72 hours in RPMI 1640 medium and examined by arresting in metaphase using Colchicine to identify Philadelphia chromosome. For PCR, RNA extraction was done by Tri Reagent LS [MRC, USA] and cDNA was synthesized using reverse transcriptase and gene specific primer. RT-PCR was done on ABI-7500. The positive samples were identified when fluorescence exceeded threshold limit. Results of cytogenetics and RT PCR were compared. Out of the 40 patients, PCR showed 37 [92.5%] were positive and 3 [7.5%] were negative for BCR-ABL fusion gene, whereas in cytogenetics 28 [70%] were positive for Ph chromosome and 12 [30%] were negative for Ph chromosome. Sensitivity and specificity of cytogenetics was 75.6% and 100% respectively. Real time PCR as compared to cytogenetics is less tedious, gives quick results, does not require multiple sampling due to culture failure and can be done on peripheral blood.

Receptors, Androgen

genetics

New single nucleotide variation in the promotor region of androgen receptor [AR] gene in hypospadias patients.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 217-220

Keywords: Promoter Regions, Genetic; Polymorphism, Single Nucleotide; Hypospadias-genetics; Polymorphism, Restriction Fragment Length; Polymerase Chain Reactio; Exons

Abstract: Hypospadias is one of the most common congenital abnormalities in the male which is characterized by altered development of urethra, foreskin and ventral surface of the penis. Androgen receptor gene plays a critical role in the development of the male genital system by mediating the androgens effects. In present study, we looked for new

variations in androgen receptor promoter and screened its exon 1 for five single nucleotide polymorphisms [SNP] in healthy and hypospadias Iranian men. In our study, at first DNA was extracted from patients [n=100] and controls [n=100] blood samples. Desired fragments of promoter and exon 1 were amplified using polymerase chain reaction. The promoter region was sequenced for the new variation and exon 1 screened for five SNPs [rs139767835, rs78686797, rs62636528, rs62636529, rs145326748] using restriction fragment length polymorphism technique. The results showed a new single nucleotide variation [CT] at -480 of two patients' promoter region [2%]. None of the mentioned SNPs were detected in patients and controls groups [0%]. This finding indicates that new single nucleotide polymorphism in androgen receptor promoter may have role in etiology of hypospadias and development of this anomaly.

Renal Colic

drug therapy

Raised white cell count in renal colic: is there a role for antibiotics?

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Urology Annals 2014; 6 (2): 127-129

Keywords: Renal Colic-blood; Anti-Bacterial Agents-therapeutic use; Leukocyte Count; C-Reactive Protein; Retrospective Studies; Neutrophils

Abstract: To determine the use of antibiotics in patients with renal colic and an elevated white cell count [WCC] in the absence of other features of infection. A retrospective audit of patients presenting to an emergency department with renal colic caused by a solitary ureteric stone over a 6 month period. Student's t-test. Fifty patients met the inclusion criteria for this study. In 42 patients [84%] the urinalysis showed hematuria only and all urine culture results were negative for microbial growth. The mean WCC was 11.5×10^9 [4-22.1] and was raised in 34 patients [80.9%]. The mean neutrophil count was 8.75×10^9 /L [2.3-18.6] and C-reactive protein [CRP] 15.9 [1-192]. Antibiotics were commenced in 34 patients [80.9%] based solely on the raised WCC. In eight patients [16%] there were leucocytes and/or nitrites on urinalysis and all urine cultures were positive for growth [coliforms in five, streptococcus in two and candida in one specimen]. The mean WCC was 10.5×10^9 /L [7.7-16.5] and was raised in four patients. The mean neutrophil count was 8.4×10^9 /L [4.9-15.2] and CRP 40.79 [3-86]. One patient had pyrexia. All eight patients were commenced on antibiotics based on the WCC and/or urinalysis result. Over three-quarters of the patients [80.9%] in this study who presented with renal colic were unjustifiably commenced on antibiotics based solely on an elevated WCC. Antibiotic use in renal colic should be reserved for when there are features of sepsis or the urinalysis is positive. Further work is required to determine the significance of the observed results and the threshold for starting antibiotics.

Resistance Training

[Effect of resistance training on serum interleukin-18 and C-reactive protein in obese men]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 1-8

Keywords: Exercise; Interleukin-18-blood; C-Reactive Protein-metabolism; Obesity-blood; Body Mass Index; Random Allocation

Abstract: Previous studies have reported inconsistent findings about the effect of endurance training on level of interleukin-18 [IL-18] and high-sensitivity C-reactive protein [hsCRP] in obese individuals. This study was performed to determine the effect of resistance training on serum level of IL-18 and hsCRP in obese men. In this clinical trial, eighteen obese men were randomly divided into training and control groups. After 12-hours fasting, height, weight, body mass index, body fat percent, serum level of IL-18 and hsCRP were assessed before and after training period. Resistance training protocol consisted of twelve weeks training, 3 sessions training per week, each session for 60 minutes. Mean \pm -SD of IL-18 were 323.34 \pm -46.57 pg/ml and 239.43 \pm -53.75 pg/ml in training and control groups, respectively. Mean \pm -SD of hsCRP was 3.83 \pm -3.65 microg/ml and 3.03 \pm -2.98 microg/ml in training and control groups, respectively. This difference was not significant. Performing resistance training for twelve weeks did not significantly reduce IL-18 and hsCRP in obese men.

[Effect of resistance exercise on protein content and mRNA expression of NT 4/5 in rat slow and fast muscles]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 35-41

Keywords: Muscle, Skeletal-metabolism; RNA, Messenger-metabolism; Receptors, Nerve Growth Factor; Rats; Random Allocation; Enzyme-Linked Immunosorbent Assay; Reverse Transcriptase Polymerase Chain Reaction; Physical Conditioning, Animal

Abstract: Trophic factor family plays a key role for neuromuscular system healthy. This study was carried out to determine the effect of one session of resistance exercise on protein content and mRNA expression of NT4/5 in rat slow and fast muscles. In this experimental study, sixteen adult male rats randomly were allocated into resistance exercise [T] and control groups. The resistance training protocol consisted of climbing a 1-meter-long ladder, with a weight attached to a tail sleeve. Quantitative Real time RT-PCR for NT-4/5 expression and ELISA Kit for protein assay were used. Resistance training significantly decreased mRNA expression and increased protein of NT4/5 in soleus muscle [P<0.05]. Significant alteration was not detected in flexor hallucis longus muscle. One session of resistance training can alter protein and mRNA of NT-4/5 in skeletal muscle and this alteration was dependent on muscle type.

Respiratory Tract Infections

epidemiology

Prevalence of URTI and growth retardation in government primary school children of Bangalore.

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Hamdard Medicus 2013; 56 (2): 77-86

Keywords: Growth Disorders-epidemiology; Growth Disorders-etiology; Health Status; Nutritional Status; Schools; Child; Cross-Sectional Studies

Abstract: Children are the important part of total community where school children constitute a large pool of children of this age group. Sickness is a major cause of school absenteeism and scholastic backwardness. To know the prevalence of URTI [Upper Respiratory Tract Infections]; and growth retardation in children of Government primary school of Bangalore a one time observational cross sectional study was conducted in the three primary schools of Kottigepalya. 456 children were recorded in this study. A complete physical examination of the children was done and deviations from normal were recorded. A large number i.e. 69.96%, school children were found to be sick. The boys had better health status as compared to girls. The nutritional status of boys was better as compared to girls. The prevalent morbidities in the school children were enlarged tonsils [13.60%], tonsillitis [1.10%], nasal discharge [14.69%], otitis externa [1.75%], otitis media [1.54%] [URTIs], underweight [20.39%] and stunting [16.89%] [Growth retardation]. Main emphasis should be given to health education, nutrition education apart from the regular educational activities in the school.

Retroperitoneal Space

Idiopathic benign retroperitoneal cyst: uncommon retroperitoneal mass.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 53-58

Keywords: Mesenteric Cyst; Cysts6bpathology; Abdominal Pain; Hospitals, Teaching; Colon, Descending; Colon, Sigmoid; Tomography, X-Ray Computed; Mullerian Ducts

Abstract: Retroperitoneal cysts are uncommon, with an estimated incidence of 1/5750 to 1/250.000. We found a case of a 54th years old female in Al-Karama Teaching Hospital with sensation of mild left lower abdominal pain colicky in nature with mild backache, ten days duration. No dysuria, normal bowel motion. On physical examination we palpated a fixed mass in the left lateral side of abdomen, ultrasound, and CT-scan were done, first we thought it is probably a mesenteric cyst but this cyst was fixed not mobile in nature. During the operation we found a retroperitoneal cyst at the lateral side of sigmoid colon and extend posterior to the descending colon. The cyst arising within the retroperitoneum outside the major organs. CT scan, and MRI might help in investigation of a retroperitoneal cyst, but surgery is the keystone in confirming the diagnosis, and surgery remains the best treatment option.

Root Canal Irrigants

Rate of apical extrusion of sodium hypochlorite: open ended versus closed ended needles.

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Pakistan Oral and Dental Journal 2014; 34 (1): 159-163

Keywords: Root Canal Preparation-instrumentation; Sodium Hypochlorite-administration dosage; Therapeutic Irrigation-instrumentation; Tooth Apex-anatomy and histology; Needles; Periapical Diseases; Dental Pulp Cavity

Abstract: The objective was to compare the role of needles design [open ended versus closed ended] on the apical extrusion of sodium hypochlorite irrigant during root canal treatment. This was an in vitro study performed at the Department of Operative Dentistry, Liaquat University of Medical and Health Sciences, Jamshoro from March 2011 to

October 2011. Access cavities were prepared in one hundred extracted human maxillary first molars. The mesiobuccal canal was left open whereas the remaining canals were sealed. The acrylic receptacles were used to hold the teeth in a position as they are present in maxillary arch naturally. The starch/KI solution [A reagent that changes into blue color when comes in contact with sodium hypochlorite] was used to fill the receptacles. The teeth were divided into two groups [G1 and G2] each contained 50 specimens respectively. G1: Irrigation of the mesiobuccal canals with 5.25% sodium hypochlorite with open ended beveled needle. G2: Irrigation of the mesiobuccal canals with 5.25% sodium hypochlorite with closed ended side vented needle. Patency file was #10 K in both the groups. The change in any color of starch/KI solution was captured with digital photographs. Results showed overall frequency of apical extrusion of sodium hypochlorite is 43% [43/100]. There was higher extrusion incidence with open ended beveled needle which was 62% [31/50] than with closed ended side vented needle which showed 24% [12/50]. It was concluded that rate of extrusion was significantly high with open ended beveled needle than with closed ended side vented needle. A closed ended side vented needles appeared significantly safer than open ended beveled needles.

Rotator Cuff

ultrasonography

[Comparison of diagnostic value of ultrasonography versus magnetic resonance imaging in the diagnosis of shoulder rotator cuff muscles tears]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 108-113

Keywords: Shoulder Joint-injuries; Tears-ultrasonography; Rotator Cuff-injuries; Ultrasonography-methods; Sensitivity and Specificity; Reproducibility of Results; Magnetic Resonance Imaging

Abstract: Rotator cuff muscles tears are among the most common problems of shoulder joint. This disorder is diagnosed most commonly by imaging methods especially ultrasound and MRI. According to previous studies, both of these methods have high diagnostic value. Because of small sample sizes and inappropriate gold standards in these studies and also lack of enough studies in our country we decided to conduct this study to compare ultrasound and MRI for diagnosis of rotator cuff muscles tears. We performed shoulder ultrasonography and MRI for 100 patients before shoulder surgery in this descriptive analytical study. The results of ultrasonography and MRI were reported separately by 2 radiologists. Using SPSS 19 software, data were analyzed by McNamara's test. 27 of 100 patients that underwent surgery had tears in rotator cuff muscles [20 with complete tear and 7 with partial tear]. Sensitivity, specificity, positive predictive value and negative predictive value were 92.6%, 95.9%, 89.3% and 97.2% for ultrasonography, and 96.3%, 97.3%, 95.9% and 98.6% respectively for MRI. There was no significant difference between the two methods [$P>0.05$]. According to the results of this study both of these methods have high accuracy in the diagnosis of rotator cuff muscles tears and can be used for patient evaluation.

Salmonella

drug effects

[Pattern of serotyping and antibiotic resistance of Salmonella in children with diarrhea]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 100-105

Keywords: Anti-Bacterial Agents-pharmacology; Diarrhea-microbiology; Drug Resistance, Bacterial; Microbial Sensitivity Tests; Salmonella-genetics; Child

Abstract: Gastroenteritis due to Salmonella is common in human and considered as a global dilemma of public health. This study was done to determine the Pattern of serotyping and antibiotic resistance of Salmonella in children with diarrhea in Iran. In this laboratory study, 306 stool samples were collected from children with diarrhea in public health centers in Robat-karim, Tehran province, Iran. The specimens were enriched in Selenite F medium and then cultured on Hekton agar. The identification of Salmonella was carried out by conventional method and antimicrobial susceptibility testing was performed according to CLSI procedures. Out of 306 stool samples, 7.2 % were identified as Salmonella species, as follow: 7 Salmonella typhi, 6 Salmonella paratyphi B, 3 Salmonella paratyphi C, 2 Salmonella paratyphi A and 4 samples were not identifiable. There was a significant relation between presence of WBC in fecal and salmonellosis [$P<0.05$]. In drug sensitivity trends, 92.3% of Salmonella species were sensitive to chloramphenicol, ceftizoxime, Nalidixic acid and Amikacin. This study showed that Salmonella was the cause of children diarrhea in 7.2% in this region.

Scilla

[In-vitro anti-bacterial activity of chloroform, ethyl acetate and hydroalcoholic extracts of Scilla persica Hausskn]

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Golestan University - Faculty of Basic Sciences - Department of Chemistry

Journal of Gorgan University of Medical Sciences 2014; 16 (1): 106-113

Keywords: Herbal Medicine; Plant Extracts-pharmacology; Escherichia coli-drug effects; Microbial Sensitivity Tests; Plant Preparations

Abstract: The generated genetic diversity in the microbial pathogens and drug resistant led to a growing interest to use herbal medicine. This study was carried out to determine the in vitro anti-bacterial activity of chloroform, ethyl acetate and hydroalcoholic extracts of Scilla persica Hausskn. In this laboratory study, chloroform, ethyl acetate and hydroalcoholic extracts were obtained from bulb of Scilla persica. The anti-microbial activity, the minimum inhibitory concentration [MIC] and the minimum bactericidal concentration [MBC] of the extracts were evaluated on Staphylococcus aureus, Bacillus cereus and Escherichia coli using the disk diffusion [growth inhibition zone] and macro-dilution methods. Dimethyl sulfoxide [DMSO] was used as a negative control while nalidixic acid and ampicillin were used as positive control. The maximum inhibition zone for ethyl acetate extract was 26.3+/-0.1 milimetre, 23.7+/-0.3 milimetre and 19.5+/-0.4 milimetre for Staphylococcus, Escherichia coli and Bacillus, respectively. The maximum inhibition zone of chloroform extract was found to be 16.4+/-0.2 milimetre and 14.9+/-0.3 milimetre for Staphylococcus and Bacillus, respectively. Antimicrobial activity of the chloroform and ethyl acetate extracts of bulb of Scilla persica on Escherichia coli, Staphylococcus aureus and Bacillus cereus are more effective compared to nalidixic acid and it is similar to ampicillin in in-vitro condition.

Sepsis

complications

Sepsis in common serious hepato-biliary disorders: a review article.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 40-47

Keywords: Liver Diseases-complications; Hemodynamics; Critical Illness; Liver Function Tests; Hepatocytes

Abstract: Assessing hepatobiliary function among critically ill patients remains challenging, and neither static nor dynamic tests can be considered a gold standard. This issue could contribute to an underestimation of the frequency and importance of this system dysfunction during the course of sepsis. Because hepatic and biliary dysfunction is strongly associated with high morbidity and mortality in patients with sepsis, the ability to accurately assess these functions is of critical interest. During sepsis, the liver plays a key role in the pathophysiology of this disorder. It is implicated in the host response, participating in the clearance of the infectious agents and their products. Sepsis also can causes hepatobiliary damage through hemodynamic alterations or through direct or indirect assault on the hepatocytes or through both. Accordingly, hepatobiliary dysfunction induced by sepsis is recognized as one of the components that contribute to the severity of the disease. In this review article, we discuss the epidemiology, diagnostic tools, and some impact on outcome as well as the pathophysiological aspects, including the cellular events and clinical picture leading to hepatobiliary dysfunction. Finally, therapeutic considerations with regard to the weakness of the pertinent specific approach are examined.

Septins

genetics

Comparative expression analysis of septin 14 in testes of infertile men with normal spermatogenesis and spermatogenic failure.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 205-208

Keywords: Spermatogenesis-genetics; Infertility, Male-genetics; Reverse Transcription; Testis-metabolism; RNA, Messenger; Azoospermia-genetics; Gene Expression Regulation; Reverse Transcriptase Polymerase Chain Reaction; Sertoli Cells-metabolism

Abstract: Septins are an evolutionary conserved group of GTP-binding and filament-forming proteins that have diverse cellular roles. An increasing body of data implicates the septin family in the pathogenesis of diverse states including cancers, neurodegeneration, and male infertility. The objective of the study was to evaluate the expression pattern of Septin14 in testis tissue of men with and without spermatogenic failure. The samples retrieved accessible random between infertile men who underwent diagnostic testicular biopsy in Royan institute. 10 infertile men with obstructive azoospermia and normal spermatogenesis and 20 infertile men with non-obstructive azoospermia were recruited for real-time reverse transcription [RT]-PCR analysis of the testicular tissue. Total RNA was extracted with trizol reagent. Comparison of the mRNA level of septin14 revealed that in tissues with partial [n=10] or complete spermatogenesis [n=10], the expression of septin 14 was significantly higher than sertoli cell only tissues. The testicular tissues of men with hypospermatogenesis, maturation arrest and sertoli cell only had lower levels of septin 14 transcripts than normal men. These data indicates that Septin 14 expression level is critical for human spermatogenesis.

Sex Chromosome Aberrations

Chromosomal abnormality in men with impaired spermatogenesis.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 35-42

Keywords: Spermatogenesis-genetics; Chromosome Deletion; Chromosomes, Human, Y; Sex Chromosome Disorders of Sex Development; Sperm Injections, Intracytoplasmic; Oligospermia; Polymerase Chain Reaction; Azoospermia

Abstract: Chromosomal abnormalities and Y chromosome microdeletions are regarded as two most frequent genetic causes associated with failure of spermatogenesis in the Caucasian population. To investigate the distribution of genetic defects in the Romanian population with azoospermia or severe oligozoospermia, karyotype analysis by G-banding was carried out in 850 idiopathic infertile men and in 49 fertile men with one or more children. Screening for microdeletions in the azoospermia factor [AZF] region of Y chromosome was performed by multiplex polymerase chain reaction [PCR] on a group of 67 patients with no detectable chromosomal abnormality. The results of the two groups were compared by a two-tailed Fisher's exact test. In our study chromosomal abnormalities were observed in 12.70% and 8.16% of infertile and fertile individuals respectively. Our data suggests that infertile men with severe azoospermia have higher incidences of genetic defects than fertile men and also patients from any other group. Infertile men with normal sperm present a higher rate of polymorphic variants. It is important to know whether there is a genetic cause of male infertility before patients are subjected to intracytoplasmic sperm injection [ICSI] or testicular sperm extraction [TESE]/ICSI treatment.

Sexual Dysfunction, Physiological

epidemiology

The relationship between body mass index and sexual function in infertile women: a cross-sectional survey.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 189-198

Keywords: Body Mass Index; Infertility, Female-etiology; Infertility, Female-epidemiology; Overweight-complications; Cross-Sectional Studies; Life Change Events; Questionnaires; Analysis of Variance

Abstract: Infertility as the bitterest life experience can affect sexual function. Many studies have shown agitation, depression, marital dissatisfaction, and sexual dysfunction as the psychological outcomes resulting from infertility. Many factors, including body mass index, influence the female sexual function. This study aimed to assess the prevalence of female sexual dysfunction and the relationship between sexual function and body mass index in the Iranian infertile women who had attended the infertility clinic. This cross sectional study was conducted on 502 infertile women who had attended Honoree clinic, Jahrom in Iran between April 2012 and December 2012. The infertile cases were classified into three groups according to the body mass index: 20-24.9 [Group I], 25-29.9 [Group II], and >29.9 and above [Group III]. In addition, Female sexual function index [FSFI] questionnaire was used in order to assess the sexual problems. Finally, the data were analyzed by descriptive statistics, ANOVA and Student's t-test. The mean age of women was 30.95±6.80 years. The results showed that 430 subjects [87.1%] had sexual dysfunction. Furthermore, the rate of sexual dysfunction among the infertile women was reported as 23.30%, 31.47%, and 45.23% in groups I, II, and III, respectively. Considering body mass index, FSFI score was 21.65±1.70 in the women with normal weight, 18.08±1.52 in overweight women, and 12.21±3.62 in obese women and the difference was statistically significant [p<0.001]. The prevalence of sexual dysfunction was quite high in infertile women, which might be due to the lack of knowledge about marital issues and lack of training in the society. If body mass index is too high, it can have a great effect on fertility. In this study, being overweight and obese based on body mass index had a negative effect on the infertile woman's sexual function.

physiopathology

A holistic approach to psychological sexual problems in women with diabetic husbands.

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IJRM-Iranian Journal of Reproductive Medicine 2014; 12 (3): 175-182

Keywords: Diabetes Mellitus-physiopathology; Sexual Behavior; Sexual Dysfunctions, Psychological; Chronic Disease; Personal Satisfaction; Questionnaires; Assertiveness; Spouses

Abstract: One of negative and influential factor to chronic diseases is creation of sexual problems in the couple's sexual relationship. Sexual health is one of the most important factor in Sexual and marital satisfaction. This study aims to compare the relationship between couple burnout, sexual assertiveness, and sexual dysfunctional beliefs in women with diabetic and non-diabetic husbands. This cross sectional descriptive study was a causal comparative one. The research plan was derived from the master's dissertation for family counseling in Shahid Beheshti University which was done during 2011-2012 in Tehran, Iran. Totally 200 participants were included in this study; 100 participants were women with diabetic husbands and the others were women with non-diabetic husbands. These participants were selected by purposeful sampling method. Data were collected using personality traits and demographic characteristics' questionnaire, couple burnout Measure, Hulbert index of sexual assertiveness and sexual dysfunctional beliefs Questionnaire. Results of the multi-variable analysis of variance indicated that there was a significant difference between couple burnout, sexual assertiveness, and sexual dysfunctional beliefs in women with diabetic and non-diabetic husbands. Women with non-diabetic husbands had a higher mean score in sexual assertiveness factor compared to women with diabetic husbands, whereas in couple burnout and sexual dysfunctional beliefs factors, women with diabetic husbands had a higher mean score. It seems that one of the most important factors which influences and increases couple burnout, increases wrong sexual beliefs regarding sexual function, and decreases sexual assertiveness in women is their husbands' sexual dysfunction. In fact, women whose husbands suffer from chronic diseases such as diabetes [which results in sexual dysfunction] have lower sexual assertiveness and higher couple burnout and sexual dysfunctional beliefs compared with other women.

Silver

therapeutic use

Therapeutic potential of silver in Unani system of medicine: an overview.

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Hamdard Medicus 2013; 56 (2): 95-103

Keywords: Metals-therapeutic use; Medicine, Unani; History, Ancient

Abstract: Metals play important roles in human body, the deficiency of which may lead to various disorders. Earlier there was a perception that metals are not compatible with human body at all, but now it has been reported that number of metallic compounds are essential for body and some are in the category of essential elements. Metals are present in human body in different concentration and combination at various sites and help the respective body tissues to perform their required activities. Perfect health is attributed to the state of equilibrium of these metals in body tissues. Any imbalance in their concentration or inactive states disturbs the body metabolism. Silver is one of the metals known since antiquity. It was used for medicinal purpose since time immemorial. The first recorded use of silver for medicinal purposes dates back to 8th century A.D. where Ibn Sina used silver filings for palpitation of the heart. In Unani system of medicine it is used in the form of kushta [calcined-oxidized herbo-metallic form] and warq [thin foils]. It is highly recommended in fever, chest affections, impotency, seminal weakness, painful and irritable conditions of the stomach, heart burn, chronic diarrhoea and nervous affections. This review is an effort to summarize the detailed prospects of ancient literature on silver along with recent pharmacological studies.

