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#### CASE REPORT CODE:061

Autologous Transplantation of Peripheral Blood Mononuclear Stem Cells in Patients with Buerger's Disease Following Stem cell Mobilization with Granulocyte-Colony Stimulating Factor: A report of three cases



**Background:** Treatment with autologous peripheral blood mononuclear stem cells (PB-MNCs) has shown benefits in patients with Buerger's disease. The purpose of this study was to evaluate the feasibility, safety and efficacy of PB-MNCs transplantation in patients with Buerger's disease.

**Methods:** Three patients were treated by PB-MNCs transplantation. The patients received G-CSF at a dose of 5 ug/kg/day prior to the treatment. Stem cells were harvested from peripheral blood and injected directly into the muscle of the affected limbs.

**Findings:** Patients reported pain relief after approximately one month. Venous oxygen saturation in the affected lower limb increased and clinical symptoms showed improvement. Angiographic scores were significantly improved in the transplanted patients.

**Conclusion:** Satisfactory clinical improvements were observed by injecting PB-MNCs after G-CSF mobilization, suggesting that this novel cell therapy method is feasible, safe and efficient. No adverse effects were observed following the intramuscular administration of stem cells.

Key words: Buerger, Stem cells, Autologous, G-CSF

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#### •CASE REPORT CODE:060

#### Basal cell carcinoma in a young man



BCC is the most common invasive malignant neoplasm of skin which arises of epithelial cells. It is formed from cells similar to basal cell layer of epidermis.

95% of BCC cases occur between 40 to 79 year old. However, it is rare to be observed in young people.

Here, we present a 22 years old man with skin type II who diagnosed with BCC on his nose following a local trauma and a history of sun exposure.

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**Key word:** Bcc, Neoplasm, Epithelial Cell



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#### • REVIEW ARTICLE CODE:059

#### Acute Children Pneumonia



After performance of successful program for control and treatment of acute gastroertritis, acute respiratory infections (ARI) especially pneumonia, are the most important infectious etiology of childrens mortality in developing countries nowadays.

Diagnosis of pneumonia is made on clinical grounds.it is based on four sets of data including Clinic, epidemiology, Radiology and routine laboratory tests. Then, pneumonia itself can be divided to three categories including bacterial, viral and atypical pneumonia. Each type of pneumonia is treated after possible diagnosis with its criteria.

Correct and accurate knowledge of physicians of diagnosis and therapy of this important disease in children could prevent unnecessary costs and decrease its morbidity and mortality

**Key words:** Acute Respiratory infection, Children pneumonia, Acute cough

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#### • ORIGINAL ARTICLE CODE:058

# Patients satisfaction from general physicians and it's determinants in Qom (2005-2006)

#### **ABSTRACT**

**Background:** The present study was designed to evaluation of patients satisfaction and related factors from general practitioner in Oom.

**Methods:** In a cross-sectional study sixty physicians were selected randomly by stratified sampling method. Twenty patients were selected for each physician that results in a sample of 1200 patients. Satisfaction questionnaire completed for each participants by interview. Data were analyzed with SPSS.

**Findings:** The results revealed that the overall rate of satisfaction is 88%. The most of satisfaction rate was from physician communication. Dissatisfaction from visit time was more than other instances. We found a significant relationship between satisfaction and patient age, education, marriage, job, relationship and physician age, gender, record of service, clinic type and activity time

**Conclusion:** In general patients were satisfied from their physicians, but recommended that physicians pay attention to related factors in this research.

Key words: Satisfaction, Patient, General physician, Clinic

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#### ORIGINAL ARTICLE CODE:057

## Antibiotic Resistance of Nosocomial Staphylococcus Infections with E\_Test Method



Background: Staphylococcus aureus is one of the most important etiologic agents causing severe infection in human. Extravagant use of vancomycin as first line treatment of infections caused by this organism, has led to production of vancomycin resistant staphylococci and enterococci, as an important health problem. The recommendations of international societies to control nosocomial infections, regarding making policies for vancomycin usage in health and treatment centers in order to prevent development and spread of vancomycin resistant Enterococcus and staphylococcus aureus. The goal of this study is determining sensitivity of S. aureus isolated from clinical specimens hospitalized patients using E-Test in order to find suitable primary therapeutic method.

**Methods:**This study is Analytic descriptive, and 14 different antibiotics were evaluated using E-Test method at Al\_Zahra hospital in Isfahan . Quality control was implemented using staphylococcus ATCC 29213. Data were analyzed by SPSS -13 software and WHOnet-5 after editing and entering into computer.

**Findings:**This study was done on 72 patients, 25 of whom were women and the rest were men. There was no meaningful relation between patients sex and the place of isolation of organisms, but regarding ward of hospitalization and resistance rate, highest resistance was observed in ICU and surgical wards (P<0.05). Highest sensitivity is to vancomycin (93.5%) and then to Rifampin (87%) and amikacin (71.4%). Highest resistance is against doxycycline and oxacillin (75%) and then cotrimoxazole and ofloxacin with 69% resistance stand at next level.

Conclusion:Because of inadvertent use of antibiotics, specially in hospitals?ICU and surgical wards, the resistance of potentially dangerous and lethal bacteria like staphylococcus aureus is high and presently only a few drugs like vancomycin exist that can cover this bacterium

**Key words:** Staphylococcus aureus, resistancy, sensitivity, MIC, E-Test

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#### ORIGINAL ARTICLE CODE:056

## Aquracy of modified Alvardo Score in diagnosis of pediatric Acute appendicitis in loqman Hospital



**Background:** Abdominal pain is one of the most Important and considerable issues in children. One of the most common causes of abdominal pain in children is acute appendicitis. The course of acute appendicitis in children is very faster than adults. Clinical manifestations in Pediatric patients are less typical and are not able to tell the exact history. In addition, no other signs or diagnostic tests can exactly detect the acute appendicitis in Pediatrics. Purpose of this study was the assessment of MAS in diagnosis is of acute appendicitis in Iranian Pediatrics patients.

**Methods:** This prospective study was conducted in Loqman Hakim hospital in 1384-5. Three hundred children aged from 4 to 12 years old with acute abdominal pain were assessed. All of information were taken from their data sheets and pathologic reports and scored in the form of 24 variables (age, sex ...)

The results were analyzed via statistic soft ware spss 12 and absolutes score of MAS was counted on the basis of clinical variables.

**Findings:** Based on the MAS the patients were divided to 2 groups: the first group were the patients with score of <7 including 147 cases (49 percent). The second group were the patients the score of  $\geq 7$  Including 153 cases, (51 percent). In overall, from 300 cases that operated with the suspicious of appendicitis, 269 cases (89.6%) in the pathologic assessment had acute appendicitis. from the patients with score of <7 (147 cases), 124 cases had diagnosis of acute appendicitis (84/35%) from the patients with score of  $\geq 7$  (153 cases), 145 cases had diagnosis of acute appendicitis (94.77%) this outcomes showed no significant difference between these groups in the diagnosis of appendicitis based of this score.

**Conclusion:** According to this analysis, sensitivity of this scoring system in the diagnosis of acute appendicitis was 53.9% and the specificity was 74.19% showing the MAS in diagnosis of acute appendicitis in Iranian pediatric patients is not soley effective and can't be an absolute clue and should be progressed in sensitivity and specificity.

**Key words**: Acute appendicitis, MAS, Pediatrics

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#### ORIGINAL ARTICLE CODE:055

### A study of patients admitted with serum sickness in Mofid children Hospital from (April 2005 to September 2007)



**Background:** Serum sickness is a type III hypersensitivity reaction mediated by immune-

complex deposition with subsequent complement activation, small-vessel vasculitis, and

tissue inflammation. Disease is caused by exposure to foreign proteins, equine diphtheria antitoxin. However, sporadic cases of serum sickness from non-protein antibiotics such as penicillins continue to occur.

**Methods:** A retrospective chart review was conducted in 28 children who were admitted

because of serum sickness in Mofid Children Hospital since April 2005 to September 2007.

**Findings:** Of 28 cases included in our study, 17 were male and 11 female. 24 of the 28 cases (86%) aged less than five years old. In 25 of the 28 patients (89%), the onset of symptoms occurred 1-3 weeks after administration of the inciting antigen, in two patients less than one week, and in one patient more than three weeks. Associated symptoms included arthritis 36%, subjective fever 75%, arthralgia 85%, skin rash and angioedema 100% were observed during admission. Furazolidone was the most common cause of disease in this study.

**Conclusion:** The incidence of serum sickness is decreasing as a result of public health vaccination programs that have decreased the need for specific antitoxins. However, currently, non-protein drugs such as furazolidone are the most common causes of serum sickness—like reactions.