Sperm Injections, Intracytoplasmic

methods

Selection of sperm based on hypo-osmotic swelling may improve ICSI outcome: a preliminary prospective clinical trial.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 21-28

Keywords: Chromatin; DNA Fragmentation; Oocytes; Pregnancy Rate; Centrifugation, Density Gradient; Spermatozoa-cytology; Prospective Studies; Embryonic Structures; Treatment Outcome

Abstract: The intra-cytoplasmic sperm injection [ICSI] technique selects sperm according to morphology and motility. However, these parameters cannot predict the chromatin integrity of sperm. Considering the detrimental effects of DNA-damaged sperm on reproductive outcomes, novel sperm selection procedures have been proposed to circumvent the possibility of inseminating DNA-damaged sperm. It has been shown that different potential hypo-osmotic swelling test [HOST] patterns possess the potential to differentiate between sperm that have intact or damaged chromatin. Therefore, for the first time, this preliminary study evaluates the role of HOST as a sperm selection procedure in a clinical setting. In this preliminary prospective clinical trial study, we divided infertile couples diagnosed with male infertility into two groups. In the treatment group [n=39], half of the oocytes were inseminated by sperm selected following density gradient centrifugation [DGC group]. The remaining oocytes from the treatment group were inseminated by sperm chosen according to HOST pattern [c, d or e] following DGC processing [HOST group]. In the control group [n=63], all oocytes were inseminated by sperm chosen after DGC. There was a significantly higher percentage of embryos that had good quality, implantation, and chemical pregnancy rates in the HOST group compared to the DGC group [p<=0.05]. This study has shown that selecting sperm according to membrane functionality [HOST pattern] rather morphology and viability may open a new window in our approach for determining the appropriate sperm for ICSI, particularly in individuals with severe male infertility.

Spinal Cord Injuries

radiography

Spinal cord injury without radiographic abnormalities [SCIWORA] in a preschool child: a case report.

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JPMI-Journal of Postgraduate Medical Institute 2014; 28 (2): 228-230

Keywords: Magnetic Resonance Imaging; Tomography, X-Ray Computed; Spinal Cord Injuries-pathology; Predictive Value of Tests; Child, Preschool

Abstract: A 3, 1/2 year old boy presented at the Soldiers' Family Rehabilitation Unit, Armed Forces Institute of Rehabilitation Medicine, Rawalpindi with 2, 1/2 years' history of weakness and numbness in legs and loss of control over bowel and bladder following run over by a vehicle. At presentation, the child was unable to stand without support with power of 2/5 in iliopsoas, 3/5 in extensor hallucis longus and 0/5 in ankle plantar flexors on both sides. The power in quadriceps was 0/5 on right and 2/5 on left side. The knee and ankle jerks were absent bilaterally. Sensations to both light touch and pin prick were impaired below T9 level on both sides. Perianal sensations were intact but voluntary anal contraction was absent. He was categorized as a case of Spinal Cord Injury T9 as classified by American Spinal Injury Association [ASIA] with impairment Scale C. X-Rays and Magnetic Resonance Imaging Scans were normal. These investigations aided by relevant clinical features qualified him as a case of Spinal Cord Injury without Radiographic Abnormalities.

Spinal Neoplasms

diagnosis

[Diagnostic value of magnetic resonance imaging and bone scan to diagnose the vertebral metastases]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 66-70

Keywords: Magnetic Resonance Imaging; Neoplasm Metastasis; Spinal Neoplasms-secondary; Magnetic Resonance Spectroscopy; Sensitivity and Specificity

Abstract: The vertebra is the most common site of bone metastases. Diagnosis of metastases particularly in the early stages can improve patients' prognosis and therapy. This study was done to compare the diagnostic value of magnetic resonance imaging and bone scan for the diagnosis of vertebral metastases. This descriptive study was done on 43 patients with any types of primary cancer. Patients underwent spinal magnetic resonance imaging and nuclear scan. Bone scan results were considered as the gold standard. The sensitivity and specificity were calculated for magnetic resonance imaging and nuclear scan. The magnetic resonance imaging diagnosed 19 cases of thoracic vertebral metastases which previously diagnosed as negative by bone scan. Sensitivity and specificity of magnetic resonance imaging compared to bone scan was 90.7% and 95.6%, respectively. The magnetic resonance imaging diagnosed 4 cases of lumbar vertebral metastases which were reported negative in bone scan. Sensitivity, specificity and accuracy of magnetic resonance imaging in compare to bone scan were 97.6%, 97% and 97.2%, respectively. In diagnosis of vertebral metastases, the magnetic resonance imaging is more sensitive than bone scan.

Suicide, Attempted

psychology

[Evaluation of early maladaptive schemas of individuals attempting suicide by self-poisoning]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 1-11

Keywords: Social Isolation-psychology; Suicidal Ideation; Psychiatric Status Rating Scales; Psychological Tests; Questionnaires; Logistic Models; Risk Factors; Case-Control Studies

Abstract: According to Beck's cognitive model, the experiences of the people result in development of assumptions or schemas about the self and the world. These assumptions contribute to the organization of perception and control and appraisal of behavior. Some of these assumptions are rigid and resistant to change and therefore are dysfunctional. The purpose of this study was to determine the schemas of individuals attempting suicide by self-poisoning according to Beck's cognitive model and determine their relationship to suicide. This was a case-control study. Our case group [n=204] included the patients admitted to Tohid Hospital due to suicide attempt. Control group consisted of healthy individuals [n=204] who had been matched with case groups. The participants completed Young Schema Questionnaire and Beck Depression Inventory. Collected data were analyzed by means of logistic regression model and correlation test. Results showed that enmeshment/undeveloped self-unrelenting standards/ hypercritical schemas can be risk factors for suicide attempts. Depression had correlation with emotional deprivation, abandonment/instability, social isolation/alienation, and self-sacrifice schemas. In non-depressed participants, undeveloped self and emotional deprivation schemas were associated with suicide attempt. In general, undeveloped self-schema might contribute to suicidal behavior independently. Emotional deprivation both directly and indirectly [by inducing depression] could precipitate suicidal behavior.

Sunscreening Agents

Sunscreens: some practical issues.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 1-3

Keywords: Dermatitis, Photoallergic-prevention and control; Solar System; Ultraviolet Rays-adverse effects; Sunburn-prevention and control

Surgical Sponges

adverse effects

Robotic-assisted laparoscopic excision of gossypiboma simulating bladder wall mass after 35 years of appendectomy.

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Urology Annals 2014; 6 (2): 163-165

Keywords: Appendectomy; Robotics; Foreign-Body Reaction-complications; Hematuria-etiology; Postoperative Complications; Foreign Bodies-ultrasonography; Urinary Bladder-pathology

Abstract: Gossypiboma or textiloma are terms commonly used to describe a retained sponge in the body that is composed of sponge invested within a layer of foreign body reaction in the form of an abscess or an aseptic fibrotic reaction. These cases are rarely reported despite an incidence of 1:1,000-1,500 of abdominal or pelvic surgery. We report a patient who presented with an incidental suprapubic mass discovered upon work up for frequency and suprapubic pain. He had appendectomy 35 years ago. The mass was excised by robotic-assisted laparoscopic technique. The pathologic evaluation came as gossypiboma.

Synbiotics

Effect of different levels of synbiotic on productivity and egg quality, blood parameters and hatchability in broiler breeder hens.

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Journal of Veterinary Research 2014; 69 (1): 65-71

Keywords: Egg Proteins; Chickens-blood; Cholesterol; Diet; Ovarian Follicle

Abstract: The present study deals with the effect of different levels of synbiotic on egg production and quality, blood parameters, hatchability and yolk cholesterol in broiler breeder hens. The aim of this study was to determine the best level of symbiotic in the diet of broiler breeder hens. The study was conducted based on a completely randomized design with 4 treatment groups, 2 replicates and 10 controls in each experimental unit. The experimental rations were containing 0 [control S0], 0.05 [S0.05], 0.1 [S0.1] and 0.2% [S0.2] synbiotic. Egg quality and weight were measured daily. Blood parameters, laying rate and hatchability were measured weekly. Yolk cholesterol, ovarian weight and number of ovarian large follicles were evaluated at the end of the experiment. The data were analyzed using GLM procedure. The results showed that yolk index in group S0.1 was significantly lower [$p<0.05$] than groups S0.05 and S0.2, but was not statistically different from the control [$p>0.05$]. Also, synbiotic had no significant effect on other egg quality traits, egg weight and hatchability [$p>0.05$]. Adding synbiotic supplement to diet reduced significantly the laying rate, ovarian weight and number of ovarian large follicles in the group S0.2 compared with the other groups [$p<0.05$]. Synbiotic significantly increased plasma glucose concentration [$p<0.05$], but plasma triglyceride, HDL and yolk cholesterol concentrations were not influenced by dietary symbiotic [$p>0.05$]. Furthermore, plasma cholesterol concentration [last week] in groups S0.1 and S0.2 were significantly lower than control group [$p<0.05$]. The results showed that it would be proper to use 0.1% symbiotic in the diet of broiler breeder hens.

Syringoma

diagnosis

Syringomas over forearm: a case report.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 96-98

Keywords: Eccrine Glands-pathology; Forearm-pathology; Hyperpigmentation

Abstract: Syringomas are benign intraepidermal tumour of eccrine sweat ducts mostly found in women at the time of adolescence. Most commonly, lower eyelids are involved and few may occur in the scalp, axillae, abdomen, forehead, penile area and vulva. Syringomas over the forearms are less commonly found. The lesions commonly present as small, multiple, skin to yellowish coloured papules. We present a case of 35-year-old lady with multiple hyperpigmented flat smooth surfaced papules only over the extensors of the forearms symmetrically for the last 1 year with no other cutaneous and systemic manifestations. Histopathological examination confirmed the diagnosis.

Temporomandibular Joint Disorders

epidemiology

Prevalence and severity of temporomandibular disorders [TMD] in undergraduate medical students using Fonseca's questionnaire.

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Pakistan Oral and Dental Journal 2014; 34 (1): 38-41

Keywords: Stress, Psychological; Severity of Illness Index; Education, Medical, Undergraduate; Questionnaires; Cross-Sectional Studies

Abstract: Objective was to assess the prevalence and severity of TMD in undergraduate medical students. It was a cross sectional descriptive study based on Fonseca's Questionnaire. It was conducted in four medical disciplines [Dentistry, Medicine, Pharmacy and Physical therapy] of The University of Faisalabad. All study participants were full time students and were females. Self-reported questionnaire was distributed among students and they were given detailed explanation to fill it. After collection of forms, scoring was done according to given standard method and data was entered in SPSS and statistical test of Chi-squared was applied. One hundred and thirty seven [137] students

were enrolled and completed questionnaire of the study. 11[7.9%] students were observed with No TMD, 62[44.3%] with mild TMD, 62[44.3%] with moderate TMD and 5[3.6%] students with severe TMD [Fig 1]. Difference among age groups was significant [$p < 0.047$] for three questions [Q2, Q, 5, Q10] There was no statistically significant difference regarding prevalence of TMD among all four disciplines of students. Regarding severity of TMD, it was observed that MBBS students were more in category of severe TMD as compared to other disciplines. It was concluded that the mean level of stress and TMD is almost equivalent in different disciplines of professional education with a variation in its level of severity which is 2 times more in MBBS students as compared to other students. There was no significant difference regarding prevalence of TMD in four groups of study.

surgery

Effect of intra- articular morphine sulfate following arthrocentesis of the temporomandibular joint: a prospective comparative study.

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Pakistan Oral and Dental Journal 2014; 34 (1): 18-20

Keywords: Morphine-therapeutic use; Therapeutic Irrigation; Paracentesis; Injections, Intra-Articular; Evaluation Studies as Topic; Treatment Outcome

Abstract: The objective was to evaluate the effect of intra- articular morphine sulfate injection following arthrocentesis on patients with TMJD. Thirty patients with refractory TMJD underwent arthrocentesis for the TMJ and were divided into two groups. First group was given morphine sulphate intra-articularly post arthrocentesis, but to the other group no intra-articular medication was given. Patients were evaluated for pain, joint sounds and mouth opening pre and postoperatively. There was a significant improvement regarding pain scores, mouth opening and joint sounds in both groups. The first group showed more improvement immediately post operatively. Arthrocentesis of the TMJ is a simple procedure for refractory TMJD cases with significant improvement in symptoms. Morphine sulphate as an intra-articular injection following arthrocentesis further improves the immediate post-operative symptoms.

Temporomandibular Joint Dysfunction Syndrome

etiology

Frequency, causes and effects of temporomandibular pain dysfunction syndrome among patients seen at Nishtar institute of dentistry, Multan.

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Pakistan Oral and Dental Journal 2014; 34 (1): 54-56

Keywords: Facial Pain-etiology; Temporomandibular Joint Dysfunction Syndrome-pathology; Temporomandibular Joint Disorders-pathology; Malocclusion-complications; Sex Factors

Abstract: Temporomandibular joint pain dysfunction syndrome is the second most frequent cause of facial pain. The objective of this study was to find out most common etiological factor of TMD, its clinical symptoms, and distribution among gender. Etiology was multifactorial. All patients [100%] with TMD were having malocclusion and stress [100%]. Third most common factor was increased pain threshold [37%]. Out of 160 patients 82 [51%] were females and 78[48%] were males. Most patients were between 20-30 years of age group 51/160 [31.8%]. Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females.

Tetralogy of Fallot

diagnosis

The spectrum of anatomical variations in patients with tetralogy of fallot undergoing diagnostic cardiac catheterization.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S105-S108

Keywords: Cardiac Catheterization; Early Diagnosis; Ventricular Outflow Obstruction; Heart Diseases-diagnosis; Association

Abstract: To determine the various anatomic associations in patients undergoing diagnostic cardiac catheterization with Tetralogy of Fallot. Descriptive study. Armed forces Institute of Cardiology and National Institute of Heart Diseases, from Jan 2012 to Dec 2012 All patients with tetralogy of fallot [TOF] who underwent cardiac catheterization were included in the study. A standard catheterization with cine-angiograms was performed and different associations were recorded. A total 200 patients underwent catheterization during 12 months. The mean age of patients was 6.3 years including 66% [n=132] male and 34% [n=68] female patients. The most common associated anomaly in our patients was major aortopulmonary collateral arteries [MAPCAS] 28% [17% significant and 11% insignificant]. The other associated anomalies were right sided arch in 10%patients, additional muscular ventricular septal defects in 4% [8] patients, persistence of left superior vena cava in 5%[10] patients, patent ductus arteriosus in 5% [10] patients, absent left pulmonary artery in 1% [2] patients and left anterior descending coronary artery crossing right ventricular outflow tract [RVOT] in 1%patients. There was no cardiac perforation, tamponade, cardiac arrest or death during this period. Major aortopulmonary collateral arteries remained the most common finding which necessitated early diagnosis and management in order to prevent long term complications.

Tooth Fractures

therapy

Conservative management of horizontal root fractures-case series.

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Pakistan Oral and Dental Journal 2014; 34 (1); 150-153

Keywords: Maxilla-pathology; Tooth Root-injuries; Tooth Root-pathology; Prognosis

Abstract: Radicular fractures in permanent teeth are uncommon injuries among dental traumas, being only 0.5-7% of the cases. Root fractures occur mainly in the central [68%] and lateral [27%] maxillary incisors; in contrast, only 5% of root fractures are found in mandibular incisors [Caliskan and Pehlivan 1996]. This article presents a case series describing successful conservative management of middle third and incisal third root fractures of the maxillary central incisors.

Tooth Loss

surgery

Trends, awareness, and attitudes of patients towards replacement of missing teeth at University College of Dentistry.

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Pakistan Oral and Dental Journal 2014; 34 (1); 190-193

Keywords: Attitude to Health; Tooth Loss-psychology; Denture, Partial, Fixed; Questionnaires; Tooth, Artificial; Dental Prosthesis-psychology; Dental Implants-psychology

Abstract: This study was carried out among the out patients seen in the University College of Dentistry [UCD] with the aim to assess their trends and attitudes towards tooth replacement. Patients with at least one missing tooth [excluding the third molars] were included. The study was conducted using a questionnaire. Majority of the patients [n=180] did not have previous experience of any sort of prosthesis. Although most of the patients preferred to have fixed partial denture [n=195] some of them responded that they would be comfortable with removable partial denture [n=33]. Low felt need was the most common reason among this study group for delay in seeking dental replacement, while 5% patients were in the post extraction healing period. Dentists were found to be the most important driving force for patient awareness regarding replacement of teeth. Majority of the patients agreed that dental visits should be regular. Some patients [8.8%] did not appreciate the importance of restoring teeth while 62.5% of the patients had the perception that artificial teeth were not equivalent to natural teeth.

Tooth Root

anatomy and histology

Frequency of second canal in mandibular lateral incisors [in-vitro]

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Pakistan Oral and Dental Journal 2014; 34 (1): 147-149

Keywords: Incisor-anatomy and histology; Mandible; Dental Pulp Cavity-anatomy and histology; Dental Pulp Cavity-pathology

Abstract: Objective of the study was to determine the frequency of second canal in extracted mandibular lateral incisors. It was observational study and was conducted in the Dental Outpatient's Department of Liaquat University of Medical and Health Sciences Hospital, Hyderabad / Jamshoro from 1st January 2010 to 31st March 2010. This study included 100 extracted permanent mandibular lateral incisors. These extracted teeth were stored in 10% formalin until access preparation was made. Pulp chamber was accessed using round bur and then irrigated with sodium hypochlorite till it is clearly visible. Then DG16 endodontic explorer was used for the location and negotiation of second canal after location of main canal. Teeth in which second canal was located, No. 10 K-files were inserted into main canal and second canal. Then two periapical radiographs from the buccolingual and proximal sides were taken for confirmation. Results were then recorded in proforma. Single canal was found in 61% of permanent mandibular lateral incisors. 39% of permanent mandibular lateral incisors had second canal. The frequency of second canal in the present study was 39% of permanent mandibular lateral incisors.

Tooth, Impacted

epidemiology

Pattern of third molar impaction: frequency and types among patients attending urban teaching hospital of Karachi.

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Pakistan Oral and Dental Journal 2014; 34 (1): 34-37

Keywords: Molar, Third; Tooth, Impacted-radiography; Outpatients; Maxilla; Cross-Sectional Studies

Abstract: The aims of this study was to determine the frequency and type of third molar impaction between 15 years and above age group of patients attending the outpatient's department of Bahria University Dental Hospital. This is a cross sectional study conducted from January 2012 to November 2013. The subjects were investigated and examined for third molar position, angle and impaction were re-corded. Chi Square test was used to analyze the association of impaction of third molar with respect to gender. A total 169 patients participated in the study; out of which majority were male that is 130 [76.9%] and 39 [23.1%] were females. The overall prevalence of impacted third molar was 169 [26%] with mean age of 29.17+/- years and [STD] +/-10.7. Study results showed that majority of the impacted teeth were present in mandible 32 [72.7%] than in the maxilla 12 [27.27%]. Majority of the impacted third molars were present in both maxillary and mandibular arch in the age group of 15-25 years. Furthermore, mesioangular impaction was the most common of all impacted third molars. It is concluded that impacted third molar is predominantly seen in mandibular arch than maxillary. The mesioangular impaction was the most common.

Tranexamic Acid

administration and dosage

Comparison of different doses of tranexamic acid on post-operative bleeding in patients of CABG surgery.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S13-S18

Keywords: Hemostasis-drug effects; Coronary Artery Bypass-adverse effects; Intraoperative Care; Postoperative Hemorrhage-prevention and control

Abstract: To compare three different dosing schedules of tranexamic acid to achieve good hemostasis intraoperatively and in post-operative period. Randomized controlled trials. Anaesthesia department, Armed Forces Institute of Cardiology/ National Institute of Heart Diseases [June 2011 to Jan 2013] A total of 128 patients, due for coronary artery bypass grafting were included in this study after informed consent. The patients were randomly divided

into four groups. Group A, being the control group, did not receive tranexamic acid during the operation, whereas the remaining three groups received tranexamic acid just after the reversal of heparin with protamine sulphate. Group B received low dose, group C received medium dose and group D received high dose of tranexamic acid both as bolus and followed by infusion. Six patients, 4 from group B and 2 from group D were dropped out due to incomplete data or some complication. The blood loss at 6 hours and 24 hours after surgery were noted along with amount and type of transfusions needed and clinical outcomes. The total cardio-pulmonary bypass time, aortic cross-clamp time and chest closure time were also noted. Haemoglobin levels, coagulation profile and activated clotting time were noted and compared pre and post operatively. All the 4 groups were comparable with respect to age, weight, gender and personal history. Average bleeding in group A was similar to group B after six hours [p = 0.755] and 24 hours [p = 0.343] but significantly higher as compared to group C [p < 0.001] and group D [p < 0.001]. Group B also had more blood in chest drain as compared to group C [p < 0.001] and group D [p < 0.001]. Group C and group D had almost similar amount of blood loss after 6 hours [p = 0.916] as well as after 24 hours [p = 0.834]. This study showed that tranexamic acid, when given at a loading dose of 20 mg/kg or greater and followed by a maintenance infusion of 15 mg/kg/hr or greater, significantly reduced the amount of blood loss, both intra-operatively and post-operatively, in patients undergoing on-pump coronary artery bypass grafting.

Tuberculosis, Female Genital

radiography

Hysterosalpingographic appearances of female genital tract tuberculosis: part II: uterus.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 13-20

Keywords: Fallopian Tube Diseases; Hysterosalpingography; Tuberculosis, Female Genital-pathology; Evaluation Studies as Topic; Endometrium

Abstract: Female genital tuberculosis remains as a major cause of tubal obstruction leading to infertility, especially in developing countries. The global prevalence of genital tuberculosis has increased during the past two decades due to increasing acquired immunodeficiency syndrome. Genital tuberculosis [TB] is commonly asymptomatic and it is diagnosed during infertility investigations. Despite of recent advances in imaging tools such as computed tomography [CT] scan, magnetic resonance imaging [MRI] and ultrasonography, hysterosalpingography has been considered as the standard screening test for evaluation of tubal infertility and as a valuable tool for diagnosis of female genital tuberculosis. Tuberculosis gives rise to various appearances on hysterosalpingography [HSG] from non-specific changes to specific findings. The present pictorial review illustrates and describes specific and non-specific radiographic features of female genital tuberculosis in two parts. Part I presents specific findings of tuberculosis related to tubes such as "beaded tube", "golf club tube", "pipestem tube", "cobble stone tube" and the "leopard skin tube". Part II will describe adverse effects of tuberculosis on structure of endometrium and radiological specific findings, such as "T-shaped" tuberculosis uterus, "pseudo-unicornuate" uterus, "collar-stud abscess" and "dwarfed" uterus with lymphatic intravasation and occluded tubes which have not been encountered in the majority of non-tuberculosis cases.

Tuberculosis, Urogenital

Other considerations for treating bladder tuberculosis.

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Urology Annals 2014; 6 (2): 155-156

Keywords: Urinary Bladder Diseases; Urinary Tract Infections; Urinary Bladder Neoplasms; Urinary Tract

surgery

Robot-assisted laparoscopic augmentation ileocystoplasty in a tubercular bladder.

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Department of Urology

Urology Annals 2014; 6 (2): 152-154

Keywords: Urinary Bladder, Neurogenic-surgery; Robotics; Laparoscopy-methods; Ileum-surgery; Urinary Bladder, Neurogenic-etiology; Reconstructive Surgical Procedures; Treatment Outcome

Abstract: Some of the patients with genitourinary tuberculosis [GUTB] present to the urologist with small contracted bladders or with significant renal damage. [1] Additional reconstructive procedures are often required along with anti-tubercular treatment in these patients. These procedures commonly performed via the open approach, now have the

advantage of minimally invasive approach provided by laparoscopic and robotic surgery. The technique of robot-assisted laparoscopic augmentation ileocystoplasty in a patient with a small contracted bladder due to GUTB will be described. The procedure was performed via a completely intra-corporeal technique using an ileal "cap" created from a 15 cm segment of distal ileum which was anastomosed to the urinary bladder bi-valved in the mid-sagittal plane. The procedure lasted for 420 minutes and the patient was discharged on postoperative day 5. At 6 month follow-up, the patient has no irritative urinary symptoms and voiding with insignificant post-void residual urine.

Ubiquinone

analogues and derivatives

[Protective effect of Co-enzyme Q10 on seizure, short term spatial memory and oxidative stress in induced-epileptic rats]

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Journal of Gorgan University of Medical Sciences 2014; 16 (1): 14-21

Keywords: Seizures-drug therapy; Memory Disorders-drug therapy; Oxidative Stress-drug effects; Mental Disorders-drug therapy; Superoxide Dismutase; Random Allocation

Abstract: Temporal lobe epilepsy is the most common type of epilepsy in human. Patients suffer from spontaneous seizures and memory deficiency. This study was done to assess the effect of Co-enzyme Q10 [CoQ10] administration on seizure, short-term spatial memory and stress oxidative indices in hippocampus of kainic acid-induced epilepsy. In this experimental study, 48 male rats were randomly allocated into six groups: shamoperated; CoQ10 [10 mg/kg/bw]-treated SH; kainate; CoQ10 [2, 5 and 10 mg/kg/bw] treated kainic acid. CoQ10 was intraperitoneally administered daily for one week before intra-hippocampal injection of kainic acid [4microg/kg/bw] in animals. Kainic acid induced chronic and acute spontaneous seizures in animals. Also, kainic acid administration caused a reduction in alternational behavior rate [consecutive or serially entrance into all of arms in triplet set], increasing of malondialdehyde, nitrite level and decreasing of superoxide dismutase activity compared to sham group [P<0.05]. Pre-treatment of kainate rats with CoQ10 decreased rate of spontaneous seizures [P<0.05]. CoQ10 increased alternational behavior rate, decreased malondialdehyde and nitrite serum level [P<0.05]. But it had no significant effect on superoxide dismutase activity. Pre-treatment of kainic acid exposed rats with CoQ10 reduced rate of seizures and improved short-term spatial memory and oxidative stress indices in rats.

Umbilicus

surgery

Single-site multi-port laparoscopic endo-surgery: the SIMPLE technique - a useful method of purely umbilical porting that ensures triangular laparoscopic ergonomics.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 203-205

Keywords: Human Engineering; Cholecystectomy, Laparoscopic-methods; Laparoscopy-methods; Operative Time; Surgical Instruments; Treatment Outcome

Abstract: Umbilical single-port surgery is a recent development that produces better cosmesis and lesser pain. However, the steep learning curve and the higher surgical expense have led to its rather sceptical acceptance. In this regard, a technique is hereby described in which three ports are directly inserted on the umbilical mound [without raising the umbilical-flap] through three small incisions to form an isosceles triangle. The respective fascial-entries are made farther away to achieve satisfactory inter trocar distance. This technique complies with the laparoscopic triangulation principles, likely to further reduce postoperative umbilical pain/morbidity, and achieve good umbilical aesthetics as the scars recede within the umbilicus. As only the routine laparoscopic instruments were utilized, it also has a potential to reduce the surgical cost. Therefore, the authors feel that this technique can be a valuable addition to the existing umbilical laparoscopic methods.

Urinary Bladder Neoplasms

chemically induced

Occupational risk of bladder cancer among Iranian male workers.

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Urology Annals 2014; 6 (2): 135-138

Keywords: Risk Factors; Urinary Bladder Neoplasms-etiology; Occupational Exposure-adverse effects; Occupational Medicine; Case-Control Studies

Abstract: Approximately 5-10% of human cancers are thought to be caused by occupational exposure to carcinogens. Compare to other cancers, bladder cancer is most strongly linked to occupational exposure to chemical toxins. This study has been performed to understand which occupations and exposures are related to bladder cancer in Iran. This study is a case-control study which is conducted on cases with bladder cancer [160 cases] diagnosed in Bahariou hospital in 2007-2009. One hundred sixty cases without any occupational exposure were considered as controls matched for demographic characteristics. Demographic data and characteristics of occupation were compared. Mean age of cases and controls were 63.7 and 64 years, respectively [P = 0.841]. History of urinary tract stone had significantly difference in two groups [P = 0.039]. Occupations such as bus and truck driving, road and asphalt making, mechanics, working in refinery and Petrochemical, plastic, metal manufactory, welding, and pipeline founded a higher risk for bladder cancer rather than controls. Our findings on Iranian workers are concurrent and compatible with findings of previous reports about occupational and environmental risk factors of bladder cancer. Although our study population was not little, further studies are needed to declare the risk of working in some occupations such as drivers and metal factories for bladder cancer.

Urinary Tract Infections

epidemiology

Extended spectrum beta-lactamase urinary tract infections.

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Urology Annals 2014; 6 (2): 114-115

Keywords: Escherichia coli-enzymology; Urinary Tract Infections-microbiology; Escherichia coli Infections-epidemiology; beta-Lactamases-biosynthesis; Drug Resistance, Bacterial

microbiology

Extended-spectrum beta-lactamase-positive Escherichia coli causing complicated upper urinary tract infection: urologist should act in time.

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Urology Annals 2014; 6 (2): 107-112

Keywords: Escherichia coli-enzymology; Urinary Tract Infections-epidemiology; Escherichia coli Infections-epidemiology; beta-Lactamases-biosynthesis; beta-Lactamases-urine; Drug Resistance, Microbial; Prospective Studies

Abstract: Recently, many articles reported increased incidence of urinary tract infection [UTI] due to Extended-Spectrum Beta-Lactamase [ESBL]-producing E. coli. No data are available to date regarding patients presenting with complicated upper ESBL-positive E. coli UTI and sepsis. We report the clinical presentation, management, and outcomes in seven cases. This prospective study was carried out between January 2008 and September 2011. Follow-ups varied in patients according to their disease presentation and clinical outcomes. All strains were cultured and identified by the Clinical Microbiology Laboratory and were recovered from blood and urine cultures. In-vitro presence of ESBL was confirmed with Clinical and Laboratory Standard Institute double disc method. In the study period, 49 patients needed hospitalization for upper UTI. Overall, in 25 patients [51%], cultures were negative. In the remaining, seven patients [14.3%] presented positive blood and urine-culture for ESBL + E. coli. Of these, four were female and three were male. Their median age was 73 years [range 66-84]. The median hospital stay of these patients was 23 days [range 13 to 45 days]. The current situation of multiple bacterial antibiotic resistance has become a worrisome issue in UTI. Multi-drug-resistant E. coli can be readily encountered in hospital settings during daily clinical practice, and urologist should act timely. The management of such infections is extremely important for the future, with particular reference to prevention of new antibiotic resistance patterns.

prevention and control

Complicated urinary tract infection caused by extended spectrum beta-lactamase-producing *Escherichia coli*.

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Urology Annals 2014; 6 (2): 112-113

Keywords: *Escherichia coli*-enzymology; Urinary Tract Infections-epidemiology; *Escherichia coli* Infections-epidemiology; Drug Resistance, Microbial; Sensitivity and Specificity; Infection Control

Urticaria

etiology

Urticaria due to tomato.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 99-100

Keywords: *Lycopersicon esculentum*; Food Hypersensitivity

Abstract: Two patients of urticaria due to tomato are reported. They developed urticaria whenever they took tomato. Urticaria disappeared completely after they stopped taking tomato. During 6 months of follow-up without tomato in their food, there was no urticaria.

Uterine Cervical Neoplasms

surgery

Laparoscopic fertility sparing management of cervical cancer.

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IJFS-International Journal of Fertility and Sterility 2014; 8 (1): 91-94

Keywords: Fertility; Laparoscopy; Cerclage, Cervical-methods; Pregnancy Outcome

Abstract: Fertility can be preserved after conservative cervical surgery. We report on a 29-year-old woman who was obese, para 0, and diagnosed with cervical insufficiency at the first trimester of current pregnancy due to a previous trachelectomy. She underwent laparoscopic transabdominal cervical cerclage [LTCC] for cervical cancer. The surgery was successful and she was discharged two days later. The patient underwent a caesarean section at 38 weeks of gestation. Laparoscopic surgery is a minimally invasive approach associated with less pain and faster recovery, feasible even in obese women.

Uterine Hemorrhage

etiology

[Evaluation of the risk factors related to dysfunctional uterine bleeding in peri-menopausal women in Sanandaj]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 45-50

Keywords: Risk Factors; Premenopause-physiology; Uterine Hemorrhage-prevention and control; Cesarean Section-adverse effects; Case-Control Studies; Questionnaires; Logistic Models; Social Conditions

Abstract: Dysfunctional uterine bleeding [DUB] is one of the common problems in peri-menopausal women that can affect their physical, emotional and social conditions. In addition DUB is one of the main causes of hysterectomy. The aim of this study was to investigate risk factors associated with DUB in peri-menopausal women in Sanandaj. This case-control study included 62 women with DUB[case group] and 124 women without DUB[control group]. We used a questionnaire consisted of different items which was completed for every subject after clinical interview. Using SPSS

software, data analysis was performed by chi-square, Fisher exact test and logistic regression. DUB showed significant relationships with type of delivery [$p=0.015$] and age [$p=0.045$]. DUB had no significant relationship with diabetes [$p=0.095$], hypertension [$p=0.917$] and type of contraceptive methods [$p=0.906$]. Analysis by logistic regression revealed that women over 50 years of age and women with history of Cesarean section [C/S] had a respective risk of 2.284 [$p=0.021$] and 2.493 [$p=0.009$] times greater to develop DUB than women without these factors. The age over 50 years and C/S was suggested as risk factors which can be related to DUB. Attention to the advantages of vaginal delivery and complications of C/S is necessary and reduction of C/S rate can be effective in decreasing the incidence of DUB.

Vasculitis, Leukocytoclastic, Cutaneous

pathology

Clinicopathological study of cutaneous vasculitides.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 8-14

Keywords: Purpura, Schoenlein-Henoch-etiology; Vasculitis, Leukocytoclastic, Cutaneous-diagnosis; Antibodies, Antinuclear; Rheumatoid Factor; Fluorescent Antibody Technique, Direct; Liver Function Tests; Connective Tissue Diseases-pathology; Cross-Sectional Studies

Abstract: To study the different patterns of cutaneous vasculitides along with their underlying etiologic factors and to assess the clinicopathological correlation. A cross sectional study was conducted on 30 consecutive patients, histologically diagnosed as cutaneous vasculitis in the department of dermatology and venereology, BSMMU, Dhaka. All patients were subjected to a baseline workup consisting of complete hemogram, serum-creatinine levels, liver function tests, chest X-ray, urine [routine and microscopic] examination besides antistreptolysin O titer, antinuclear antibody assay, rheumatoid factor assay, antineutrophilic cytoplasmic antibodies and hepatitis B and C. Histopathological examination was done in all patients while immunofluorescence was done in 9 patients. Out of a total of 30 patients diagnosed histologically as cutaneous vasculitis, 22 were classified as cutaneous small vessel vasculitis [CSVV], 6 as Henoch-Schonlein purpura, and one each as urticarial vasculitis, and Behcet's syndrome. Approximately 30% of the patients had a significant drug history, 23.3% were attributed to infection. No cause was found in 46.7% cases. Only 9 patients could undergo direct immunofluorescence [DIF], out of which 4 were positive for vasculitis. Cutaneous small vessel vasculitis was the commonest type of vasculitis presenting to the dermatology outpatient department. The workup of patients with cutaneous vasculitis includes detailed history, clinical examination and investigations to rule out multisystem involvement followed by skin biopsy and DIF at appropriate stage of evolution of lesions. Follow up of these patients is very essential as cutaneous manifestations may be the forerunners of serious systemic involvement.

Venous Thrombosis

pathology

Superior vena cava thrombosis with peripartum dilated cardiomyopathy.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 209-212

Keywords: Vena Cava, Superior-pathology; Jugular Veins-ultrasonography; Cardiomyopathy, Dilated-diagnosis; Cardiomyopathy, Dilated-therapy; Peripartum Period; Pulmonary Embolism-ultrasonography; Ultrasonography, Doppler; Tomography, X-Ray Computed; Treatment Outcome; Echocardiography

Abstract: A 30 years multiparous female with history of emergency caesarean section 10 days back was referred to us with cough, severe breathlessness at rest, orthopnea with pain in neck and arms. Clinical examination revealed signs of heart failure. Echocardiography showed ejection fraction of 15%, with no right ventricular strain. A diagnosis of peripartum cardiomyopathy was made. Doppler ultrasound of neck veins showed bilateral internal jugular vein thrombosis. Subsequent multislice CT examination showed thrombosis of superior vena cava and both internal jugular veins [with collateral formation] and pulmonary embolism. There were no mediastinal abnormalities on the CT scan. Her thrombophilia screen and CT scan brain was normal. She was managed in collaboration with cardiologist. Following treatment with subcutaneous enoxaparin therapy and warfarin her symptoms of upper limb pain improved. She responded very well to medical therapy for heart failure with marked improvement of NYHA functional class.

Ventricular Septal Rupture

therapy

Management of patients with acute myocardial infarction complicated by ventricular septal rupture - AFIC study.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S59-S62

Keywords: Myocardial Infarction-complications; Ventricular Septal Rupture-pathology; Treatment Outcome; Risk Factors

Abstract: The aim of this study was to report management; peri-procedural and short term results of patients hospitalized with acute myocardial infarction [MI] complicated by ventricular septal rupture [VSR] considered high risk or unfit for surgical repair at AFIC-NIHD. Quasi experimental study Adult and paediatric cardiology departments of Armed Forces Institute of Cardiology / National Institute of Heart Diseases [AFIC/NIHD] from 1[st] January 2012 to 31[st] August 2013. We included 12 patients with post myocardial infarction VSR with mean age of 59 years [41-85 years], who underwent elective transcatheter closure. The entry criteria for trans-catheter closure after initial medical stabilization was 1) patients with ventricular septal rupture up to 20 mm size with significant left to right shunting [Qp/Qs >1.5] 2) defect anatomy and location thought to be suitable for device closure or otherwise considered high risk or unfit for surgical closure. The time from the onset of infarction to the index procedure ranged between 4 to 20 days [mean 10.83 days]. There were ten patients in acute phase [2 weeks or less] and two presented in sub-acute phase [> 2 weeks] . Ten patients were in NYHA class III and one each in class II and IV. A successful device implantation occurred in all patients except in one in whom second attempt failed. The defect size ranged 4-18 mm [mean 9.25 mm] and the devices ranging from 8-22 mm [mean 13.3 mm] were implanted. The procedure time ranged from 90-140 min [mean 105 min]. In all patients Qp/Qs was more than 2 and decreased to less than two after the procedure. Six surviving patients are in NYHA class II and doing well. One patient died one hour after the procedure whereas one patient died twelve hour after the closure because of re-infarction. One patient developed another VSR leak 3 days after the procedure and device closure was attempted again but the device could not be deployed. He subsequently died awaiting surgery. Primary trans-catheter closure of post-infarction ventricular septal rupture may be an alternative to surgery in patients with suitable anatomy and high risk or unfit for surgery.

Vibration

[Effect of whole-body vibration training on physiological indices and cardiovascular fitness in elderly veterans]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 12-20

Keywords: Exercise Therapy; Serotonin-physiology; Adipose Tissue-physiology; Body Mass Index; Veterans; Lipids-blood

Abstract: Whole-body vibration training as an exercise method and as a non-drug treatment strategy has been used for improvement of cardiovascular fitness. The aim of this study was to examine the effect of whole-body vibration training on vo2max, body fat percentage, and lipid profile and serotonin level in elderly veterans. In this semi experimental study, forty veterans with 25 percent damage [age range 55-65 years of age] were selected and randomly divided into two experimental and control groups. Subjects in the experimental group performed whole-body vibration training for a period of 12 weeks with frequency of 30-35 Hz and amplitude of 1/7 mm. Our control group did not participate in any regular exercise program during study period. Serotonin levels, VO2max, percentage of body fat, BMI and lipid profile were measured before and after training for both groups. Data were introduced into SPSS18 software and analyzed by t-tests at P<0/05. After 12 weeks of whole body vibration training, we found significant decrease in the percentage of body fat, BMI and lipid profile and significant increase in VO2max and serotonin in the experimental group [P<0.05]. Whole-body vibration training in the elderly veterans as a new training method can lead to improved cardiovascular function.

Vitiligo

therapy

Guidelines for the management of vitiligo.

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JPAD-Journal of Pakistan Association of Dermatologists 2014; 24 (1): 68-78

Keywords: Psychotherapy; Immunologic Factors; Immunomodulation; Phototherapy; Combined Modality Therapy; Adrenal Cortex Hormones

Abstract: Vitiligo is an acquired disorder of depigmentation affecting 0.1%-2% of the world's population without discrimination of race, age and gender. The disease is characterized by white patches, often symmetrically distributed, which usually increase in size with time, corresponding to a considerable loss of functioning epidermal and sometimes hair follicle melanocyte. There are many treatment options available for the disease. Standardized guidelines for treating this disease in Asian skin are not readily available which leads to no set criteria for treating this cosmetically disfiguring problem. These guidelines have been prepared for dermatologists considering all the latest evidence based data available. Vitiligo is diagnosed clinically, although in some cases biopsy is required. Lesions on face and neck respond well to the treatment. However, segmental and acral types respond poorly to treatment. In the assessment of patient before starting therapy it is important to consider age, pre-existing diseases, in particular autoimmune disorders and previous medications. Topical corticosteroids and/or topical immunomodulators for localized vitiligo and phototherapy for generalized vitiligo are considered as first line therapies. As the treatment often extends over a long period of time, patients are frequently frustrated by the failure of previous treatments, so psychological stress is common and thus psychotherapy has also positive role. These comprehensive guidelines for the diagnosis and management of vitiligo in coloured skin aims to give high quality clinical advice, based on the best available evidence and expert consensus.

Warts

drug therapy

[Comparison of effectiveness of liquid nitrogen and podophyllin in treatment of genital warts in males]

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Higher Education in Dermatology and Venereology - Arab Board Certificate in Dermatology

JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 35-39

Keywords: Podophyllin-therapeutic use; Cryotherapy; Nitrogen-therapeutic use; Treatment Outcome; Genital Diseases, Male-drug therapy

Abstract: Clinical assessment of effectiveness of liquid nitrogen and podophyllin in treatment of genital warts, and comparison of the two treatments in clearance and recurrence rates. Forty male patients [19 to 53 years old] were allocated to receive treatment for genital warts; they were randomly divided into two groups; liquid nitrogen group and podophyllin group. Therapy was continued for 6 weeks. After that the patients were assessed for clearance of lesions, and then monitored for recurrence for three months after clearance of lesions. In the first group [liquid nitrogen] lesions cleared in 75% of patients, and there was a recurrence in 33% of the cured patients during first 3 months. While in the second group [podophyllin], lesions cleared in 30% of patients, and recurrence occurred in 43% of those patients. There was a statistical significant difference [p=0.05] between clearance rates in the two groups, whereas the difference wasn't statistically significant between recurrence rates. Cryotherapy [liquid nitrogen] showed more efficacy than podophyllin 20% in treatment of genital warts in males, with no difference in clearance rates.

Water-Electrolyte Imbalance

epidemiology

Frequency of dysnatremia and dyskalemia in cardiac surgical intensive care unit.

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PAFMJ-Pakistan Armed Forces Medical Journal 2014; 1 (1): S39-S43

Keywords: Hyponatremia-epidemiology; Hypokalemia-epidemiology; Hyponatremia-epidemiology; Hyponatremia-epidemiology; Intensive Care Units; Cardiac Surgical Procedures; Cross-Sectional Studies

Abstract: To determine the frequency of dysnatremia and dyskalemiain cardiac surgical intensive care unit patients and to identify the factors associated with the changes in potassium and sodium levels. Cross Sectional study. Cardiac surgical intensive care unit [ICU] of Armed Forces Institute of Cardiology / National Institute of Heart Diseases [AFIC/NIHD] from July 2013 to November 2013. Post-operative patients in cardiac surgical intensive care unit were selected through non probability convenient sampling. Demographic and clinical data was collected for all patients including: age, sex etc. Additionally, laboratory data such as potassium and sodium serum concentrations were recorded of day one of the first five post operative days. Out of 100 patients, 51% had dyskalemia, 33% had episodes of hypokalemia, and 19% had hyperkalemia. On the other hand 79% patients had dysnatremia, among them 71% had hyponatremia, and 8% had hypernatremia. Dyskalemia and dysnatremia are common problems in cardiac surgical ICU with higher frequency of hyponatremia as compared to hypernatremia, and hypokalemia as compared to hyperkalemia.

Wounds and Injuries

mortality

[Evaluation of trauma patterns and their related factors in Besat Hospital in Sanandaj in 2012]

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Scientific Journal of Kurdistan University of Medical Sciences 2014; 19 (1): 99-107

Keywords: Accidents, Traffic-mortality; Wounds and Injuries-etiology; Age Factors; Chi-Square Distribution; Emergency Service, Hospital-standards

Abstract: Trauma is one of the world's most important public health challenges. Considering the advances made in technology and industrialization of societies in the last century, trauma and its complications have been regarded a major problem because, it is the most common cause of death and disability in people between 1 and 44 years of age. The aim of this study was to determine trauma patterns in the trauma victims treated at Besat Hospital in Sanandaj in 1390. This was a descriptive-analytical study and included 4016 patients who had referred to Besat Hospital in Sanandaj due to trauma. Data were entered into SPSS V.18 software and analyzed by descriptive statistics and chi-square test. We used Mann-Whitney U test for the variable of age because distribution of age was not normal. 1263 patients [31.4%] were female and 2753 [68.6%] were male. The mean age of the study population was 31.7 +/- 19.6 [age range: 1 month to 90 years] . 131 patients [3.3%] had penetrating and 3885 [96.7%] had blunt trauma. 20 patients [0.5%] died from trauma related injuries. Patterns of trauma had significant relationships with gender and type of traumatic event [p<0.001]. There was also a statistically significant relationship between age and trauma patterns [p = 0.006], but the patterns of trauma and trauma-related deaths did not show any statistically significant relationship [p = 0.410]. The rate of traffic accidents is high among the young people who are the most active and competent group in the society. Prevention of These accidents requires meticulous planning. Well-equipped emergency rooms can have an important role in the reduction of mortality rate due to trauma related injuries.

Wrist Injuries

surgery

Flexor zone 5 cut injuries: emergency management and outcome.

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JCPSP-Journal of the College of Physicians and Surgeons Pakistan 2014; 24 (3): 194-197

Keywords: Ulnar Nerve-injuries; Emergency Medical Services; Lacerations-surgery; Radial Nerve-injuries; Treatment Outcome; Ulnar Artery-injuries; Ulnar Artery-surgery; Wounds, Penetrating-surgery; Wrist-blood supply; Wrist-innervation

Abstract: To determine the outcome and devise a protocol for emergency management of cut injuries in Flexor Zone 5 of hands. Descriptive study. Department of Plastic Surgery and Burn Unit, Mayo Hospital, KEMU, Lahore, Pakistan, from January 2009 to March 2013. All patients above 12 years of age with single sharp cut injuries in Flexor Zone 5, with no skeletal injuries, presenting within 12 hours in emergency were included with follow-up of 6 months, with active range of motion evaluated by Strickland's adjusted formula. Power of opponens pollicis and adductor muscles was evaluated from P0-4. Nerve repair results were evaluated serially by advancing Tinnel's sign, electrophysiological studies and sensory perception scored from S0-4 compared to the normal opposite upper limb. The study group comprised of 31 patients [M : F = 2.4 : 1]. Average age was 27 years ranging from 17 - 53 years. In 25 [80%] cases, injury was accidental, in 3 [10%] homicidal and in 3 [10%] injury was suicidal. Four most commonly involved structures included Flexor carpi ulnaris, ulnar artery, ulnar nerve and Flexor digitorum superficialis. Median nerve and radial artery were involved in 10 cases each, while ulnar artery and ulnar nerve were involved in 14 cases each. Long tendons were involved in most cases with greater involvement of medial tendons. None of the patients required re-exploration for ischaemia of distal limb while doppler showed 22 out of 24 vascular anastomosis remained patent. Recovery of long-

tendons was good and recovery after nerve repair was comparable in both median and ulnar nerves. Early and technically proper evaluation, exploration and repair of Zone 5 Flexor tendon injuries results in good functional and technical outcome.