**Key words:** Serum Sicknen, Type III Hypersensitivity, dray reaction.

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#### ORIGINAL ARTICLE CODE:054

### Thyroid Dysfunction in Perimenopausal Women



**Background:** There are mild changes in Hypothalamous – piuitary –thyroid axis with aging that may be accompanied with thyroid dysfunctions without clinical manifestation. The aim of this study is evaluation thyroid dysfunction in perimenopausal women.

**Methods:** This is a cross-sectional descriptive study that was performed on 100 women at the age of 40-60yr, who had referred to Gynecology and Menopausal clinic of Ghaem hospital, Mashhad University in 2005. At first, a questionnaire including clinical symptoms was completed ,then patients were submitted to laboratory tests including T3,T4,T3 RU,TSH,TG (triglyceride), HDL-cholesterol and LDL cholesterol. The information was analyzed by  $\chi 2$  and fisher exact tests. (P $\leq$ 0.05) was considered as statistically significant.

**Findings:** In this study the prevalence of subclinical hyper and hypothyroidism was 5% and 1% for overt conditions. In the women of 51-60 yr ,the prevalence of subclinical hypothyroidism was 6.25%. There was an increasing levels of TG in 20% of subclinical hypothyroidism and 13.64% of euthyroidism. There was also an increase in serum LDL cholesterol levels in 40% and 22.73% of two groups, respectively (P=0.001). Subclinical hyperthyroidism group was not different from normal group in the view of menstrual disorders.

**Conclusion:** subclinical thyroid dysfunction increases with aging and is relatively common in women. It is recommended that all aged women , should be gone under screening test for thyroid dysfunction.

**Key words:** Hypothyroidism, hyperthyroidism, thyroid dysfunction, perimenopausal Women

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Journal of Medical Council of Islamic Republic of Iran, VOL. 26, NO. 4, winter 2008: 499-503

#### • ORIGINAL ARTICLE CODE:053

### Serum Sicknem Level in RA Patients in Tehran (2005-2006)



**Background**: Rheumatoid arthritis (RA) is a chronic inflammatory disease with prevalence of 1% and may lead to disability and in some case to mortality. Selenium is a trace element with anti oxidant property.

The aim of this study was to compare the serum selenium level in Iranian RA patients and normal subjects.

**Method**: In 56 RA patients (according to 1998 ACR criteria) in rheumatology clinic of shahid mostafa khomeiny hospital after conversation patients examined by rheumatologist and with DAS-28 and Global Functional Status (GFS) disease activity estimated and then a blood sample drown for CBC, ESR, CRP, RF, Selenium level and in control group, matching with age and gender without RA or inflammatory disease serum selenium with atomic absorption method measured.

**Findings**: Average selenium level in RA patients was 90.76 micg/l (SD31.22) and 92.21 micg/l (SD48.65) in control group and there was not any significant difference between two groups (P= 0.889) and there was not any correlation between age, gender, ethnic, GFS, DAS-28, RF and serum selenium level but by increase of age (per 1 year) serum selenium decreased 0.865 micg/dl.

**Conclusions**: there was not any significant difference between RA patients and controls in serum selenium level.

**Key words**: rheumatoid arthritis, trace element, selenium

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#### ORIGINAL ARTICLE CODE:052

## Association between chronic periodontitis and acute myocardial infarction



**Background**: Chronic periodontitis has been associated with cardiovascular diseases. The hypothesis that oral, especially periodontal, infections systemic implications, is now gaining evidence.

**Methods:** In this Case- control study, cases were 45-60 years old patients who had been hospitalized in one of cardiologic care units or emergency wards of Isfahan city such Chamran and Khorshid Shahr hospitals, for acute myocardial infarction (AMI). Control group had no evidence of acute myocardial infarction, all receiving comprehensive periodontal examination. Information such as age, socioeconomic state, smoking and Dm history were obtained from hospital records and direct interview. Dependent variants attachment loss (AL) and lost teeth have been considered as characteristics of periodontal disease. In this research a total of 56 samples participated in our study, based on informed consent. The association between mean attachment level and number of missing teeth with studied groups were analyzed with **paired t** -test and SPSS 15 software.

**Finding:** Research findings showed that AL index mean in patients group (MI patients) and control group (healthy group) was  $3.11\pm1.05$  and  $2.46\pm0.85$  and lost teeth index mean in patients group and control group was  $7.78\pm5.12$  and  $4.67\pm3.47$  respectively. The statistical test showed that these differences in both indexes with p<0.05 are significant.