Xanthophylls

pharmacology

Comparison of the effect of astaxanthin and dunaliella salina algae on skin carotenoid, lipid peroxidation and coloration of heros severus.

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Journal of Veterinary Research 2014; 69 (1): 95-102

Keywords: Carotenoids; Skin-drug effects; Microalgae; Nuclear Proteins; Lipid Peroxidation; Administration, Oral

Abstract: Microalgae *Dunaliella salina* is a national source of carotenoids which can be used in aquaculture, meanwhile synthetic Astaxanthin is very expensive for use in aquaculture and several attempts have been made to find alternatives for Astaxanthin. The purpose of this study is to investigate the effect of oral administration of Astaxanthin and *D.salina* on skin carotenoid level, skin and fins coloration as well as lipid peroxidation of muscles in *H.severus*. One hundred and thirty five *H.severus* weighing 27+/-0.5g were randomly divided to three groups in triplicate: Groups 1 [G1] was fed with basal diet, group 2 [G2] and group 3 [G3] were fed with basal diet supplemented with 200 mg kg⁻¹ *D.salina* or Astaxanthin respectively. After 6 weeks, digital photo were taken from 15 fishes of each group and skin and muscles samples were taken after euthanasia. Skin beta carotene rate, lipid peroxidation of muscle [based on Malondialdehyde activity] as well as skin and fins coloration pattern [a*, b*, Hue, L* and Chroma] were compared among groups. Skin beta-carotene rate significantly increased in G2 and G3 compare to G1 but, Lipid peroxidation rate were decreased in G2 and G3 compare to control [p<0.05]. Although some improvement in color quality were observed in trunk area, there was no significant difference in color indicators among the groups [p>0.05]. In the fin areas a* value significantly increased in G2 and G3 compare to control also Hue and b* value significantly decreased in G2 and G3 compare to control [p<0.05]. Chroma significantly increased in G3 compared with other [p<0.05]. No significant difference were observed in L* between the groups [p>0.05]. Although the effect of Astaxanthin on skin carotenoid level and skin and fins coloration was better compared with *D. salina*. However, because of reasonable price, wide availability and the production of *Dunaliella salina*, it can be used as an alternative for Astaxanthin.

Yersinia Infections

prevention and control

Study of efficacy of vaccination against yersiniosis in rainbow trout using local strains of *Yersinia ruckeri*.

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Journal of Veterinary Research 2014; 69 (1): 57-63

Keywords: *Yersinia* Infections-veterinary; *Yersinia ruckeri*-immunology; Bacterial Vaccines-immunology; Trout; *Oncorhynchus mykiss*; Treatment Outcome; Evaluation Studies as Topic

Abstract: Outbreak and development of yersiniosis in rainbow trout farms in Iran has caused a serious problem over the last years. The purpose of this study was to evaluate the efficacy of immersion vaccination with *Yersinia ruckeri* in rainbow trout. Prior to antigen preparation, the phenotypic, molecular and serological features of a number of *Yersinia ruckeri* isolates obtained from affected trout farms were studied. The virulent of these isolates were then evaluated using intra peritoneal injection route. Trout were vaccinated by immersion route [3 min at 12 °C] using *Yersinia ruckeri* bacterin of the virulent strains. The efficacy of vaccine antibody titer within 2, 4, 6, 8 and 10 weeks post vaccination were evaluated using relative percent survival. The phenotyping, serological and molecular studies have led to identification of 8 isolates of *Yersinia ruckeri* and all the isolates produced bands 409 bp, which is indicative of *Yersinia ruckeri*. In pathogenicity test 3 isolates caused above 50% mortality, while 5 isolates reached 16%. The RPS of vaccinated fish reached 72.7, 80, 80, 82.2 and 83.3% within 2, 4, 6, 8 and 10 weeks post vaccination, respectively. In the other words, the mortality level in vaccinated groups was in range of 10-20% within 10 weeks post vaccination, while those of control group was in range 56.7 - 73.3% [p<0.05]. The lowest and the highest antibody titers in immunized groups were 32+/-4.50 and 164.57+/-9.37 respectively, obtained after 4 and 10 weeks of immunization, whereas the control group had no measurable titer of antibody. The results of this study clearly show that this vaccine can remarkably protect the trout from yersiniosis outbreaks inside Iran.

Zinc

blood

Serum zinc level in children with beta-thalassemia major on iron chelator.

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JABHS-Journal of the Arab Board of Health Specializations 2014; 15 (1): 2-7

Keywords: beta-Thalassemia-blood; Iron Chelating Agents-adverse effects; Hospitals, Teaching; Case-Control Studies

Abstract: Zinc as a second trace element of human body plays an important role in numerous functions. Thalassemic patients are at risk of zinc deficiency due to various causes including the use of iron chelating agents oral or injectable. In this study we aim to measure the serum zinc level in beta-thalassemic patients on oral versus injectable iron chelator. A hospital based case control study conducted in the Center of Hereditary Blood Disorders in Al-Zahra Teaching Hospital for the period between 1st of December 2011 to 31st of August 2012. Seventy children with beta-thalassemia major were studied, patients were divided into two groups: 37 patients were treated by deferoxamine constituent of group A and 33 were those on deferasirox therapy constituent group B. Control group consisted of 35 healthy children. Serum zinc was measured by atomic absorption spectrophotometry. Patients aged between 5-11 years, boys were 34 and girls 36. The mean age of patients was 7.5 years. The mean serum zinc level in group A [patients on deferoxamine] 59.3784±28.44913 microg/dl was significantly lower than that of group B [patients on deferasirox] 105.5667±30.25488 microg/dl and control group 96.8974±24.98083 microg/dl respectively. Hypozincemia found in 70.7%, 20% and 17.9% in group A, B and control group respectively. There was a significant difference between patients of both groups and control [p<0.05], while high significant difference between patients of different iron chelators [p<0.001]. Hypozincemia is common in thalassemic patients. The low level of serum zinc mainly found in those with injectable iron chelator. Routine follow up of serum zinc level and other possible causes of hypozincemia should be studied before giving zinc to these patients.

Zirconium

Zirconia: properties and application - a review.

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Pakistan Oral and Dental Journal 2014; 34 (1): 178-183

Keywords: Dental Abutments; Dental Materials; Dental Prosthesis Design; Dental Prosthesis, Implant-Supported; Dental Restoration Failure; Dental Stress Analysis; Materials Testing

Abstract: Over the last decade, zirconia has propelled a rapid development of metal-free dentistry with improved material strength, enhanced esthetic and high biocompatibility for a wide range of promising clinical applications. It holds a unique place amongst the oxide ceramics due to its excellent mechanical properties owing to the phase transformation toughening mechanism. Like other side of the same coin, this mechanism is also responsible for its low temperature degradation which is the main limiting factor in the extensive use of zirconia. Zirconia is an inert material and presents reduced bond strength with the conventional ceramic cementation procedures. Bonding to traditional silica based ceramics is a predicta. A high percentage of clinical failures of zirconia-based restorations are attributed to debonding and or fracture of veneering ceramic. This review presents the properties, types of zirconia for dental application, the manufacturing procedures, the various application and its guidelines, luting of zirconia and bonding of the veneering ceramics.

Appendix I

Author Index

- Abadi, Ali Fath**
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(physiopathology)
- Abbas, Assad**
PULPOTOMY (methods)
DENTAL CARIES (epidemiology)
- Abbas, Safdar**
ENERGY INTAKE
WATER-ELECTROLYTE IMBALANCE
(epidemiology)
CORONARY ARTERY BYPASS (adverse effects)
- Abbas, Shahid**
CORONARY THROMBOSIS (epidemiology)
CORONARY ANGIOGRAPHY
PERCUTANEOUS CORONARY INTERVENTION
- Abdi, M.**
INDUCED PLURIPOTENT STEM CELLS
(transplantation)
- Abdul Mannan, Hakeem**
HAIR (growth and development)
- Abdul Rashid**
MANDIBULAR CONDYLE (injuries)
- Abdul Razzaq**
TEMPOROMANDIBULAR JOINT DISORDERS
(epidemiology)
- Abdullah, Saeeda**
DENTAL ENAMEL HYPOPLASIA (epidemiology)
- Abed, Anwar**
HEMATOMA, EPIDURAL, SPINAL (diagnosis)
- Abid, Irum**
HEART FAILURE (mortality)
- Abolnezhadian, Farhad**
AGAMMAGLOBULINEMIA (genetics)
- Aboumarzouk, Omar M.**
URINARY TRACT INFECTIONS (epidemiology)
- ANGIOMYOLIPOMA
- Abraham, Ponselkar**
DENTURE, OVERLAY
- Absazadegan, M.**
RESISTANCE TRAINING
- Abu Al Ghanam, Manal**
TEMPOROMANDIBULAR JOINT DISORDERS
(surgery)
- Abu Shukair, Mohammad E.**
AGAMMAGLOBULINEMIA (epidemiology)
- Abu Zafar**
DIABETIC RETINOPATHY (blood)
- Adil, Muhammad**
ELECTROCARDIOGRAPHY (methods)
- Afroze, Dilshad**
PREGNADIENEDIOLS (pharmacology)
- Afsarian, O.**
PREBIOTICS
- Afshari, Afsoon**
INTERLEUKIN-17 (genetics)
- Afzal, Muhammad**
PATIENT SATISFACTION
- Afzal, Nadeem**
DIABETIC RETINOPATHY (blood)
- Aggarwal, Sandeep**
TUBERCULOSIS, UROGENITAL (surgery)
- Agha Rahimi, Azam**
OVARIAN FOLLICLE (transplantation)
- Ahmad, Akram Jarjees**
PPAR GAMMA (genetics)
- Ahmad, Ayaz**
MYOCARDIAL INFARCTION (surgery)
EMBOLISM (prevention and control)
- Ahmad, Belal**
OLIGOSPERMIA (therapy)
- Ahmad, Kaleem**
ENERGY INTAKE
- Ahmad, Muneer**
TEMPOROMANDIBULAR JOINT
DYSFUNCTION SYNDROME (etiology)
- Ahmad, Mushtaq**
CORNEAL ULCER (surgery)
- Ahmad, Q.Z.**
ASTHMA (epidemiology)
- Ahmad, Salman**
LEISHMANIASIS, CUTANEOUS (diagnosis)
- Ahmad, Syed Azhar**
BLOOD PLATELETS (metabolism)
- Ahmad, Zaheer**
PSORIASIS (blood)
- Ahmadi, Firoozeh**
TUBERCULOSIS, FEMALE GENITAL
(radiography)
- Ahmed, Iftikhar**
TRANEXAMIC ACID (administration and dosage)
FONTAN PROCEDURE
- Ahmed, Irshad**
MALOCCLUSION, ANGLE CLASS II
- Ahmed, Saeed**
ANKYLOSIS (surgery)
- Ahmed, Shaheen**
MAXILLOFACIAL INJURIES (epidemiology)

- Ahmed, Suhaib**
REAL-TIME POLYMERASE CHAIN REACTION
- Ahmed, Syed Afaq**
EPIDERMODYSPLASIA VERRUCIFORMIS (complications)
- Ahmed, Tahir Aziz**
ANEMIA, PERNICIOUS (epidemiology)
- Ahmed, Tahseen**
FONTAN PROCEDURE
- Ahouei, M.**
BERBERINE ALKALOIDS (therapeutic use)
- Ahsan, Uzma**
OBESITY (complications)
- Akbar, Hajira**
ECHOCARDIOGRAPHY
DUCTUS ARTERIOSUS, PATENT (surgery)
BALLOON VALVULOPLASTY (mortality)
TETRALOGY OF FALLOT (diagnosis)
VENTRICULAR SEPTAL RUPTURE (therapy)
- Akbar, Hajra**
CARDIAC CATHETERIZATION (instrumentation)
- Akbari, Hamed**
URINARY BLADDER NEOPLASMS (chemically induced)
- Akbari, Hesam**
URINARY BLADDER NEOPLASMS (chemically induced)
- Akhoond, Mohammad Reza**
ENDOMETRIOSIS6BCOMPLICATIONS
- Akhtar, Jamal**
PLANTS, MEDICINAL
- Akhtar, Khurram**
ECHOCARDIOGRAPHY
CARDIAC CATHETERIZATION (instrumentation)
DUCTUS ARTERIOSUS, PATENT (surgery)
BALLOON VALVULOPLASTY (mortality)
TETRALOGY OF FALLOT (diagnosis)
- Akhtar, Muhammad Usman**
AMELOBLASTOMA (surgery)
- Akhtar, Rubina**
CONGENITAL ABNORMALITIES (epidemiology)
- Akhtar, Shahid Javaid**
PSORIASIS (blood)
- Akhtar, Zehra**
OVARY (anatomy and histology)
- Akhtar, Zubaida**
GENITAL NEOPLASMS, FEMALE (epidemiology)
- Akram, Usama**
PLANTS, MEDICINAL
- Akyuz, Aygul**
DOMESTIC VIOLENCE (psychology)
- Al Allaf, Luma Ibrahim Khalel**
BENZAMIDES (toxicity)
- Al Aown, Abdulrahman**
NEPHRECTOMY (methods)
NEUROENDOCRINE TUMORS (diagnosis)
- Al Ashoo, Hafidh**
BENZAMIDES (toxicity)
- Al Asmar, Anas M.**
WARTS (drug therapy)
- Al Aubi, Isra'a**
DENTAL MARGINAL ADAPTATION
- Al Hussain, Turkey**
SURGICAL SPONGES (adverse effects)
- Al Khudair, Waleed Khalid**
SURGICAL SPONGES (adverse effects)
- Al Naemi, Amjad Hazim**
PPAR GAMMA (genetics)
- Al Otaibi, Mohammed Faihan**
SURGICAL SPONGES (adverse effects)
- Al Rabadi, Hytham Farah**
TEMPOROMANDIBULAR JOINT DISORDERS (surgery)
- Al Samawi, Abdullah S.**
ESOPHAGEAL NEOPLASMS (epidemiology)
- Al Sheikhly, Ahmed S.**
SEPSIS (complications)
- Al Shekhli, Ali A. Razooki**
DENTAL MARGINAL ADAPTATION
- Al Shraim, Mubarak**
NEUROENDOCRINE TUMORS (diagnosis)
- Alaei, E.**
CONSTIPATION (prevention and control)
- Alani, Wedad S.**
SEPSIS (complications)
- Alhadi, Ahmed**
NEUROENDOCRINE TUMORS (diagnosis)
- Ali, Ahmed**
EMBOLIZATION, THERAPEUTIC (adverse effects)
- Ali, Asghar**
DENTAL CAVITY LINING
- Ali, Jahanzab**
MYOCARDIAL INFARCTION (surgery)
EMBOLISM (prevention and control)
HEART-ASSIST DEVICES
- Ali, Kamran**
AMELOBLASTOMA (surgery)

- Ali, Nadir**
REAL-TIME POLYMERASE CHAIN REACTION
- Ali, Raafia**
HEPATITIS C (complications)
- Ali, S.A. Mohamed**
DENTURE, OVERLAY
- Ali, Sajjad**
BIOMASS
- Ali, Seyed Ashraf**
ZIRCONIUM
DENTAL MODELS
- Ali, Syed Ahsan**
EDUCATION, MEDICAL (standards)
- Ali, Waqar**
PROSTHESIS-RELATED INFECTIONS
(microbiology)
- Alibakhshi, R.**
PHENYLKETONURIAS (genetics)
- Alijanpour, E.**
POSTOPERATIVE NAUSEA AND VOMITING
(prevention and control)
- Alimadadi, K.**
PHENYLKETONURIAS (genetics)
- Alimohammadi, N.**
ALUMINUM (analysis)
- Alinezhad, M.**
BIMMUNOGLOBULIN A (blood)
- Alishahi, M.**
XANTHOPHYLLS (pharmacology)
- Alizadeh N., Shams**
SUICIDE, ATTEMPTED (psychology)
- Alizadeh, Leila**
EMBRYO TRANSFER (ethics)
- Alizadeh, M.**
PISTACIA
- Alkhalaf, Abdullah M.**
NEPHRECTOMY (instrumentation)
- Alleemudder, Adam**
RENAL COLIC (drug therapy)
- Almutereen, Mohammad A.**
AGAMMAGLOBULINEMIA (epidemiology)
- Arabeeah, Khalid A.**
NEPHRECTOMY (instrumentation)
- Alsharif, Shakir**
NEUROENDOCRINE TUMORS (diagnosis)
- Alyasin, Soheila**
AGAMMAGLOBULINEMIA (genetics)
- Alzyoud, Raed M.**
AGAMMAGLOBULINEMIA (epidemiology)
- Amanat, Nasreen**
TOOTH, IMPACTED (epidemiology)
ORAL SUBMUCOUS FIBROSIS (genetics)
- Amanbaei, A.**
ALUMINUM (analysis)
- Amin, Muhammad**
HEPATITIS C, CHRONIC (drug therapy)
- Amin, Nuzhat**
POSTPARTUM HEMORRHAGE (prevention and control)
- Aminian, Omid**
URINARY BLADDER NEOPLASMS (chemically induced)
- Amirghofran, Zahra**
ISLET AMYLOID POLYPEPTIDE
- Amiriani, T.**
POLYPS (pathology)
- Amirkhani, Z.**
BORAGINACEAE
- Amirshahi, Tayebeh**
FATTY ACIDS (therapeutic use)
- Amjad, Faiza**
TOOTH LOSS (surgery)
- Amjad, Qurrat Ul Ain**
CORONARY ARTERY BYPASS (adverse effects)
- Amlashi, Y. Aghebat**
BETA-THALASSEMIA (psychology)
- Amoli H., Ahmadi**
WOUNDS AND INJURIES (mortality)
- Anbarian, M.**
ORTHOTIC DEVICES
- Andalib, Alireza**
ABORTION, SPONTANEOUS (immunology)
- Anis, Abdollah**
HYPERKERATOSIS, EPIDERMOLYTIC
(genetics)
- Anjamrooz, H.**
INDUCED PLURIPOTENT STEM CELLS
(transplantation)
- Anjum, Nighat**
PLANTS, MEDICINAL
- Anjum, Shaheen**
TEMPOROMANDIBULAR JOINT
DYSFUNCTION SYNDROME (etiology)
- Ansari, Abdul Haseeb**
RESPIRATORY TRACT INFECTIONS
(epidemiology)

- Ansari, Z.**
SYNBIOTICS
- Anwar, Irfan**
VITILIGO (therapy)
- Anwar, Khurram**
ROOT CANAL IRRIGANTS
- Appu, Sree**
CARCINOMA, RENAL CELL (pathology)
- Aprikian, Armen G.**
NEPHRECTOMY (instrumentation)
- Araghi, A.**
IMMUNOPHENOTYPING
- Arbabmojeni, S.**
ALUMINUM (analysis)
- Ardekani, Seyed Mojtaba Yassini**
ANXIETY (epidemiology)
- Arora, Amanjot Kaur**
KERATOSIS, SEBORRHEIC (diagnosis)
- Arzani, A.**
BIMMUNOGLOBULIN A (blood)
- Asadabadi, Hojatollah Raji**
PERITONEAL DIALYSIS, CONTINUOUS
AMBULATORY (methods)
- Asadi, Edalat**
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(physiopathology)
- Asaduzzaman, A.T.M.**
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)
ARTHRITIS, PSORIATIC (drug therapy)
- Asbagh, Firoozeh Akbari**
CYSTADENOMA, SEROUS (pathology)
- Asgar, Aneela**
DIABETIC RETINOPATHY (blood)
- Asgar, Shama**
DENTAL CAVITY LINING
- Ashfaq, Muhammad**
HEPATITIS C (complications)
- Ashrafi, Mahnaz**
ENDOMETRIOSIS6BCOMPLICATIONS
- Asif, Javeria**
MANDIBULAR CONDYLE (injuries)
- Askari, Hasan**
HEARING LOSS, NOISE-INDUCED
(epidemiology)
- Askarinejad Behbahani, Rahil**
ABORTION, SPONTANEOUS
- Aslam, Mohammad Aqeel**
MAXILLOFACIAL INJURIES (epidemiology)
- Atyabi, N.**
IMMUNOPHENOTYPING
- Aulaqi, Saleh M.**
ESOPHAGEAL NEOPLASMS (epidemiology)
- Ayatollahi, S.A.**
BORAGINACEAE
- Ayaz, Saeed Bin**
SPINAL CORD INJURIES (radiography)
- Ayub, Ali**
MALOCCLUSION, ANGLE CLASS II
- Azad, Abrar Hussain**
PATIENT SATISFACTION
- Azadi, Leila**
SPERM INJECTIONS, INTRACYTOPLASMIC
(methods)
- Azami, A.**
COGAN SYNDROME (diagnosis)
- Azarhoush, R.**
POLYPS (pathology)
- Azarpira, Negar**
INTERLEUKIN-17 (genetics)
- Azeem, Muhammad**
MANDIBULAR CONDYLE (injuries)
- Azhar, Misbahuddin**
PLANTS, MEDICINAL
- Aziz, Salman**
TOOTH LOSS (surgery)
- Aziz, Sohail**
CORONARY THROMBOSIS (epidemiology)
MYOCARDIAL INFARCTION (surgery)
VENTRICULAR SEPTAL RUPTURE (therapy)
PERCUTANEOUS CORONARY INTERVENTION
EMBOLISM (prevention and control)
HEART-ASSIST DEVICES
- Azizi, F.**
INSULIN RESISTANCE
- Azizi, Mohammad R.**
ANTIBODIES, ANTINUCLEAR (analysis)
- Babaei, S.**
VIBRATION
- Babar, Sabat**
ENERGY INTAKE
- Badar, Muhammad Arshad**
ANKYLOSIS (surgery)
MANDIBULAR CONDYLE (injuries)
- Bahadoran, Z.**
INSULIN RESISTANCE
- Bahrou, Shaghaf**
BONE REMODELING

Bakhsh, Muhammad
ENERGY INTAKE

Bak r, Bilal
DOMESTIC VIOLENCE (psychology)

Baloch, Shahla
HEPATITIS C (complications)

Baluchnejadmojarad, T.
UBIQUINONE (analogues and derivatives)

Bangash, Muhammad Fuad Khan
DENTAL IMPRESSION TECHNIQUE
(instrumentation)

Barin, A.
HOUSEFLIES (pathogenicity)

Barki, Umar Farooq
INTERFERON-ALPHA (adverse effects)

Baseer, Saman
MOLAR (anatomy and histology)

Batavani, Rouzali
IN VITRO OOCYTE MATURATION
TECHNIQUES

Batool, Arooj
CHOLEDOCHAL CYST (diagnosis)

Bayrak, Omer
CYSTITIS, INTERSTITIAL (drug therapy)

Bazrafshan, E.
PISTACIA

Beckley, Ian
HERNIA, INGUINAL (surgery)

Behdin, Shabnam
ABORTION, SPONTANEOUS

Behera, Ramya R.
ADRENALECTOMY (instrumentation)

Beigi, Ali Akbar
PERITONEAL DIALYSIS, CONTINUOUS
AMBULATORY (methods)

Belbasi, Abolfazl
IN VITRO OOCYTE MATURATION
TECHNIQUES

Bhandarkar, Deepraj S.
ADRENALECTOMY (instrumentation)

Bhatti, Farhat Abbas
REAL-TIME POLYMERASE CHAIN REACTION

Bilal, Afsheen
VITILIGO (therapy)

Bittar, Roshan
HYPERKERATOSIS, EPIDERMOLYTIC
(genetics)
CARCINOMA, SQUAMOUS CELL (diagnosis)

Bladou, Frank
NEPHRECTOMY (instrumentation)

Bokhari, Syed Akhtar Hussain
TEMPOROMANDIBULAR JOINT DISORDERS
(epidemiology)

Bonab, S. Farashi
DENDRITIC CELLS

Bora, Girdhar
PROSTATECTOMY (methods)
TUBERCULOSIS, UROGENITAL (surgery)

Borhani, Nasim
RECEPTORS, ANDROGEN (genetics)

Borna, L.
WOUNDS AND INJURIES (mortality)

Boukottaya, Samir
BRUXISM (rehabilitation)

Bozkurt, Nuray
PREGNANCY RATE

Bukhari, Mohammed Azam
HEPATITIS C (complications)

Camano, Luiz
ACTIVINS

Carmignani, Luca
URINARY TRACT INFECTIONS (microbiology)

Casadio, Paolo
UTERINE CERVICAL NEOPLASMS (surgery)

Casellato, Stefano
URINARY TRACT INFECTIONS (microbiology)

Chada, Sudhir
KIDNEY TRANSPLANTATION

Chakraborty, Sayantani
PREGNANCY COMPLICATIONS (epidemiology)

Chand, Sohail
ORAL HEALTH (education)

Chang, Allen
PROSTATECTOMY (economics)

Charehjooy, Nasim
SPERM INJECTIONS, INTRACYTOPLASMIC
(methods)

Chatha, Muhammad Rafique
AMELOBLASTOMA (surgery)

Chaudhry, Imtiaz Ahmed
MITRAL VALVE (surgery)

Chaudhury, Shahid Shah
SILVER (therapeutic use)

Chavoshi, Farzaneh
URINARY BLADDER NEOPLASMS (chemically
induced)

- Chien, Gary W.**
PROSTATECTOMY (economics)
- Choudhury, Agha Masood**
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)
- Choudhury, Joyeeta**
PREGNANCY COMPLICATIONS (epidemiology)
- Chowdhury, Mostaque Hassan**
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)
- Chuh, Antonio**
INFLUENZA A VIRUS, H1N1 SUBTYPE
(immunology)
- Costa, Elena**
URINARY TRACT INFECTIONS (microbiology)
- Cui, Yuanqing**
PITUITARY NEOPLASMS (pathology)
- Dabbaghmanesh, Mohammad Hossein**
ISLET AMYLOID POLYPEPTIDE
- Dadpay, M.**
BORAGINACEAE
- Dallal, M.M. Soltan**
SALMONELLA (drug effects)
- Dar, Nimra**
DENTAL IMPLANTS
- Dar, Tanveer Iqbal**
KIDNEY TRANSPLANTATION
- Darabi, Masoud**
ARYLDIALKYLPHOSPHATASE
- Darbooe, Mojtaba**
INTERLEUKIN-17 (genetics)
- Das, I.**
LIPOID PROTEINOSIS OF URBACH AND
WIETHE (genetics)
- Das, Suchibrata**
PREGNANCY COMPLICATIONS (epidemiology)
- Das, Sudip**
PREGNANCY COMPLICATIONS (epidemiology)
- Dastah, S.**
VIBRATION
- Deemeh, Mohammad Reza**
SPERM INJECTIONS, INTRACYTOPLASMIC
(methods)
- Dehghan, Maryam**
OVARIAN FOLLICLE (transplantation)
- Deivanai, Mangala**
ZIRCONIUM
DENTAL MODELS
- Derakhshanpour, F.**
DOMESTIC VIOLENCE
- Derboghossians, Armen**
PROSTATECTOMY (economics)
- Dezfoulian, O.**
DIGITAL DERMATITIS (pathology)
- Din, Iqtidarul**
ELECTROCARDIOGRAPHY (methods)
- Dobbins, Brian**
HERNIA, INGUINAL (surgery)
- Dogra, Prem Nath**
PROSTATECTOMY (methods)
- TUBERCULOSIS, UROGENITAL (surgery)
- Dolatabady, M. Muhagheh**
LACTOFERRIN (genetics)
- Douki, Nabiha**
BRUXISM (rehabilitation)
- Dudeja, Puja**
HISTOCOMPATIBILITY ANTIGENS CLASS II
- Durrani, Asghar Aurangzeb**
ANEMIA, PERNICIOUS (epidemiology)
- Ebrahimi, H.R.**
GESTATIONAL AGE
- Ebrahimi, Mahbod**
CYSTADENOMA, SEROUS (pathology)
- Ebrahimi, P.**
SCILLA
- Eid, Refat**
NEUROENDOCRINE TUMORS (diagnosis)
- Eisa Khaje, Jalal**
ARYLDIALKYLPHOSPHATASE
- Ejtahed, H.S.**
INSULIN RESISTANCE
- El Naji, Waddah S**
TEMPOROMANDIBULAR JOINT DISORDERS
(surgery)
- El Osta, Lana**
AGE DETERMINATION BY TEETH
- El Osta, Nada**
AGE DETERMINATION BY TEETH
- Erbagci, Ahmet**
CYSTITIS, INTERSTITIAL (drug therapy)
- Erdem, Ahmet**
PREGNANCY RATE
- Erdem, Mehmet**
PREGNANCY RATE

- Erfani, R.**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY (epidemiology)
- Erturhan, Sakip**
CYSTITIS, INTERSTITIAL (drug therapy)
- Esker F., Salari**
ORTHOTIC DEVICES
- Eslami, R.**
RESISTANCE TRAINING
- Eslami, S.**
ARTERIOSCLEROSIS (pathology)
- Esmaeili, H.**
ORTHOTIC DEVICES
- Facchini, Chiara**
UTERINE CERVICAL NEOPLASMS (surgery)
- Fadaei, M.**
CONSTIPATION (prevention and control)
- Faghihi, S.M.**
FOOD MICROBIOLOGY
- Faheem, Mohammad**
ELECTROCARDIOGRAPHY (methods)
- Fakher e Fayaz**
TRANEXAMIC ACID (administration and dosage)
CORONARY ARTERY BYPASS (adverse effects)
- Fakheri T.**
GESTATIONAL AGE
- Fakheri, Taravat**
ENDOMETRIOSIS6BCOMPLICATIONS
- Fakhouri, Fakhr**
HEMATOMA, EPIDURAL, SPINAL (diagnosis)
- Falah, A. Ashraf**
SPINAL NEOPLASMS (diagnosis)
- Fallah, H.**
SYNBIOTICS
- Farahani, Reza Masteri**
RECEPTORS, ANDROGEN (genetics)
- Faraji, A. Sohan**
DIAZINON (adverse effects)
- Faraz, Ahmad**
CHOLELITHIASIS (microbiology)
- Farhadifar, F.**
UTERINE HEMORRHAGE (etiology)
- Farooq, Shafaq**
OBSTETRIC LABOR, PREMATURE (etiology)
- Farooq, Sumiya**
HEPATITIS C (complications)
- Farshchian, N.**
GESTATIONAL AGE
SPINAL NEOPLASMS (diagnosis)
- Farzadi, Laya**
ARYLDIALKYLPHOSPHATASE
- Fathi, F.**
INDUCED PLURIPOTENT STEM CELLS
(transplantation)
- Fattahi, E.**
DIAZINON (adverse effects)
- Fayezi, Shabnam**
ARYLDIALKYLPHOSPHATASE
- Fazeli, Zahra**
OVARIAN FAILURE, PREMATURE (genetics)
- Fesahat, Farzaneh**
ANXIETY (epidemiology)
- Finley, David S.**
PROSTATECTOMY (economics)
- Fooshang, Fawzy**
NEUROENDOCRINE TUMORS (diagnosis)
- Frydenberg, Mark**
CARCINOMA, RENAL CELL (pathology)
- Gasemzadeh, Alieh**
ARYLDIALKYLPHOSPHATASE
- Ge, Li**
PITUITARY NEOPLASMS (pathology)
- Ghadirnejad, S.H.**
PENAEIDAE (genetics)
- Ghafari, S.**
DIABETES, GESTATIONAL
- Ghafoor, Adnan**
ANEMIA, PERNICIOUS (epidemiology)
- Ghahiri, Ataollah**
ABORTION, SPONTANEOUS (immunology)
- Ghahramani, E.**
PISTACIA
- Ghajar, Abdelwahed**
HEMATOMA, EPIDURAL, SPINAL (diagnosis)
- Gharagozloo, Marjan**
ABORTION, SPONTANEOUS (immunology)
- Gharakhanlou, R.**
RESISTANCE TRAINING
- Gharesi Fard, Behrouz**
ABORTION, SPONTANEOUS
- Gharibi, F.**
OBSESSIVE-COMPULSIVE DISORDER
(genetics)
HOSPITALS (standards)

Ghasemi, Candidate, Mojdeh
ANXIETY (epidemiology)

Ghasemnian, A.A.
EXERCISE (physiology)

Ghavidel, A.
GALLSTONES (ultrasonography)

Ghodratnama, M.
YERSINIA INFECTIONS (prevention and control)

Ghoran, S. Hafez
SCILLA

Ghorbanian, B.
EXERCISE (physiology)

Ghoroghi, A.
PENAEIDAE (genetics)

Ghosal, Loknath
PREGNANCY COMPLICATIONS (epidemiology)

Gilani, Mohammad Ali Sadighi
SEPTINS (genetics)

Gilkolaei, S. Rezvani
PENAEIDAE (genetics)

Gill, Zaheer Ahmed
SPINAL CORD INJURIES (radiography)

Gogna, Paritosh
FEMORAL NEOPLASMS (surgery)

Golalipour, M.J.
DIABETES, GESTATIONAL

Gorzi, A.
EXERCISE (physiology)

Goyal, Anuj
RENAL COLIC (drug therapy)

Grivas, Nikolaos
CARCINOMA, RENAL CELL (pathology)

Gupta, Rakesh Kumar
HISTOCOMPATIBILITY ANTIGENS CLASS II

Gupta, Ramji
URTICARIA (etiology)

Gupta, Sunil K.
KERATOSIS, SEBORRHEIC (diagnosis)

Gupta, Vinay
FEMORAL NEOPLASMS (surgery)

Hababbeh, Zeyad M.
AGAMMAGLOBULINEMIA (epidemiology)

Habib Ur Rehman
MAXILLOFACIAL INJURIES (epidemiology)

Habibzad, J.
LACTOFERRIN (genetics)

Hadjati, J.
DENDRITIC CELLS

Hadyait, Muhammad Arfan
ORAL HEALTH (education)

Hafeez, Imrana
HAIR (growth and development)

Hafeez, Kamran
EDUCATION, MEDICAL, UNDERGRADUATE

Hafizullah, Mohammad
ELECTROCARDIOGRAPHY (methods)

Haider, Syed Mehmood
MAXILLOFACIAL INJURIES (epidemiology)

Hajiloo, B.
ORTHOTIC DEVICES

Hajizade, A.
BIMMUNOGLOBULIN A (blood)

Hajong, Ranendra
HERNIA, INGUINAL (surgery)

Hakim, Mukhtar Hussain
EDEMA (epidemiology)

Halvaei, Iman
ANXIETY (epidemiology)

Hameedullah
ELECTROCARDIOGRAPHY (methods)

Hamid, Hassan
ASTHMA (epidemiology)

Hamiduddin
SILVER (therapeutic use)

Hanif, Amjad
DENTAL IMPRESSION TECHNIQUE
(instrumentation)

Hanif, Razia
ANTIBODIES, MONOCLONAL (diagnostic use)

Hao, Cuifang
PITUITARY NEOPLASMS (pathology)

Haque, Anwarul
PATIENT READMISSION

Haroon, Mustafa
EDUCATION, MEDICAL, UNDERGRADUATE
(methods)

Haroon, Saroona
EDUCATION, MEDICAL, UNDERGRADUATE

Hasan, Abed Alkarim
BONE REMODELING

Hashim, Jasim Mohammed
ZINC (blood)

Hassan, Iffat
PAPILLON-LEFEVRE DISEASE (diagnosis)

- Hassan, Muhammad Kamran**
HEPATITIS C, CHRONIC (drug therapy)
- Hassanzadeh, M. Akbar**
ABORTION, SPONTANEOUS (immunology)
- Hassen, Narjes**
BRUXISM (rehabilitation)
- Hastazeris, Konstantinos**
CARCINOMA, RENAL CELL (pathology)
- Hayat, Azmat**
PROSTHESIS-RELATED INFECTIONS (microbiology)
- Helan, J. Ashrafi**
DIGITAL DERMATITIS (pathology)
- Hidayat, Mariyah**
MELATONIN (pharmacology)
- Hijazeen, Hazar M.**
TEMPOROMANDIBULAR JOINT DISORDERS (surgery)
- Hossain, Mohammed Anwar**
PHYTOTHERAPY
- Hossain, Mohammed Awlad**
PHYTOTHERAPY
- Hosseini, Ahmad**
RECEPTORS, ANDROGEN (genetics)
- Hosseini, Habibolla**
ABORTION, SPONTANEOUS (immunology)
- Hosseini, Reza Haji**
ARYLDIALKYLPHOSPHATASE
- Huma, Shafqat**
PSYCHOTIC DISORDERS (diagnosis)
- Hussain, Abid**
PSORIASIS (blood)
- Hussain, Ijaz**
SUNSCREENING AGENTS
- Hussain, Mehwish**
HEALTH PROMOTION
- Hussain, Sajjad**
HEART FAILURE (mortality)
PSYCHOTIC DISORDERS (diagnosis)
VENOUS THROMBOSIS (pathology)
- Hussain, Syed Aqeel**
FONTAN PROCEDURE
- Hyder, Omar**
EDUCATION, MEDICAL, UNDERGRADUATE (methods)
- Iftikhar, Anum**
TEMPOROMANDIBULAR JOINT DISORDERS (epidemiology)
- Ijaz, Wasim**
LIP (anatomy and histology)
- Imanikhah, F.**
LACTOFERRIN (genetics)
- Imran, Tanzeel**
ANEMIA, PERNICIOUS (epidemiology)
- Imtiyaz, Shaikh**
SILVER (therapeutic use)
- Imtiyaz, Syed**
PAPILLON-LEFEVRE DISEASE (diagnosis)
- Innamuri, Raviteja**
KETOCONAZOLE (pharmacology)
- Intesar Ul Haq, Rana**
FONTAN PROCEDURE
- Intisar Ul Haq**
MITRAL VALVE (surgery)
- Iqbal, Muhammad**
PROSTHESIS-RELATED INFECTIONS (microbiology)
- Iqbal, Muhammad Afsheen**
MITRAL VALVE (surgery)
- Iqbal, Rabia**
MALOCCLUSION, ANGLE CLASS II
- Iqbal, Zafar**
NALBUPHINE (therapeutic use)
- Iram, Sumaira**
PATIENT READMISSION
- Irfan, Muhammad**
CORONARY THROMBOSIS (epidemiology)
DILATATION, PATHOLOGIC (radiography)
- Ishkhanian, Silva**
HYPERKERATOSIS, EPIDERMOLYTIC (genetics)
- Ishtiaq, Muhammad**
PNEUMOCONIOSIS (epidemiology)
- Islam, Mohammed Amirul**
PHYTOTHERAPY
- Islam, Muhammad**
PSYCHOTIC DISORDERS (diagnosis)
- Islam, Nazrul**
ARTHRITIS, PSORIATIC (drug therapy)
- Jabeen, Sadaqat**
CONGENITAL ABNORMALITIES (epidemiology)
- Jacobsen, Steven J.**
PROSTATECTOMY (economics)
- Jaffery, Syed Ammar Yasir**
WRIST INJURIES (surgery)

Jahangir, Syed Mohammad
EDUCATIONAL STATUS

Jahanmehr, N.
HOSPITALS (standards)

Jahazi, A.
BETA-THALASSEMIA (psychology)

Jahromi, Athar Rasekh
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(epidemiology)

Jahromi, S. Tamadoni
PENAEIDAE (genetics)

Jaigirdar, Qamrul Hassan
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)

Jain, N.
LIPOID PROTEINOSIS OF URBACH AND
WIETHE (genetics)

Jamal, Anwar
MEDICINE, UNANI

Jamal, Tanveer
GENITAL NEOPLASMS, FEMALE (epidemiology)

Jamala, Fazilat
CONGENITAL ABNORMALITIES (epidemiology)

Jamali, Safieh
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(epidemiology)

Jamil, Ayesha
OBESITY (complications)

Janzamin, E.
IMMUNOPHENOTYPING

Jardan, Dumitru
SEX CHROMOSOME ABERRATIONS

Jarrar, Ahmed
MOUTHWASHES

Jategaonkar, Priyadarshan Anand
UMBILICUS (surgery)

Jauhari, Harsh
KIDNEY TRANSPLANTATION

Javaid, Arshad
BIOMASS

Javed, Khursheed
DIABETIC RETINOPATHY (blood)

Javed, Muhammad Paras
MYELODYSPLASTIC SYNDROMES (drug
therapy)

Jawaid, Masood
EDUCATION, MEDICAL, UNDERGRADUATE

Jehan, Noor
PNEUMOCOONIOSIS (epidemiology)

Jorsaraei, S.Gh.
DIAZINON (adverse effects)

Junejo, Saba Binish
HEARING LOSS, NOISE-INDUCED
(epidemiology)

Junior, Edward Araujo
ACTIVINS

Junior, Julio Elito
ACTIVINS

Kafarakis, Vasilios
CARCINOMA, RENAL CELL (pathology)

Kalantar, Fathollah
ISLET AMYLOID POLYPEPTIDE

Kalhor, Feroze Ali
TOOTH ROOT (anatomy and histology)
ROOT CANAL IRRIGANTS

Kallidonis, Panagiotis
NEPHRECTOMY (methods)

Karabacak, Recep Onur
PREGNANCY RATE

Karakok, Metin
CYSTITIS, INTERSTITIAL (drug therapy)

Karamifar, M.
XANTHOPHYLLS (pharmacology)

Karim, Khawar
DENTAL PULP CAVITY

Karim, Rukhsana
CONGENITAL ABNORMALITIES (epidemiology)

Karimi, Mohammad Hossein
INTERLEUKIN-17 (genetics)

Karimzadeh, Hadi
ANTIBODIES, ANTINUCLEAR (analysis)

Karthigeyan, Suma
ZIRCONIUM

DENTAL MODELS

Kashmir, Saba Binte
INTERFERON-ALPHA (adverse effects)

Katara, Avinash N.
ADRENALECTOMY (instrumentation)

Kaukab, Tazmeen
TEMPOROMANDIBULAR JOINT DISORDERS
(epidemiology)

Kayani, Azhar Mahmood
HEART FAILURE (mortality)
VENOUS THROMBOSIS (pathology)

Kazemi, Bahram
RECEPTORS, ANDROGEN (genetics)

- Kazmi, Farhat**
MOUTH NEOPLASMS (genetics)
CARCINOMA, SQUAMOUS CELL (genetics)
- Kebria, F. Ghasemi**
CONSTIPATION (prevention and control)
- Keshavarzi, S.**
DOMESTIC VIOLENCE
- Khadum, Shamaa Mohammed**
ZINC (blood)
- Khaki, Amir**
IN VITRO OOCYTE MATURATION
TECHNIQUES
- Khalid, Asma**
EPIDERMODYSPLASIA VERRUCIFORMIS
(complications)
- Khalid, Muhammad**
LUPUS ERYTHEMATOSUS, SYSTEMIC
(complications)
- Khalid, Uzma**
PSORIASIS (blood)
- Khalil, Fadi**
BONE REMODELING
- Khalili, Mohammad Ali**
ANXIETY (epidemiology)
OVARIAN FOLLICLE (transplantation)
- Khalilpour, A.**
POSTOPERATIVE NAUSEA AND VOMITING
(prevention and control)
- Khamirani M., Helmi**
SUICIDE, ATTEMPTED (psychology)
- Khan, Aftab Ahmed**
HEARING LOSS, NOISE-INDUCED
(epidemiology)
- Khan, Ahmed**
PATIENT SATISFACTION
- Khan, Alauddin**
PREGNADIENEDIOLS (pharmacology)
- Khan, Atif**
HERNIA, INGUINAL (surgery)
- Khan, Atif Ahmed**
SPINAL CORD INJURIES (radiography)
- Khan, Farid Ahmad**
WRIST INJURIES (surgery)
- Khan, Hamza Ali**
GLYCYRRHIZA (adverse effects)
- Khan, Hannan Humayun**
PULPOTOMY (methods)
DENTAL CARIES (epidemiology)
- Khan, Hina Mehwish**
CORNEAL ULCER (surgery)
- Khan, Hizbullah**
PNEUMOCONIOSIS (epidemiology)
- Khan, Humna**
TEMPOROMANDIBULAR JOINT DISORDERS
(epidemiology)
- Khan, Irfan Ali**
BONE MARROW EXAMINATION (methods)
- Khan, Jahangir Sarwar**
BILE DUCTS (injuries)
- Khan, Jamroz**
DENTAL IMPRESSION TECHNIQUE
(instrumentation)
- Khan, Kifayatullah**
PNEUMOCONIOSIS (epidemiology)
- Khan, Mohammad Atif**
CHOLELITHIASIS (microbiology)
- Khan, Mohammad Laiq uz Zaman**
EDUCATION, MEDICAL, UNDERGRADUATE
- Khan, Mohammad Naeem**
CORNEAL ULCER (surgery)
- Khan, Muhammad Ahmed**
MITRAL VALVE (surgery)
- Khan, Muhammad Alamgir**
MITRAL VALVE PROLAPSE
ARRHYTHMIAS, CARDIAC (epidemiology)
- Khan, Muhammad Nadir**
CORONARY THROMBOSIS (epidemiology)
DILATATION, PATHOLOGIC (radiography)
PERCUTANEOUS CORONARY INTERVENTION
- Khan, Muhammad Qaisar**
MYOCARDIAL INFARCTION (surgery)
EMBOLISM (prevention and control)
- Khan, Muhammad Qaiser**
ACUTE CORONARY SYNDROME (diagnosis)
DILATATION, PATHOLOGIC (radiography)
PERCUTANEOUS CORONARY INTERVENTION
- Khan, Muhammad Rehan**
PATIENT READMISSION
- Khan, Mumtaz**
CHOLELITHIASIS (microbiology)
- Khan, Muslim**
PALATE (injuries)
MANDIBULAR FRACTURES (pathology)
MYIASIS (pathology)
- Khan, Nadeem Ahmad**
TEMPOROMANDIBULAR JOINT
DYSFUNCTION SYNDROME (etiology)