**Conclusion:** According to the findings, we can advise if elders in ordinary dentistry examinations show signs of periodontal disease and have some lost teeth may have higher risks for cardiovascular disease.

**Key words**: Chronic periodontitis, Myocardial infarction

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#### • ORIGINAL ARTICLE CODE:051

### study of causes of patellofemoral pain syndrome in taekwondo athletes compaired with non-athletes

#### **ABSTRACT**

Back ground: Taekwondo is one of the active and exciting martial arts, during competitions about 90 percent of stricks are executed by feet and through powerful tiny and fast movements, knee bending and straightening in different angle of hip joint meanwhile during raising lower limb, it is probable direct hits to ones thigh and knee.in the other hands, there are too complaints about anterior knee pains among athletes in clinics.therefor this make a question in mind: Is there any relationship between knees severes activities in this sport and patellofemoral pain syndrome?

The aim of this study is to answer to this question.

Methods:In this study ,30 professional male-taekwondo athletes from north of Khuzestan were selected separately according to inclusion and exclusion criteria after preliminary assessments by orthopedist and physiotherapist. Raw data about causes of patellofemoral pain syndrome and functional tests and physical measurements(thigh,knee and ankle joint,etc)were collected.similar data collected from a thirty non-athlete, the second group collected data from both groups analyzed with SPSS package.

Findings: The following results were obtained after comparing the two groups initial left and right knees measurements.

- 1.Athletes right knees patellofemoral joints assessment score (karlsson questionnaire score)was considerably lower than the nonathlete ones.(P=0/039)
- 2. There were no considerable differences in two legs Q-angle between two groups during sitting or standing conditions.
- 3. There were no considerable differences in measures obtained from knee functional tests between two groups.
- 4. There were no considerable differences in thigh circumferential size in different distances from knee joint line between two groups. conclusion:Low score obtained from karlsson questionnaire for taekwondo athletes right foot v.s non-athletes is an evidence for existence of more prepared factors for P.F.P.S .some of these factors are:
- 1. Tightness of muscles and soft tissue. 2.Lack of muscular efficiency (partial weakness) than overpressure knees in taekwondo. 3.Increased Q-angle.

Key words: Sport injuries, taekwondo, patellofemoral pain syndrome, karlsson questionnaire, Q-angle

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Journal of Medical Council of Islamic Republic of Iran, VOL. 26, NO. 4, winter 2008: 474-485

#### ORIGINAL ARTICLE CODE:050

# Exploratory Factor Analysis of Psychosocial determinats measures of physical activity amony Iranian adolescent Girls



The present study aimed at assessing the psychometric properties of psychosocial determinants of physical activity-related measures in Iranian adolescent girls.

These translated measures were administered to 512 ninth and tenthgrade Iranian high school students.

The results of a series of factor analysis showed that the self-efficacy scale contained a single factor, the social support scale contained two factors: family support and friend support, the physical activity "pros & cons" scale contained two factors: physical activity pros scale and physical activity cons scale, the change strategies scale contained a single factor, the environment scale also contained a single factor. Chronbach's alphas, mean inter–item correlations and test-retest coefficients showed that these solutions were reliable. These preliminary results provide support for using the mentioned scales to measure psychosocial determinants of physical activity in Iranian adolescent girls.

**Key words**: adolescent, exercise, factor structure; parallel analysis

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#### • ORIGINAL ARTICLE CODE:049

Urban-rural difference in weights and heights of children and its trend during two National Health Surveys (1991 and 1999)



**Background:** Growth studies show that height and weight of boys and girls are greater in urban compared with rural. However, the study of urban-rural differences in growth over time has been always of interest. In this study, in addition to the evaluation of urban-rural growth difference of Iranian children, its trend over a decade (1991-1999) has been studied.

method: Data from two Iranian National Health Surveys 1990-1 and 1999 were used to evaluation of urban-rural growth difference in children 2-18 year olds and its comparison in two surveys.

Results: In all ages, height and weight of boys and girls are significantly greater in urban compared with rural. Urban-rural differences in height and weight in 1999 compared to the 1990-1 differed significantly in either sex. The increase in median differences of weights and heights of girls and boys over this period were 0.151 and 0.191 kg and 0.1 cm respectively (p<0.0001).

Although, the corresponding relative difference increase ranged 0.2% to 1%.

Conclusion: Although, urban children have better growth status than rural but the differences in height and weight over the period of study, are not clinically appreciable.

**Key words:** Growth, trend, weight, height, urban, rural.

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