- Khan, Nadir**
MYOCARDIAL INFARCTION (surgery)
CORONARY ANGIOGRAPHY
EMBOLISM (prevention and control)
HEART-ASSIST DEVICES
- Khan, Qaiser**
CORONARY THROMBOSIS (epidemiology)
CORONARY ANGIOGRAPHY
VENTRICULAR SEPTAL RUPTURE (therapy)
- Khan, Rakhshaan**
HEALTH PROMOTION
- Khan, Safdar Ali**
ENERGY INTAKE
WATER-ELECTROLYTE IMBALANCE
(epidemiology)
CORONARY ARTERY BYPASS (adverse effects)
- Khan, Sikandar Hayat**
BLOOD PLATELETS (metabolism)
- Khan, Sohrab**
SUNSCREENING AGENTS
- Khan, Taj Ali**
BONE MARROW EXAMINATION (methods)
- Khan, Yawar Hayat**
MOUTH NEOPLASMS
- Khan, Zahoor Aslam**
ACUTE CORONARY SYNDROME (diagnosis)
- Khansari, N.**
DENDRITIC CELLS
- Khaskheli, Meharunnisa**
HEPATITIS C (complications)
- Khatoon, Safia**
DENTAL CARIES (epidemiology)
- Khattak, Osama**
DENTAL RESTORATION FAILURE
- Kheirie, M.**
ASCORBIC ACID (blood)
- Khojasteh B., Golzar**
GAMMA RAYS
- Khokhar, Nasir**
HEPATIC ENCEPHALOPATHY (blood)
- Khondker, Lubna**
PREGNADIENEDIOLS (pharmacology)
- Khurshid, Hana**
TRANEXAMIC ACID (administration and dosage)
- Kiani, Kiandokht**
ENDOMETRIOSIS6BCOMPLICATIONS
- Kim, Brian**
PROSTATECTOMY (economics)
- Kirmani, Muzzafar**
WATER-ELECTROLYTE IMBALANCE
(epidemiology)
- Kohli, Arvin Singh**
DENTAL RESTORATION FAILURE
- Kontogiannis, Stavros**
NEPHRECTOMY (methods)
- Koochaki, Ameneh**
RECEPTORS, ANDROGEN (genetics)
- Koolae, Anahita Khodabakhshi**
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(physiopathology)
- Kouhi, F.**
RESISTANCE TRAINING
- Kumar E. Raj**
DENTURE, OVERLAY
- Kumar, Tarun**
TOOTH FRACTURES (therapy)
- Kundu, Zile Singh**
FEMORAL NEOPLASMS (surgery)
- Kyriayis, Iason**
NEPHRECTOMY (methods)
- Lang, Cuihong**
PITUITARY NEOPLASMS (pathology)
- Lari, A. Rastegar**
SALMONELLA (drug effects)
- Latafat, Tabassum**
HAIR (growth and development)
OLIGOSPERMIA (therapy)
- Liatsikos, Evangelos**
NEPHRECTOMY (methods)
- Maad Ullah**
DUCTUS ARTERIOSUS, PATENT (surgery)
BALLOON VALVULOPLASTY (mortality)
TETRALOGY OF FALLOT (diagnosis)
- Maan, Muhammad Arif**
PSORIASIS (blood)
- Mahboobi, H.R.**
DOMESTIC VIOLENCE
- Maheshwari, Prem Kumar**
PATIENT READMISSION
- Mahmood, Khalid**
BONE MARROW EXAMINATION (methods)
- Mahmud, Mostaque**
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)
ARTHRITIS, PSORIATIC (drug therapy)
- Mahmud, Waqas**
EDUCATION, MEDICAL, UNDERGRADUATE
(methods)

Mahvi, A.
PISTACIA

Majeed, Kaukab
WATER-ELECTROLYTE IMBALANCE
(epidemiology)

Majeed, Syed Mohammad Imran
ACUTE CORONARY SYNDROME (diagnosis)
CORONARY THROMBOSIS (epidemiology)
MYOCARDIAL INFARCTION (surgery)
DILATATION, PATHOLOGIC (radiography)
CORONARY ANGIOGRAPHY
MITRAL VALVE PROLAPSE
VENTRICULAR SEPTAL RUPTURE (therapy)
PROSTHESIS-RELATED INFECTIONS
(microbiology)
PERCUTANEOUS CORONARY INTERVENTION
EMBOLISM (prevention and control)

Majeed, Syed Muhammad Imran
ARRHYTHMIAS, CARDIAC (epidemiology)

Majid, Anam
GENITAL NEOPLASMS, FEMALE (epidemiology)

Maleki, N.
COGAN SYNDROME (diagnosis)

Maliji, Gh.
DIAZINON (adverse effects)

Malik, Muhammad Mumtaz
LEISHMANIASIS, CUTANEOUS (diagnosis)

Malik, Sunita
DENTAL CARE FOR CHRONICALLY ILL
(methods)

Manan, Fazal
CHOLELITHIASIS (microbiology)

Mani, Ranjana
ZIRCONIUM

Manoochehri, Mehdi
RECEPTORS, ANDROGEN (genetics)

Mansoor, Ladan
SEXUAL DYSFUNCTION, PHYSIOLOGICAL
(physiopathology)

Mansoor, Nadia
MYIASIS (pathology)

Mansoor, Samina
ANTIBODIES, MONOCLONAL (diagnostic use)

Manzoor, Manzoor Ahmed
PULPOTOMY (methods)

Marashi, Sayed Mahdi
PERITONEAL DIALYSIS, CONTINUOUS
AMBULATORY (methods)

Mardanpur, K.
ROTATOR CUFF (ultrasonography)

Maroufi, A.
OBSESSIVE-COMPULSIVE DISORDER
(genetics)

Martinuzzi, Emanuela
ISLET AMYLOID POLYPEPTIDE

Mashhood, Asher Ahmed
LEISHMANIASIS, CUTANEOUS (diagnosis)

Massoud, A.
DENDRITIC CELLS

Matee, Sumeera
SPINAL CORD INJURIES (radiography)

Maxood, Anser
DENTAL ENAMEL HYPOPLASIA (epidemiology)

Mehboob, Bushra
PALATE (injuries)
MYIASIS (pathology)

Mehdinejad, M.H.
ALUMINUM (analysis)

Mehdizadeh, Amir
ARYLDIALKYLPHOSPHATASE

Mehrabian, Ferdos
ABORTION, SPONTANEOUS (immunology)

Mesbah, M.
XANTHOPHYLLS (pharmacology)

Mian, Farrukh Imran
TEMPOROMANDIBULAR JOINT DISORDERS
(epidemiology)

Mierla, Dana
SEX CHROMOSOME ABERRATIONS

Mighani, H.
SCILLA

Miraki, T.
HOSPITALS (standards)

Mirazizi L., Shokery
GAMMA RAYS

Mirbehbahani, N.B.
BETA-THALASSEMIA (psychology)

Mirdar, Sh.
BIMMUNOGLOBULIN A (blood)

Mirmiran, P.
INSULIN RESISTANCE

Mirza, Asaad Javid
EDUCATIONAL STATUS

Mirza, Daud
TOOTH, IMPACTED (epidemiology)
ORAL SUBMUCOUS FIBROSIS (genetics)

Mirzargar, S.S.
YERSINIA INFECTIONS (prevention and control)

- Mishra, Atul**
KERATOSIS, SEBORRHEIC (diagnosis)
- Mishra, Mahendra Narain**
HISTOCOMPATIBILITY ANTIGENS CLASS II
- Mittal, Gaurav K.**
ADRENALECTOMY (instrumentation)
- Mittal, Shifali**
TOOTH FRACTURES (therapy)
- Mittal, Sunandan**
TOOTH FRACTURES (therapy)
- Mobaleghi, J.**
WOUNDS AND INJURIES (mortality)
- Moeen ul haq**
HEPATITIS C, CHRONIC (drug therapy)
- Moeen, Faisal**
DENTAL IMPLANTS
- Moghadami, Mohsen**
ISLET AMYLOID POLYPEPTIDE
- Moghaddam, H. Kalalian**
BERBERINE ALKALOIDS (therapeutic use)
- Mohammad, Taqi**
EDUCATIONAL STATUS
- Mohammadi, E.**
IMMUNOPHENOTYPING
- Mohammadi, M.**
HOSPITALS (standards)
- Mohammadkhani, R.**
RESISTANCE TRAINING
- Moharreri, A.R.**
DIABETES, GESTATIONAL
- Mohit, A.**
SYNBIOTICS
- Mohseni, Hossein**
URINARY BLADDER NEOPLASMS (chemically induced)
- Mokarizadeh, Aram**
IN VITRO OOCYTE MATURATION TECHNIQUES
- Molazadeh, Morteza**
ANTIBODIES, ANTINUCLEAR (analysis)
- Momtaz, H. Emad**
HEMATURIA (etiology)
- Montanari, Giulia**
UTERINE CERVICAL NEOPLASMS (surgery)
- Moradi, F.**
RESISTANCE TRAINING
- Moradi, K.**
PHENYLKETONURIAS (genetics)
- Moradi, N.**
ROTATOR CUFF (ultrasonography)
- Mortazavi, S.**
POSTOPERATIVE NAUSEA AND VOMITING (prevention and control)
- Mortazavi, Y.**
POSTOPERATIVE NAUSEA AND VOMITING (prevention and control)
- Mosalanejad, Leili**
SEXUAL DYSFUNCTION, PHYSIOLOGICAL (physiopathology)
- Mostafa pour F., Kord**
PISTACIA
- Mousavi, S.S.**
PREBIOTICS
- Mowla, J.**
RESISTANCE TRAINING
- Muhaidat, Zuhair**
TEMPOROMANDIBULAR JOINT DISORDERS (surgery)
- Mukhtar, Rushqia**
EPIDERMODYSPLASIA VERRUCIFORMIS (complications)
- Mumtaz, Muhammad**
MANDIBULAR CONDYLE (injuries)
MOUTH NEOPLASMS (genetics)
CARCINOMA, SQUAMOUS CELL (genetics)
- Munir, Ahmed**
EDUCATION, MEDICAL, UNDERGRADUATE (methods)
- Munir, Rubab**
HEART FAILURE (mortality)
VENOUS THROMBOSIS (pathology)
- Murshid, Gazi Mohammed Monjur**
PHYTOTHERAPY
- Murugesan, K.**
DENTURE, OVERLAY
- Musavi, H.A. Ebrahimzadeh**
YERSINIA INFECTIONS (prevention and control)
- Mushtaq, Nasir**
MOLAR (anatomy and histology)
- Nabati, M.**
ARTERIOSCLEROSIS (pathology)
- Nabi, Ali**
ANXIETY (epidemiology)
- Nabi, Ghulam**
EMBOLIZATION, THERAPEUTIC (adverse effects)
- Nabian, S.**
CATHEPSINS

- Nadeem, M.**
MEDICINE, UNANI
- Nadeem, Muhammad**
MOUTHWASHES
- Naeem, Muhammad**
CORNEAL ULCER (surgery)
- Naeem, Sajid**
LEADERSHIP
- Naghshvar, F.**
GLYCOPROTEINS (diagnostic use)
- Nagi, Abdul Hanan**
DIABETIC RETINOPATHY (blood)
- Naheed, Aqsa**
LUPUS ERYTHEMATOSUS, SYSTEMIC (complications)
- Najafi, Gholamreza**
IN VITRO OOCYTE MATURATION TECHNIQUES
- FATTY ACIDS (therapeutic use)
- Najafi, Mohammad Hassan**
SPERM INJECTIONS, INTRACYTOPLASMIC (methods)
- Naqi, Syed Asghar**
PEER GROUP
- Naqvi, Haider A.**
PSYCHOTIC DISORDERS (diagnosis)
- Naseer, Mursaleen**
EDEMA (epidemiology)
- Nasr Esfahani, Mohammad Hossein**
SPERM INJECTIONS, INTRACYTOPLASMIC (methods)
- Nassiri, S.M.**
IMMUNOPHENOTYPING
- Nausheen, Aneela**
LIP (anatomy and histology)
- Nawaz, Ahmad**
HEPATITIS C, CHRONIC (drug therapy)
- Nayak, Brusabhanu**
PROSTATECTOMY (methods)
- Nayak, U.K. Sudhir**
KETOCONAZOLE (pharmacology)
- Naz, Talat**
GENITAL NEOPLASMS, FEMALE (epidemiology)
- Nazari, Saeedeh**
OVARIAN FOLLICLE (transplantation)
- Nejati, Vahid**
FATTY ACIDS (therapeutic use)
- Neki, Nirankar Singh**
HYPOPIGMENTATION (diagnosis)
- Nikbakhsh, N.**
POSTOPERATIVE NAUSEA AND VOMITING (prevention and control)
- Nikbakht, Gh.R.**
CATHEPSINS
- Nimmi**
DENTAL MODELS
- Nisar, Saleha**
DENTAL IMPLANTS
- Nomani, Ali Zohair**
INTERFERON-ALPHA (adverse effects)
- Nomani, Hanna**
INTERFERON-ALPHA (adverse effects)
- Noor Ul Wahab**
MYIASIS (pathology)
- Noreen, Rabia**
MANDIBULAR FRACTURES (pathology)
- Norouziyan, M.**
BORAGINACEAE
- Notash A., Yaghoobi**
WOUNDS AND INJURIES (mortality)
- Nouri, M.**
DIGITAL DERMATITIS (pathology)
- Nouri, Mohammad**
ARYLDIALKYLPHOSPHATASE
- Novin, Marefat Ghaffari**
RECEPTORS, ANDROGEN (genetics)
- Nozad, G.J.**
VIBRATION
- Oktem, Mesut**
PREGNANCY RATE
- Oliveira, Leandro Gustavo**
ACTIVINS
- Omidi, A.**
ASCORBIC ACID (blood)
- Omidikazazi, F.**
UTERINE HEMORRHAGE (etiology)
- Omrani, Mir Davood**
RECEPTORS, ANDROGEN (genetics)
- Ostadali, M.R.**
IMMUNOPHENOTYPING
- Ostadi, Vajihe**
ABORTION, SPONTANEOUS (immunology)
- Oualha, Lamia**
BRUXISM (rehabilitation)

- Oualha, Ramy**
BRUXISM (rehabilitation)
- Pahwa, Mrinal**
KIDNEY TRANSPLANTATION
- Panagopoulos, Vasilis**
NEPHRECTOMY (methods)
- Paola, Gaia**
URINARY TRACT INFECTIONS (microbiology)
- Paracha, Vaqar Illahi**
MITRAL VALVE (surgery)
- Partha, Praveen**
GLYCYRRHIZA (adverse effects)
- Parvaresh, N.**
ATTENTION DEFICIT DISORDER WITH
HYPERACTIVITY (epidemiology)
- Pati, Jhumur**
RENAL COLIC (drug therapy)
- Paul, Harashit Kumar**
VASCULITIS, LEUKOCYTOCLASTIC,
CUTANEOUS (pathology)
- ARTHRITIS, PSORIATIC (drug therapy)
- Peter, Paul**
GLYCYRRHIZA (adverse effects)
- Picozzi, Stefano C.M.**
URINARY TRACT INFECTIONS (microbiology)
- Pilu, Gianluigi**
UTERINE CERVICAL NEOPLASMS (surgery)
- Piran, R.**
ARTERIOSCLEROSIS (pathology)
- Piryaei, A.**
BORAGINACEAE
- Pirzadeh, A.**
GALLSTONES (ultrasonography)
- Pook, David**
CARCINOMA, RENAL CELL (pathology)
- Pouresmaeili, Farkhondeh**
OVARIAN FAILURE, PREMATURE (genetics)
- Pourmovahed, Zahra**
ANXIETY (epidemiology)
- Punjabi, Suneel Kumar**
MAXILLOFACIAL INJURIES (epidemiology)
- Puri, Neerja**
NEVUS, SEBACEOUS OF JADASSOHN
(pathology)
- Qadirullah**
NALBUPHINE (therapeutic use)
- Qasmi, Shamsul Arifin**
HEARING LOSS, NOISE-INDUCED
(epidemiology)
- Qayum, Iftikhar**
INTERLEUKIN-11 (therapeutic use)
- Qazi, M.H.**
MOUTH NEOPLASMS (genetics)
CARCINOMA, SQUAMOUS CELL (genetics)
- Qazi, Qudsia**
GENITAL NEOPLASMS, FEMALE (epidemiology)
- Qazi, Samir Riaz**
EDUCATION, DENTAL (standards)
LEADERSHIP
- Qiam, Fahad**
PALATE (injuries)
- Quddusi, Neelam**
PLANTS, MEDICINAL
- Qureshi, Farheen**
MOUTHWASHES
- Qureshi, Muhammad Omar**
HEPATIC ENCEPHALOPATHY (blood)
- Qureshi, Muhammad Saleem**
INTERFERON-ALPHA (adverse effects)
- Rabiee, O.**
POSTOPERATIVE NAUSEA AND VOMITING
(prevention and control)
- Rabnawaz**
PNEUMOCONIOSIS (epidemiology)
- Rahimi Nejad, M.**
POLYPS (pathology)
- Rahimi, M.**
HEMATURIA (etiology)
- Rahman, H.**
MEDICINE, UNANI
- Rahman, Khaleequr**
SILVER (therapeutic use)
- Rahman, Mohammed Muztafizar**
PHYTOTHERAPY
- Raidullah, Ebadullah**
DENTAL RESTORATION FAILURE
- Rajabi, H.**
RESISTANCE TRAINING
- Rajarubendra, Nieroshan**
CARCINOMA, RENAL CELL (pathology)
- Rajesh**
LIPOID PROTEINOSIS OF URBACH AND
WIETHE (genetics)

- Rajih, Emad Sabri**
SURGICAL SPONGES (adverse effects)
- Rajput, Abdul Majid**
PATIENT SATISFACTION
- Rajput, Foza**
DENTAL CARIES (epidemiology)
ROOT CANAL IRRIGANTS
- Ramesh, Manchala**
RESPIRATORY TRACT INFECTIONS
(epidemiology)
- Ramezannezhad, A.A.**
BIMMUNOGLOBULIN A (blood)
- Ranjan, K.P.**
URINARY TRACT INFECTIONS (prevention and control)
- Ranjan, Neelima**
URINARY TRACT INFECTIONS (prevention and control)
- Rapacchia, Giuseppina**
UTERINE CERVICAL NEOPLASMS (surgery)
- Raptis, Pavlos**
CARCINOMA, RENAL CELL (pathology)
- Rasheed, Kiran**
MOUTH NEOPLASMS
- Rashid, Sumara**
OBESITY (complications)
- Rashidi, Mohammad Reza**
ARYLDIALKYLPHOSPHATASE
- Rasool, Ghulam**
LIP (anatomy and histology)
- Rassouli, A.**
FOOD MICROBIOLOGY
- Raza, Hasan Ali**
LIP (anatomy and histology)
- Raza, Muhammad Sheraz**
WRIST INJURIES (surgery)
- Regmi, Subodh K.**
TUBERCULOSIS, UROGENITAL (surgery)
- Rehan, Anam**
MALOCCLUSION, ANGLE CLASS II
- Rehman, Rehana**
OVARY (anatomy and histology)
HEALTH PROMOTION
- Rezaei, Abbas**
ABORTION, SPONTANEOUS (immunology)
- Rezaei, Amir**
AGAMMAGLOBULINEMIA (genetics)
- Rezaei, F.**
SUICIDE, ATTEMPTED (psychology)
- Rezaei, M.**
GESTATIONAL AGE
INDUCED PLURIPOTENT STEM CELLS
(transplantation)
ROTATOR CUFF (ultrasonography)
- Rezaei, S.**
HOSPITALS (standards)
- Rezaie, E.**
DIAZINON (adverse effects)
- Rezaii, M.**
UTERINE HEMORRHAGE (etiology)
- Rezazadeh, Azadeh**
CARCINOMA, SQUAMOUS CELL (diagnosis)
- Rizvi, Farwa**
PATIENT SATISFACTION
- Rizvi, Kulsoom Fatima**
TOOTH, IMPACTED (epidemiology)
- Rogawski, Karol M.**
HERNIA, INGUINAL (surgery)
- Roghaei, Mohammad Ali**
ABORTION, SPONTANEOUS (immunology)
- Roghani, M.**
UBIQUINONE (analogs and derivatives)
- Roshandel, Gh.R.**
CONSTIPATION (prevention and control)
- Rossini, Mattia**
URINARY TRACT INFECTIONS (microbiology)
- Rostampour, N.**
GAMMA RAYS
- Rostamzadeh, J.**
INDUCED PLURIPOTENT STEM CELLS
(transplantation)
- Rouzrokh, Mohsen**
RECEPTORS, ANDROGEN (genetics)
- Roychoudhury, Soumyajit**
SYRINGOMA (diagnosis)
- Sabbaghian, Marjan**
SEPTINS (genetics)
- Saburi, Amin**
URINARY BLADDER NEOPLASMS (chemically induced)
TUBERCULOSIS, UROGENITAL
- Sadeghi, M.R.**
PENAEIDAE (genetics)
- Sadeghi, Maria**
ENDOMETRIOSIS6B (complications)

- Sadiq, Nadeem**
ECHOCARDIOGRAPHY
CARDIAC CATHETERIZATION (instrumentation)
VENTRICULAR SEPTAL RUPTURE (therapy)
DUCTUS ARTERIOSUS, PATENT (surgery)
BALLOON VALVULOPLASTY (mortality)
HEART SEPTAL DEFECTS, VENTRICULAR (surgery)
TETRALOGY OF FALLOT (diagnosis)
- Sadr Nabavi, Ariane**
CHROMOSOMES, HUMAN, PAIR 14
- Saeed, Farooq**
INTERLEUKIN-11 (therapeutic use)
- Saeed, Muhammad Qasim**
LEADERSHIP
- Saeidi, Morteza**
CHROMOSOMES, HUMAN, PAIR 14
- Safiabady, Mahdi**
TUBERCULOSIS, UROGENITAL
- Saha, A.**
LIPOID PROTEINOSIS OF URBACH AND WIETHE (genetics)
- Sahiner, Gonull**
DOMESTIC VIOLENCE (psychology)
- Saif ur Rehman**
ANEMIA, PERNICIOUS (epidemiology)
- Saifuzzaman, Mohammed**
PHYTOTHERAPY
- Saini, A.K.**
TUBERCULOSIS, UROGENITAL (surgery)
- Saini, Ashish Kumar**
PROSTATECTOMY (methods)
- Sajad, Peerzada**
PAPILLON-LEFEVRE DISEASE (diagnosis)
- Sajid, Muhammad**
MOUTHWASHES
- Salamat, F.**
CONSTIPATION (prevention and control)
- Saleem, Kamal**
FONTAN PROCEDURE

HEART SEPTAL DEFECTS, VENTRICULAR (surgery)
- Salehi, F.**
GLYCOPROTEINS (diagnostic use)
- Salehi, M.**
BETA-THALASSEMIA (psychology)
- Salehi, M.Gh.**
ROTATOR CUFF (ultrasonography)
- Salehi, T. Zahraie**
DENDRITIC CELLS
- Salman, Jasim M.**
INTUBATION, INTRATRACHEAL (methods)
- Samad, Ambareen**
GENITAL NEOPLASMS, FEMALE (epidemiology)
- Samadi, M.T.**
GAMMA RAYS
- Samani, Reza Omani**
EMBRYO TRANSFER (ethics)
- Samore, Naseer Ahmad**
CORONARY ANGIOGRAPHY
PERCUTANEOUS CORONARY INTERVENTION
- Samore, Naseer Ahmad**
CORONARY THROMBOSIS (epidemiology)
CORONARY ANGIOGRAPHY
- Sangi, Laila**
TOOTH ROOT (anatomy and histology)
- Sangwan, Sukhbir Singh**
FEMORAL NEOPLASMS (surgery)
- Sanjari, M.A.**
ORTHOTIC DEVICES
- Sardar, Souvik**
SYRINGOMA (diagnosis)
- Saremi, S.**
BORAGINACEAE
- Sarir, H.**
ASCORBIC ACID (blood)
- Sarkar, Somenath**
SYRINGOMA (diagnosis)
- Sarwar, Ghulam**
PNEUMOCONIOSIS (epidemiology)
- Sarwar, Madiha**
MITRAL VALVE PROLAPSE
ARRHYTHMIAS, CARDIAC (epidemiology)
- Seckiner, Ilker**
CYSTITIS, INTERSTITIAL (drug therapy)
- Senthil S., Siva**
DENTURE, OVERLAY
- Seracchioli, Renato**
UTERINE CERVICAL NEOPLASMS (surgery)
- Sereshki, Nasrin**
ABORTION, SPONTANEOUS (immunology)
- Seth, J.**
LIPOID PROTEINOSIS OF URBACH AND WIETHE (genetics)
- Seven, Memnun**
DOMESTIC VIOLENCE (psychology)
- Shabbir, Muhammad**
DILATATION, PATHOLOGIC (radiography)

- Shafiei, Sh.**
YERSINIA INFECTIONS (prevention and control)
- Shafipour, Maryam**
SEPTINS (genetics)
- Shafqat, Farzana**
HEPATIC ENCEPHALOPATHY (blood)
- Shah, Farhat Abbas**
ELECTROCARDIOGRAPHY (methods)
- Shah, Syed Adnan Ali**
ANKYLOSIS (surgery)
- MANDIBULAR CONDYLE (injuries)
- Shaheen, Jamil Ahmed**
LUPUS ERYTHEMATOSUS, SYSTEMIC (complications)
- Shahgeibi, Sh.**
UTERINE HEMORRHAGE (etiology)
- Shahhoseini, Maryam**
SEPTINS (genetics)
- Shahir, M.H.**
PREBIOTICS
- Shahmirzadi, M. Sobhani**
CONSTIPATION (prevention and control)
- Shahnazi, Vahideh**
ARYLDIALKYLPHOSPHATASE
- Shahrzad, Gholam**
TUBERCULOSIS, FEMALE GENITAL (radiography)
- Shahzad, Atif**
HEPATITIS C (complications)
- Shahzad, Faheem**
DIABETIC RETINOPATHY (blood)
- Shahzad, Khurram**
PERCUTANEOUS CORONARY INTERVENTION
- Shahzad, Syed Khurram**
CORONARY ANGIOGRAPHY
- Shaikh, Mohammad Ilyas**
DENTAL CARIES (epidemiology)
- Shaikh, Muhammad Arif**
DENTAL CARIES (epidemiology)
TOOTH ROOT (anatomy and histology)
ROOT CANAL IRRIGANTS
- Shakeel, Sahar**
MOLAR (anatomy and histology)
- Shakir, Iffat Ara**
DENTURE, OVERLAY
- Shakoor, Asma**
MOUTH NEOPLASMS
- Shakoor, Sadaf**
HEARING LOSS, NOISE-INDUCED (epidemiology)
- Shanehsaz, Siavash M.**
HYPERKERATOSIS, EPIDERMOLYTIC (genetics)
- Shanehsaz, Siavash Mohammadzadeh**
CARCINOMA, SQUAMOUS CELL (diagnosis)
- Sharif, Hamid**
CORONARY THROMBOSIS (epidemiology)
- Sharifi, Ali**
PERITONEAL DIALYSIS, CONTINUOUS AMBULATORY (methods)
- Sharifi, M.**
PREBIOTICS
- Sharma, Jyotika**
TOOTH FRACTURES (therapy)
- Sharma, Nikhil**
KIDNEY TRANSPLANTATION
- Shehzad, Atif**
SUNSCREENING AGENTS
- Shenoi, Shrutakirthi D.**
KETOCONAZOLE (pharmacology)
- Shirani, D.**
IMMUNOPHENOTYPING
- Shiravi, Abdol Hossein**
SPERM INJECTIONS, INTRACYTOPLASMIC (methods)
- Shojaei, N.**
GLYCOPROTEINS (diagnostic use)
- Shokoohi, M.**
ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY (epidemiology)
- Shome, K.**
LIPOID PROTEINOSIS OF URBACH AND WIETHE (genetics)
- Shoro, Amir Ali**
MELATONIN (pharmacology)
- Shrimal, Arpit**
SYRINGOMA (diagnosis)
- Siddique, Misbahuddin**
HAIR (growth and development)
- Siddiqui, Abdul Hameed**
CORONARY ANGIOGRAPHY
CORONARY THROMBOSIS (epidemiology)
VENTRICULAR SEPTAL RUPTURE (therapy)
PERCUTANEOUS CORONARY INTERVENTION
- Siddiqui, Aisha**
MEDICINE, UNANI

- Siddiqui, M.Y.**
OLIGOSPERMIA (therapy)
- Sikder, Akramullah**
ARTHRITIS, PSORIATIC (drug therapy)
- Silva, Marcelo Octavio Fernandes**
ACTIVINS
- Singh, Gurdarshan**
DENTAL CARE FOR CHRONICALLY ILL (methods)
- Singh, Prabhjot**
PROSTATECTOMY (methods)
- TUBERCULOSIS, UROGENITAL (surgery)
- Singh, Satendra**
HUMANITIES
- Slezak, Jeffrey**
PROSTATECTOMY (economics)
- Soheyliniya, S.**
HOUSEFLIES (pathogenicity)
- Soltani, A.**
ALUMINUM (analysis)
- Soltani, M.**
YERSINIA INFECTIONS (prevention and control)
- Somani, Bhaskar**
EMBOLIZATION, THERAPEUTIC (adverse effects)
- Soufizadeh, N.**
UTERINE HEMORRHAGE (etiology)
- Stavropoulos, Nikolaos E.**
CARCINOMA, RENAL CELL (pathology)
- Stephen, Lawrence**
MOUTHWASHES
- Stoian, Veronica**
SEX CHROMOSOME ABERRATIONS
- Stolzenburg, Jens Uwe**
NEPHRECTOMY (methods)
- Suliman, Muhammad Imran**
INTERLEUKIN-11 (therapeutic use)
- Sultan, Mehboob**
ECHOCARDIOGRAPHY
CARDIAC CATHETERIZATION (instrumentation)
VENTRICULAR SEPTAL RUPTURE (therapy)
DUCTUS ARTERIOSUS, PATENT (surgery)
BALLOON VALVULOPLASTY (mortality)
HEART SEPTAL DEFECTS, VENTRICULAR (surgery)
TETRALOGY OF FALLOT (diagnosis)
- Surriah, Mohammed Hillu**
RETROPERITONEAL SPACE
- Swami, Satchi**
EMBOLIZATION, THERAPEUTIC (adverse effects)
- Syed, Fatima**
HEALTH PROMOTION
- Syed, Iffat Batool**
DENTAL CARIES (epidemiology)
- Taheri, M.**
CATHEPSINS
- Tahir, Muhammad**
MELATONIN (pharmacology)
- Tahmasbian, Hamid**
IN VITRO OOCYTE MATURATION TECHNIQUES
- Tai, Xin You**
RENAL COLIC (drug therapy)
- Tajik, Imran**
MOLAR (anatomy and histology)
- Tala, M.**
PENAEIDAE (genetics)
- Tarigopula, Giridhar**
GLYCYRRHIZA (adverse effects)
- Tariq, Mohammad Abbas**
NALBUPHINE (therapeutic use)
- Tariq, Mohammed**
SILVER (therapeutic use)
- Tariq, Muhammad**
EDUCATION, MEDICAL (standards)
- Tariq, Nadia**
PATIENT SATISFACTION
- Tashfeen, Sunila**
REAL-TIME POLYMERASE CHAIN REACTION
- Tavalae, Marziyeh**
SPERM INJECTIONS, INTRACYTOPLASMIC (methods)
- Tavosi, Z.**
COGAN SYNDROME (diagnosis)
- Tejada, Milvana**
URINARY TRACT INFECTIONS (microbiology)
- Thomas, Anil A.**
PROSTATECTOMY (economics)
- Tofighi, A.**
VIBRATION
- Torabizadeh, J.**
GLYCOPROTEINS (diagnostic use)
- Tsimaris, Ioannis**
CARCINOMA, RENAL CELL (pathology)
- Tyagi, Vipin**
KIDNEY TRANSPLANTATION

- Ullah, Hashmat**
HEPATITIS C, CHRONIC (drug therapy)
- Ullah, Maad**
ECHOCARDIOGRAPHY

CARDIAC CATHETERIZATION (instrumentation)

VENTRICULAR SEPTAL RUPTURE (therapy)
- Usman, Mohammad**
ASTHMA (epidemiology)
- Usmani, Ambreen**
OVARY (anatomy and histology)
- Ustun, Abdulkerim**
CYSTITIS, INTERSTITIAL (drug therapy)
- Vaezi, Gh.**
BERBERINE ALKALOIDS (therapeutic use)
- Wahab, Samdana**
CONGENITAL ABNORMALITIES (epidemiology)
- Wahadneh, Adel M.**
AGAMMAGLOBULINEMIA (epidemiology)
- Waheed Ur Rehman**
DILATATION, PATHOLOGIC (radiography)
- Wahid, Arsalan**
ANKYLOSIS (surgery)

TEMPOROMANDIBULAR JOINT DISORDERS (epidemiology)

MANDIBULAR CONDYLE (injuries)
- Wang, Xiong**
PITUITARY NEOPLASMS (pathology)
- Wazir, Marina**
INTERFERON-ALPHA (adverse effects)
- Yadav, Pawan Kumar**
PLANTS, MEDICINAL
- Yadav, Sudeep Pradeep**
UMBILICUS (surgery)
- Yaghoobi, Ramin**
INTERLEUKIN-17 (genetics)
- Yazdi, M.K. Sharifi**
SALMONELLA (drug effects)
- Yildiz, Funda**
PREGNANCY RATE
- Yousefi, F.**
UTERINE HEMORRHAGE (etiology)
- Yousefi, P.**
CATHEPSINS
- Yusuf, Azam**
CHOLEDOCHAL CYST (diagnosis)
- Zabihi, E.**
DIAZINON (adverse effects)
- Zafar, Lubna**
ANEMIA, PERNICIOUS (epidemiology)
- Zafarani, Fatemeh**
TUBERCULOSIS, FEMALE GENITAL (radiography)
- Zaghal, A.**
IMMUNOPHENOTYPING
- Zahid, Maryam**
WATER-ELECTROLYTE IMBALANCE (epidemiology)
- Zahid, Shehla**
DENTAL ENAMEL HYPOPLASIA (epidemiology)
- Zaidi, Sabeen Khurshid**
PROSTHESIS-RELATED INFECTIONS (microbiology)
- Zakir, Shahida**
PNEUMOCONIOSIS (epidemiology)
- Zaman, Roohi**
SILVER (therapeutic use)
- Zaman, Shakeela**
DIABETIC RETINOPATHY (blood)
- Zandvakili, F.**
UTERINE HEMORRHAGE (etiology)
- Zarch, Zohre Nasiri**
PERITONEAL DIALYSIS, CONTINUOUS AMBULATORY (methods)
- Zare, S.**
INDUCED PLURIPOTENT STEM CELLS (transplantation)
- Zarei, Hossein**
SEXUAL DYSFUNCTION, PHYSIOLOGICAL (epidemiology)
- Zarei, M.**
OBSESSIVE-COMPULSIVE DISORDER (genetics)
- Zarei, M.**
XANTHOPHYLLS (pharmacology)
- Zawar, Vijay**
INFLUENZA A VIRUS, H1N1 SUBTYPE (immunology)
- Ziaadini, H.**
ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY (epidemiology)
- Zulkifle, M.**
ASTHMA (epidemiology)
- Zulkifle, Mohammad**
RESPIRATORY TRACT INFECTIONS (epidemiology)

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 (140)	
AAMJ-AI-Azhar Assiut Medical Jsrnal	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
AI-Azhar Journal of Dental Science	1110-6751
AI-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]	1110-0036
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
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 (31)	
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 Dohuk University	1812-7568
Journal of Karbala University	1813-0410
Journal of the Faculty of Medicine-Baghdad	0041-9419
Kufa Medical Journal	N/A
Medical Journal of Basrah University [The]	0253-0759

Journal	ISSN
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 (222)	
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	N/A
Anesthesiology and Pain Medicine	2228-7523
Annals of Military and Health Sciences Research	2383-1960
Archive of Breast Cancer	2383-0425
Archives of Clinical Infectious Diseases	2641-2345
Archives of Iranian Medicine	1029-2977
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
Cell Journal [Yakhteh]	2228-5806
DARU-Journal of Pharmaceutical Sciences	1560-8115
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
Endovascular Journal	2008-1812
Feyz-Journal of Kashan University of Medical Sciences	1029-7855

Journal	ISSN
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 Information Management	1735-7853
Hepatitis Monthly	1735-143X
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
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
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

Journal	ISSN
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 Environmental Health Science and Engineering	1735-1979
Iranian Journal of Epidemiology	1735-7489
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

Journal	ISSN
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 [IJPCP]	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
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
JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
JMB-Journal of Medical Bacteriology	2251-8649
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 Anesthesiology and Pain	2228-6659
Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
Journal of Cardio-Thoracic Medicine	2345-2447
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 Promotion Management [JHPM]	2251-8614
Journal of Health Scope	2251-8959

Journal	ISSN
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 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 Rehabilitation	2008-2576
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 Patient Safety and Quality Improvement	2345-4482
Journal of Periodontology and Implant Dentistry	2008-7748
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 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 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 Tehran University Heart Center [The]	1735-8620

Journal	ISSN
Journal of Veterinary Research	2008-2525
Journal of Zahedan University of Medical Sciences and Health Services	1735-076X
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
JPC-Journal of Pharmaceutical Care	2322-4630
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
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
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
Research in Cardiovascular Medicine	2251-9572

Journal	ISSN
RMM-Research in Molecular Medicine	2322-1348
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
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
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
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

Journal	ISSN
Lebanon (10)	
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
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
Oman (3)	
Oman Journal of Ophthalmology	0974-620X
Oman Medical Journal	1999-768X
SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
Pakistan (85)	
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

Journal	ISSN
Annals of King Edward Medical College	1684-6680
APMC-Annals of Punjab Medical College	2077-9143
Bahria Journal of Professional Psychology	1816-0840
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
Isra Medical Journal	2073-8285
JAMC-Journal of Ayub Medical College-Abbotabad-Pakistan	1025-9589
JCPSP-Journal of the College of Physicians and Surgeons Pakistan	1022-386X
JDUHS-Journal of the Dow University of Health Sciences	1995-2198
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 of Basic and Applied Sciences	1814-8085
Journal of Medical Sciences	1682-4474
Journal of Medical Sciences	1997-3438
Journal of Nephrology Urology and Transplantation	1606-9331
Journal of Surgery [The]	1681-4517
JPAD-Journal of Pakistan Association of Dermatologists	1560-9014
JPDA-Journal of the Pakistan Dental Association	1680-2292
JPIMS-Journal of Pakistan Institute of Medical Sciences	1683-6928
JPMA-Journal of Pakistan Medical Association	0030-9982
JPMI-Journal of Postgraduate Medical Institute	1013-5472
JPPS-Journal of Pakistan Psychiatric Society	1726-8710

Journal	ISSN
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
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 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

Journal	ISSN
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
POJ-Pakistan Orthodontic Journal	2074-0069
PJPH-Pakistan Journal of Public Health	2225-0891
PJR-Pakistan Journal of Radiology	1607-2006
PJS-Pakistan Journal of Surgery	0258-8552
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
Qatar Medical Journal	0253-8253
Saudi Arabia (29)	
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 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

Journal	ISSN
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 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 (10)	
AJNT-Arab Journal of Nephrology and Transplantation	1858-554X
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	ISSN
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
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
YJMHR-Yemeni Journal of Medical and Health Research	N/A
YMJ-Yemen Medical Journal	N/A

Last update March 2016

Appendix III

**List of EMR Journals Indexed in
IMEMR**

(by title)

S/N	Journal	ISSN
1	AAMJ-Al-Azhar Assiut Medical Jsrnal	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	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	Arab Dental Journal	N/A
45	Arab Family Health and Population	N/A
46	Arab Journal for Food and Nutrition	1608-8352
47	Arab Journal of Biotechnology	1110-6875
48	Arab Journal of Gastroenterology	1687-1979
49	Arab Journal of Laboratory Medicine [The]	1110-1822
50	Arab Journal of Pharmaceutical Sciences	1683-0369
51	Arab Journal of Psychiatry [The]	1016-8923
52	Arabic Journal of Forensic Medicine and Criminal Science	N/A
53	Arabic Medical Journal	N/A
54	Archive of Breast Cancer	2383-0425
55	Archives de l'Institut Pasteur de Tunis	0020-2509
56	Archives of Clinical Infectious Diseases	2641-2345
57	Archives of Iranian Medicine	1029-2977
58	Archives of Trauma Research	2251-953X
59	Armaghane-danesh	1728-6506
60	ARYA Atherosclerosis Journal	1735-3955
61	Asia Oceania Journal of Nuclear Medicine and Biology	2322-5718
62	Asian Journal of Sports Medicine	2008-000X
63	ASJOG-Ain-Shams Journal of Obstetrics and Gynecology	1697-2193
64	ASNJ-Alexandria Scientific Nursing Journal	1687-3858
65	Assiut Medical Journal	1110-0494
66	Assiut University Bulletin for Environmental Researches	1110-6107
67	Assiut Veterinary Medical Journal	N/A
68	Audiology	1735-1936
69	Avicenna Journal of Phytomedicine [AJP]	2228-7930
70	Bahrain Medical Bulletin	1012-8298

S/N	Journal	ISSN
71	Bahria Journal of Professional Psychology	1816-0840
72	Basic and Clinical Neuroscience	2008-126X
73	Basrah Journal of Surgery	1683-3589
74	BCCR-Basic and Clinical Cancer Research	2228-6527
75	BEAT-Bulletin of Emergency and Trauma	2322-2522
76	Benha Medical Journal	1110-208X
77	Bina Journal of Ophthalmology	1026-6399
78	Biomedica	1992-4852
79	Bulletin Epidemiologique	0851-8238
80	Bulletin of Alexandria Thoracic Association	1687-997X
81	Bulletin of Endemic Disease-Baghdad	0007-4845
82	Bulletin of Faculty of Pharmacy-Cairo University	1110-0931
83	Bulletin of Faculty of Physical Therapy-Cairo University	1110-6611
84	Bulletin of Nutrition and Food	N/A
85	Bulletin of Pharmaceutical Sciences-Assiut University	1110-0052
86	Bulletin of the Faculty of Science-University of Alexandria	0568-9619
87	Bulletin of the Kuwait Institute for Medical Specialization	N/A
88	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A
89	Bulletin of the National Research Centre	1110-0591
90	Bulletin of the Ophthalmological Society of Egypt	0078-5342
91	Cahiers Medicaux de Tunisie	0300-5291
92	Cell Journal [Yakhteh]	2228-5806
93	Challenge-Quarterly [The]	0528-7944
94	Childhood and Development Quarterly	1110-8681
95	Clinical Diabetes	0891-8929
96	Community Medicine	0301-7265
97	Damascus University Journal for Health Sciences	2072-2265
98	DARU-Journal of Pharmaceutical Sciences	1560-8115
99	DENA-Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450
100	Dermatology and Cosmetic Quarterly	2008-7470
101	Diabetes Digest	1369-7501
102	Dirasat	1026-3764
103	DMJ-Derna Medical Journal	N/A
104	DMJ-Dohuk Medical Journal	2071-7326
105	DRJ-Dental Research Journal	1735-3327

S/N	Journal	ISSN
106	EBNESINA-Medical Journal of Military Medicine [The]	1735-9503
107	EDJ-Egyptian Dental Journal	0070-9484
108	Egyptian Heart Journal [The]	1110-2608
109	Egyptian Journal of Anatomy [The]	1110-2144
110	Egyptian Journal of Biomedical Engineering	1012-5558
111	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525
112	Egyptian Journal of Breastfeeding	N/A
113	Egyptian Journal of Bronchology [The]	1687-8426
114	Egyptian Journal of Cardiothoracic Anesthesia	1687-9090
115	Egyptian Journal of Cataract and Refractive Surgery [The]	N/A
116	Egyptian Journal of Chemistry	0449-2285
117	Egyptian Journal of Chest Diseases and Tuberculosis [The]	0422-7638
118	Egyptian Journal of Community Medicine [The]	1110-1865
119	Egyptian Journal of Dermatology and Andrology	1110-7650
120	Egyptian Journal of Diabetes [The]	N/A
121	Egyptian Journal of Food Science	1110-0192
122	Egyptian Journal of Genetics and Cytology	0046-161X
123	Egyptian Journal of Histology [The]	1110-0559
124	Egyptian Journal of Hospital Medicine [The]	1687-2002
125	Egyptian Journal of Immunology [The]	1110-4902
126	Egyptian Journal of Medical Human Genetics [The]	1110-8630
127	Egyptian Journal of Medical Laboratory Sciences	1110-5593
128	Egyptian Journal of Microbiology	0022-2704
129	Egyptian Journal of Neonatology [The]	1110-8991
130	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083
131	Egyptian Journal of Nutrition	1687-1235
132	Egyptian Journal of Nutrition and Health	1687-7950
133	Egyptian Journal of Occupational Medicine	1110-1881
134	Egyptian Journal of Otolaryngology [The]	1012-5574
135	Egyptian Journal of Paediatrics [The]	1687-1677
136	Egyptian Journal of Pediatric Allergy and Immunology [The]	1687-1642
137	Egyptian Journal of Pharmaceutical Sciences	0301-5068
138	Egyptian Journal of Physiological Sciences	0301-8660
139	Egyptian Journal of Psychiatry [The]	1110-1105
140	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278

S/N	Journal	ISSN
141	Egyptian Journal of Surgery [The]	1110-1121
142	Egyptian Journal of Urology	1110-5712
143	Egyptian Journal of Veterinary Science	1110-0222
144	Egyptian Liver Journal	2090-6218
145	Egyptian Medical Journal of the National Research Center	1687-1278
146	Egyptian Orthodontic Journal	1110-435x
147	Egyptian Orthopaedic Journal [The]	1110-1148
148	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315
149	Egyptian Population and Family Planning Review [The]	1110-1156
150	Egyptian Rheumatologist [The]	1110-1164
151	Egyptian Rheumatology and Rehabilitation	1110-161X
152	Egyptian Science Magazine [The]	1687-3815
153	EJB-Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502
154	EJENTAS-Egyptian Journal of ENT and Allied Sciences	2090-0740
155	EJMM-Egyptian Journal of Medical Microbiology [The]	1110-2179
156	EMHJ-Eastern Mediterranean Health Journal	1020-3397
157	EMJ-Emirates Medical Journal	0250-6882
158	Endovascular Journal	2008-1812
159	Esculapio	2309-3080
160	Feyz-Journal of Kashan University of Medical Sciences	1029-7855
161	Frontiers in Biomedical Technologies	2345-5829
162	FWU Journal of Social Sciences	1995-1272
163	Garyounis Medical Journal	0254-7198
164	Gastroenterology and Hepatology from Bed to Bench	2010-2258
165	Gazette of the Egyptian Paediatric Association [The]	1110-6638
166	Genetics in the 3rd Millennium	2423-7159
167	Gezira Journal of Health Sciences	1810-5386
168	GJMS-Gomal Journal of Medical Sciences	1819-7973
169	GJO-Gulf Journal of Oncology [The]	2078-2101
170	Govaresh	1560-7186
171	Gulf Journal of Dermatology and Venereology [The]	N/A
172	Gulf Medical University: Proceedings	2306-6865
173	HAKIM Research Journal	1561-252X
174	Hamdard Medicus	0250-7188

S/N	Journal	ISSN
175	HAYAT-Journal of Faculty of Nursing and Midwifery [The]	1735-2215
176	Health [The]	2218-3299
177	Health Information Management	1735-7853
178	Health Services Journal of the Eastern Mediterreanean Region	1014-9899
179	Heart Views	1995-705X
180	Hematology, Oncology and Stem Cell Therapy	1658-3876
181	Hepatitis Monthly	1735-143X
182	HJMS-Hadramout Journal of Medical Sciences	2224-1806
183	HMJ-Hamdan Medical Journal	2227-2437
184	Homa-ye-Salamat	2008-2002
185	Hormozgan Medical Journal	1735-2223
186	Hospital-Journal of Iranian Scientific Hospital Association	2008-1928
187	IAJD-International Arab Journal of Dentistry	2218-0885
188	IBJ-Iranian Biomedical Journal	1028-852X
189	IDEES-Revue de Perfectionnement Medical et Paramedical	N/A
190	IEJ-Iranian Endodontic Journal	1735-7497
191	IHJ-Iranian Heart Journal	1735-7306
192	IJBC-Iranian Journal of Blood and Cancer	2008-4595
193	IJB-Iranian Journal of Biotechnology	1728-3043
194	IJCBNM-International Journal of Community Based Nursing and Midwifery	2322-2476
195	IJCN-Iranian Journal of Child Neurology	1735-4668
196	IJDO-Iranian Journal of Diabetes and Obesity	2008-6792
197	IJEHSR-International Journal of Endorsing Health Science Research	2307-3748
198	IJEM-Iranian Journal of Endocrinology and Metabolism	1683-4844
199	IJFS-International Journal of Fertility and Sterility	2008-076X
200	IJHOSCR-International Journal of Hematology-Oncology and Stem Cell Research	2008-2207
201	IJHPM-International Journal of Health Policy and Management	N/A
202	IJHS-Iranian Journal of Health Sciences	2322-553X
203	IJI-Iranian Journal of Immunology	1735-1383
204	IJKD-Iranian Journal of Kidney Diseases	1735-8582
205	IJMCM-International Journal of Molecular and Cellular Medicine	2251-9637
206	IJME-Iranian Journal of Medical Education	1608-9359
207	IJM-Iranian Journal of Microbiology	2008-3289
208	IJMS-Iranian Journal of Medical Sciences	0253-0716
209	IJN-Iranian Journal of Neonatology	2251-7510

S/N	Journal	ISSN
210	IJOH-International Journal of Occupational Hygiene	2008-5109
211	IJO-Iranian Journal of Orthodontics	1735-5087
212	IJP-International Journal of Pediatrics	2345-5047
213	IJPM-International Journal of Preventive Medicine	2008-7802
214	IJPR-Iranian Journal of Pharmaceutical Research	1735-0328
215	IJRM-International Journal of Reproductive Biomedicine	2476-4108
216	IJVM-Iranian Journal of Veterinary Medicine	2251-8894
217	IMJ-Iraqi Medical Journal	0304-4564
218	Infectious Diseases Journal of Pakistan	1027-0299
219	International Cardiovascular Research Journal	2251-9130
220	International Journal of Diabetes and Metabolism	1606-7754
221	International Journal of Diabetes Mellitus	1877-5934
222	International Journal of Endocrinology and Metabolism	1726-913X
223	International Journal of Environmental Research	1735-6865
224	International Journal of Environmental Science and Technology	1735-1472
225	International Journal of Health Sciences	1658-3639
226	International Journal of High Risk Behaviors and Addiction	2251-8711
227	International Journal of Mycobacteriology	2212-5531
228	International Journal of Occupational and Environmental Medicine	2008-6520
229	International Journal of Organ Transplantation Medicine	2008-6490
230	International Journal of Pathology	1810-0155
231	International Journal of Radiation Research	2322-3243
232	International Journal of Women's Health and Reproduction Sciences	N/A
233	IOJ-Iraqi Orthodontic Journal	1816-0581
234	IPMJ-Iraqi Postgraduate Medical Journal	1608-8360
235	Iran Journal of Nursing	2008-5923
236	Iran Occupational Health	1735-5133
237	Iranian Journal of Allergy, Asthma and Immunology	1735-1502
238	Iranian Journal of Arthropod-Borne Diseases	1735-7179
239	Iranian Journal of Basic Medical Sciences	2008-3866
240	Iranian Journal of Cancer Prevention	2008-2398
241	Iranian Journal of Dermatology	0021-082X
242	Iranian Journal of Diabetes and Lipid Disorders	1726-7544
243	Iranian Journal of Environmental Health Science and Engineering	1735-1979
244	Iranian Journal of Epidemiology	1735-7489

S/N	Journal	ISSN
245	Iranian Journal of Health and Environment	2008-2029
246	Iranian Journal of Medical Microbiology	1735-8612
247	Iranian Journal of Medical Physics	1735-160X
248	Iranian Journal of Nuclear Medicine	1681-2824
249	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066
250	Iranian Journal of Nursing Research	1735-7012
251	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756
252	Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993
253	Iranian Journal of Ophthalmology	1735-4153
254	Iranian Journal of Otorhinolaryngology	1560-1293
255	Iranian Journal of Parasitology	1735-7020
256	Iranian Journal of Pediatrics	2008-2142
257	Iranian Journal of Psychiatric Nursing	2345-2501
258	Iranian Journal of Psychiatry	1735-4587
259	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639
260	Iranian Journal of Psychiatry and Clinical Psychology [IJPCP]	1735-4315
261	Iranian Journal of Public Health	0304-4556
262	Iranian Journal of Radiology	1735-1065
263	Iranian Journal of Veterinary Research	1728-1997
264	Iranian Rehabilitation Journal	1735-3602
265	Iraqi Army Medical Journal	N/A
266	Iraqi Journal of Agriculture	1818-6645
267	Iraqi Journal of Biotechnology	N/A
268	Iraqi Journal of Community Medicine	1684-5382
269	Iraqi Journal of Medical Sciences	1681-6579
270	Iraqi Journal of Microbiology	N/A
271	Iraqi Journal of Pharmaceutical Sciences	1683-3597
272	Iraqi Journal of Tropical Disease Researches	1814-0823
273	Iraqi New Medical Journal	2409-5931
274	IRCMJ-Iranian Red Crescent Medical Journal	1561-4395
275	ISESCO Journal of Science and Technology	2028-8077
276	Isra Medical Journal	2073-8285
277	JABHS-Journal of the Arab Board of Health Specializations	1561-0217
278	JAMC-Journal of Ayub Medical College-Abbottabad-Pakistan	1025-9589
279	JBMS-Journal of the Bahrain Medical Society	1015-6321

S/N	Journal	ISSN
280	JBUMS-Journal of Babol University of Medical Sciences	1561-4107
281	JCPSP-Journal of the College of Physicians and Surgeons Pakistan	1022-386X
282	JCR-Journal of Craniomaxillofacial Rersearch	5489-2345
283	JCVTR-Journal of Cardiovascular and Thoracic Research	2008-5117
284	JDT-Journal of Dentistry Tehran University of Medical Sciences	1735-2150
285	JDUHS-Journal of the Dow University of Health Sciences	1995-2198
286	JEMTAC-Journal of Emergency Medicine, Trauma and Acute Care	1999-7086
287	JESN-Journal of Egyptian Society of Nephrology [The]	N/A
288	JIIMC-Journal of Islamic International Medical College [The]	1815-4018
289	JIMDC-Journal of Islamabad Medical and Dental College	2227-3875
290	JISHIM-Journal of the International Society for the History of Islamic Medicine	1303-667X
291	JKCD-Journal of Khyber College of Dentistry	2220-2633
292	JLDA-Journal of the Lebanese Dental Association	1810-9632
293	JLUMHS-Journal of the Liaquat University of Medical Health Sciences	1729-0341
294	JMB-Journal of Medical Bacteriology	2251-8649
295	JMJ-Jamahiriya Medical Journal	2079-1216
296	JMJ-Juba Medical Journal	N/A
297	JMR-Journal of Medical Research	1728-1962
298	JNE-Journal of Nursing Education	3812-2322
299	JNMS-Journal of Nursing and Midwifery Sciences	2345-5756
300	JNP-Journal of Nephropathology	2251-8363
301	JOPDAK-Journal of the Pakistan Dental Association Karachi	1680-2292
302	Jordan Journal of Pharmaceutical Sciences	1995-7157
303	Jordan Medical Journal	0446-9283
304	Journal du Practicien	1113-5667
305	Journal of Advanced Research	2090-1232
306	Journal of Anesthesiology and Pain	2228-6659
307	Journal of Arak University of Medical Sciences-Rahavard Danesh	1735-5338
308	Journal of Baghdad College of Dentistry	1680-0057
309	Journal of Basic and Applied Sciences	1814-8085
310	Journal of Basic Medical Sciences	N/A
311	Journal of Cardio-Thoracic Medicine	2345-2447
312	Journal of Childhood Studies	2090-0619
313	Journal of Clinical Excellence	2322-391X
314	Journal of Clinical Laboratory [The]	1814-411X

S/N	Journal	ISSN
315	Journal of Community Medicine	N/A
316	Journal of Dental Materials and Techniques	2322-4150
317	Journal of Dental Medicine-Tehran University of Medical Sciences	1024-641X
318	Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X
319	Journal of Dental School-Shahid Beheshti University of Medical Sciences	1735-7683
320	Journal of Dentistry-Shiraz University of Medical Sciences	1728-3426
321	Journal of Dohuk University	1812-7568
322	Journal of Drug Research of Egypt	0085-2406
323	Journal of Environmental Studies	1025-8620
324	Journal of Epidemiology and Global Health	2210-6006
325	Journal of Family and Community Medicine	2230-8229
326	Journal of Family and Reproductive Health	1735-8949
327	Journal of Fundamentals of Mental Health [The]	1028-6918
328	Journal of Gorgan University of Medical Sciences	1562-4765
329	Journal of Guilan University of Medical Sciences	2008-4048
330	Journal of Health Administration	2008-1200
331	Journal of Health and Safety at Work	2251-807X
332	Journal of Health Promotion Management [JHPM]	2251-8614
333	Journal of Health Scope	2251-8959
334	Journal of Hepatology, Gastroenterology and Infectious Diseases	1110-0796
335	Journal of High Institute of Public Health [The]	1110-0036
336	Journal of Hygiene and Health	1735-2363
337	Journal of Infection and Public Health	1876-0341
338	Journal of Injury and Violence Research	2008-2053
339	Journal of Isfahan Dental School	1735-255X
340	Journal of Isfahan Medical School	1027-7595
341	Journal of Islamic Dental Association of Iran [The]-JIDA	1024-6428
342	Journal of Jahrom University of Medical Sciences	2008-7993
343	Journal of Karbala University	1813-0410
344	Journal of Kerman University of Medical Sciences	1023-9510
345	Journal of Kermanshah University of Medical Sciences [KUMS]	2251-9068
346	Journal of King Abdulaziz University-Medical Sciences	1319-1004
347	Journal of Lasers in Medical Sciences	2008-9783
348	Journal of Legal Medicine and Forensic Sciences [The]	1110-6468
349	Journal of Mashhad Dental School	1560-9286

S/N	Journal	ISSN
350	Journal of Mazandaran University of Medical Sciences	1735-9260
351	Journal of Medical Council of Islamic Republic of Iran	1562-1073
352	Journal of Medical Education	1735-3998
353	Journal of Medical Sciences	1997-3438
354	Journal of Medical Sciences	1682-4474
355	Journal of Medicinal Plants	1684-0240
356	Journal of Minimally Invasive Surgical Sciences	2251-7022
357	Journal of Modern Rehabilitation	2008-2576
358	Journal of Nephrology Urology and Transplantation	1606-9331
359	Journal of Nursing and Midwifery Quarterly-Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941
360	Journal of Ophthalmic and Vision Research	2008-2010
361	Journal of Patient Safety and Quality Improvement	2345-4482
362	Journal of Periodontology and Implant Dentistry	2008-7748
363	Journal of Qazvin University of Medical Sciences [The]	1561-3666
364	Journal of Rafsanjan University of Medical Sciences	1735-3165
365	Journal of Rehabilitation	1607-2960
366	Journal of Reproduction and Infertility	2228-5482
367	Journal of Research in Behavioural Sciences	1735-2029
368	Journal of Research in Dental Sciences	2008-4676
369	Journal of Research in Health Sciences [JRHS]	2228-7795
370	Journal of Research in Medical Sciences	1735-5311
371	Journal of Sabzevar University of Medical Sciences	1606-7487
372	Journal of Safety Promotion and Injury Prevention	2345-2455
373	Journal of School of Public Health and Institute of Public Health Research	1735-7586
374	Journal of Screening and Geographical Medicine	1735-7594
375	Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X
376	Journal of Shahrekord University of Medical Sciences	1735-1448
377	Journal of Surgery [The]	1681-4517
378	Journal of Taibah University Medical Sciences	1658-3612
379	Journal of Tehran University Heart Center [The]	1735-8620
380	Journal of the Arab Board of Medical Specializations	1561-0217
381	Journal of the Arab Dentist	N/A
382	Journal of the Arab Neonatology Forum	1812-1756
383	Journal of the Arab Society for Medical Research	1687-4293
384	Journal of the Egyptian Medical Association [The]	0013-2411

S/N	Journal	ISSN
385	Journal of the Egyptian National Cancer Institute	1110-0362
386	Journal of the Egyptian Public Health Association [The]	0013-2446
387	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245
388	Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216
389	Journal of the Egyptian Society of Parasitology	1110-0583
390	Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A
391	Journal of the Egyptian Society of Toxicology	1110-127X
392	Journal of the Faculty of Medicine-Baghdad	0041-9419
393	Journal of the Medical Research Institute-Alexandria University	1110-0133
394	Journal of the Royal Medical Services	2078-8703
395	Journal of the Saudi Heart Association	1016-7315
396	Journal of Tropical Nephro-Urology	N/A
397	Journal of Veterinary Research	2008-2525
398	Journal of Zahedan University of Medical Sciences and Health Services	1735-076X
399	Journal of Zanjan University of Medical Sciences and Health Services	1606-9366
400	JPAD-Journal of Pakistan Association of Dermatologists	1560-9014
401	JPC-Journal of Pediatric Club [The]	N/A
402	JPC-Journal of Pharmaceutical Care	2322-4630
403	JPDA-Journal of the Pakistan Dental Association	1680-2292
404	JPIMS-Journal of Pakistan Institute of Medical Sciences	1683-6928
405	JPMA-Journal of Pakistan Medical Association	0030-9982
406	JPMI-Journal of Postgraduate Medical Institute	1013-5472
407	JPPS-Journal of Pakistan Psychiatric Society	1726-8710
408	JRH-Journal of Research and Health	2251-6395
409	JRMS-Journal of Research in Medical Sciences	1735-1995
410	JRRS-Journal of Research in Rehabilitation Sciences	1735-7519
411	JSOGP-Journal of the Society of Obstetricians and Gynaecologists of Paksitan	N/A
412	JSP-Journal of Surgery Pakistan International	1817-0242
413	Jundishapur Journal of Microbiology [JJM]	2008-3645
414	Jundishapur Journal of Natural Pharmaceutical Products	1735-7780
415	Jundishapur Scientific Medical Journal	2252-052x
416	Kasr El Aini Journal of Surgery	0022-9237
417	Kasr El-Aini Medical Journal	N/A
418	Khartoum Pharmacy Journal	1816-5168
419	Kidney Forum	1369-3050

S/N	Journal	ISSN
420	KMJ-Kuwait Medical Journal	0023-5776
421	KMUJ-Khyber Medical University Journal	2072-7763
422	KOOMESH-Journal of Semnan University of Medical Sciences	1608-7046
423	Kufa Medical Journal	N/A
424	Lahore Journal of Public Health	N/A
425	Lebanese Science Journal	1561-3410
426	Libyan Journal of Infectious Diseases [The]	N/A
427	LJM-Libyan Journal of Medicine	1993-2820
428	LMJ-Lebanese Medical Journal	0023-9852
429	Maghreb Medical	0330-258X
430	Mansoura Journal of Pharmaceutical Sciences	1110-1318
431	Mansoura Medical Bulletin	1012-5590
432	Mansoura Medical Journal	1110-211X
433	Maroc Medical	0253-4053
434	MDV-Molecular Diagnosis and Vaccine	1687-2010
435	MEAJO-Middle East African Journal of Ophthalmology	0974-9233
436	Medical Arabization	N/A
437	Medical Channel	1681-5491
438	Medical Forum Monthly	1029-385X
439	Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A
440	Medical Journal of Basrah University [The]	0253-0759
441	Medical Journal of Cairo University [The]	0045-3803
442	Medical Journal of Islamic World Academy of Sciences	1016-3360
443	Medical Journal of Mashad University of Medical Sciences	1735-4013
444	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671
445	Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039
446	Medical Journal of the Islamic Republic of Iran	1016-1430
447	Medical Journal of Tikrit University [The]	N/A
448	Medical Laboratory Journal	1735-9007
449	Medical Principles and Practice	1011-7571
450	Medical Sciences Journal of Islamic Azad University	1023-5922
451	Medical Spectrum [The]	0254-8534
452	Medical-Surgical Nursing Journal	2322-178X
453	Medicine Today	1813-9876
454	MEJC-Middle East Journal of Cancer	2008-6709

S/N	Journal	ISSN
455	Middle East Journal of Anesthesiology	0544-0440
456	Middle East Journal of Digestive Diseases	2008-5230
457	Middle East Journal of Family Medicine	N/A
458	Minoufia Medical Journal	1110-2098
459	MJFCT-Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437
460	Modares Journal of Medical Sciences, Pathobiology	1562-9554
461	Mother and Child	0379-2617
462	Neonatology	1687-0492
463	Nephro-Urology Monthly	2251-7006
464	Neurosciences	1319-6138
465	New Egyptian Journal of Medicine [The]	1110-1946
466	New Iraqi Journal of Medicine [The]	1817-5562
467	Novelty in Biomedicine	2345-3346
468	Nursing and Midwifery Research	1753-5001
469	Nursing Practice Today	2383-1154
470	Nutrition and Food Sciences Research	2383-0441
471	Ofogh-E-Danesh	1735-1855
472	Oman Journal of Ophthalmology	0974-620X
473	Oman Medical Journal	1999-768X
474	Omdurman Journal of Pharmaceutical Sciences	N/A
475	PAFMJ-Pakistan Armed Forces Medical Journal	0030-9648
476	Pakistan Heart Journal	0048-2706
477	Pakistan Journal of Biochemistry	0300-8185
478	Pakistan Journal of Chest Medicine	N/A
479	Pakistan Journal of Clinical Psychology	1019-438X
480	Pakistan Journal of Community Medicine [The]	N/A
481	Pakistan Journal of Health	0030-9834
482	Pakistan Journal of Medical and Health Sciences	1996-7195
483	Pakistan Journal of Medical Ethics	N/A
484	Pakistan Journal of Medical Sciences	1682-024X
485	Pakistan Journal of Neurological Sciences	1990-6269
486	Pakistan Journal of Neurology	1990-6269
487	Pakistan Journal of Obstetrics and Gynaecology	N/A
488	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X
489	Pakistan Journal of Otolaryngology-Head and Neck Surgery	0257-4985

S/N	Journal	ISSN
490	Pakistan Journal of Pathology	1024-6193
491	Pakistan Journal of Pharmaceutical Sciences	1011-601X
492	Pakistan Journal of Pharmacology	0255-7088
493	Pakistan Journal of Physiology	1819-270X
494	Pakistan Journal of Psychology	0030-9869
495	Pakistan Journal of Scientific and Industrial Research	0030-9885
496	Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413
497	Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421
498	Pakistan Medical Journal	0031-000X
499	Pakistan Ophthalmology	0259-3661
500	Pakistan Oral and Dental Journal	1012-8700
501	Pakistan Pediatric Journal	0304-4904
502	Pan Arab Journal of Neurosurgery	1319-6995
503	Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912
504	Pan Arab Medical Journal	N/A
505	Payavard-Salamat	1735-8132
506	Payesh-Health Monitor	1680-7626
507	Pejouhandeh: Bimonthly Research Journal	1735-1022
508	PJC-Pakistan Journal of Cardiology	1016-1244
509	PJMR-Pakistan Journal of Medical Research	0030-9842
510	PJO-Pakistan Journal of Ophthalmology	0886-3067
511	PJPH-Pakistan Journal of Public Health	2225-0891
512	PJR-Pakistan Journal of Radiology	1607-2006
513	PJS-Pakistan Journal of Surgery	0258-8552
514	PMJ-Palestinian Medical Journal	N/A
515	POJ-Pakistan Orthodontic Journal	2074-0069
516	Population Bulletin of ESCWA	0258-1914
517	Population Researches and Studies	0255-898X
518	Population Sciences	N/A
519	Population Studies	1110-1342
520	Proceedings-Shaikh Zayed Postgraduate Medical Institute	N/A
521	Professional Medical Journal-Quarterly [The]	1024-8919
522	PUJ-Parasitologists United Journal	1687-7942
523	Qatar Medical Journal	0253-8253
524	Qom University of Medical Sciences Journal	1735-7799

S/N	Journal	ISSN
525	Quarterly Journal of Medical Ethics	2008-4374
526	Quarterly Journal of Medical Law	N/A
527	Quarterly Scientific Journal of Relief and Rescue	2008-4544
528	Razi Journal of Medical Sciences	2228-7043
529	Rehabilitation International	N/A
530	Research Centre Bulletin	1019-5335
531	Research in Cardiovascular Medicine	2251-9572
532	Research Journal of Aleppo University-Medical Sciences Series	N/A
533	Revue Maghrebine de Pediatrie [La]	0330-7611
534	Revue Maghrebine d'Endocrinologie-Diabete et de Reproduction [La]	N/A
535	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A
536	Revue Marocaine de Medecine et Sante	0251-0758
537	Revue Marocaine des Maladies de L'Enfant	N/A
538	Revue Tunisienne d'Infectiologie	1737-8958
539	Risafa Medical Journal	N/A
540	RMJ-Rawal Medical Journal	0303-5212
541	RMM-Research in Molecular Medicine	2322-1348
542	Salmand-Iranian Journal of Aging	1735-806X
543	Sana'a University Journal of Medical Sciences	1993-3584
544	Saudi Epidemiology Bulletin	1319-3965
545	Saudi Heart Journal	1018-077X
546	Saudi Journal of Disability and Rehabilitation	1319-6499
547	Saudi Journal of Gastroenterology [The]	1319-3767
548	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491
549	Saudi Journal of Sports Medicine [The]	1319-6308
550	Saudi Medical Journal	0379-5284
551	Scientific and Research Journal of Army University of Medical Sciences-JAUMS	1727-1789
552	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381
553	Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446
554	Scientific Journal of Forensic Medicine	1027-1457
555	Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520
556	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X
557	Scientific Medical Journal	1110-5607
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559	SDJ-Saudi Dental Journal [The]	1013-9052

S/N	Journal	ISSN
560	SGH Medical Journal	1658-2489
561	SJA-Saudi Journal of Anaesthesia	1658-354X
562	SJO-Saudi Journal of Ophthalmology	1319-4534
563	SJPH-Sudanese Journal of Public Health	1990-7567
564	Smile Dental Journal	2072-473X
565	Social Welfare Quarterly	1735-8191
566	Sohag Medical Journal	1110-7529
567	South Valley Medical Journal	1110-7529
568	SPJ-Saudi Pharmaceutical Journal	1319-0164
569	SQUMJ-Sultan Qaboos University Medical Journal	2075-051X
570	SST-Sante et Securite au Travail	N/A
571	Strides in Development of Medical Education	1735-4242
572	Sudan Journal of Medical Sciences	1858-5051
573	Sudan Medical Journal	0491-4481
574	Sudan Medical Monitor	1858-5000
575	Sudanese Journal of Dermatology	1815-3941
576	Suez Canal University Medical Journal	1110-6999
577	Tabib Attifil Alarabi	N/A
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579	Tanta Medical Journal	1110-1415
580	Tanta Medical Sciences Journal	1687-5788
581	Teb Va Tazkie	1608-2397
582	Tehran University Medical Journal [TUMJ]	1683-1764
583	Thrita Student Journal of Medical Sciences	2251-8312
584	Toloo-e-Behdasht	1728-5127
585	Trauma Monthly	2251-7464
586	Tunisie Medicale [La]	0041-4131
587	University of Aden Journal of Natural and Applied Sciences	1606-8947
588	Urology Annals	0974-7796
589	Urology Journal	1735-1308
590	Veterinary Medical Journal	1110-1423
591	WJPS-World Journal of Plastic Surgery	2228-7914
592	Yafteh Journal	1563-0773
593	Yemeni Journal for Medical Sciences [The]	N/A
594	YHMRJ-Yemeni Health and Medical Research Journal	N/A

S/N	Journal	ISSN
595	YJMHR-Yemeni Journal of Medical and Health Research	N/A
596	YMJ-Yemen Medical Journal	N/A
597	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X
598	Zagazig Journal of Pharmaceutical Sciences	1110-5089
599	Zagazig Medical Association Journal	1110-2322
600	Zagazig University Medical Journal	1110-1431
601	Zahedan Journal of Research in Medical Sciences	N/A
602	Zanco Journal of Medical Sciences	1995-5588

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