

Excerpts from Persian Medical Literature

The Role of Dyslipidemia in Sensorineural Hearing Loss in Children

The relationship between dyslipidemia and hearing is controversial, especially in children as data are scarce and limited to case reports. We sought to determine whether dyslipidemia is associated with sensorineural hearing loss (SNHL) in a group of 5 to 18-year-old children and adolescents.

Records of the children who attended the pediatric Endocrinology Clinic of Loghman Hospital in Tehran, Iran, between April 2007 and April 2009, were reviewed and the lipid profile were obtained. Following confirmation of their lipid profiles; patients were enrolled if the results were the same as previous (normal or dyslipidemic). Pure tone thresholds, speech discrimination score and lipid profiles were analyzed.

When controlled for age and sex, no associations between dyslipidemia and SNHL were found. There was also no statistically significant relationship between dyslipidemia and SNHL in different age groups.

No association was found between dyslipidemia and SNHL in children and adolescents aged 5 to 18 years.

Authors: Anbari S, Isazadeh D, Safavi Naieni A, Alaie M, Saadat N, Abdi A.

Source: *Iranian Journal of Endocrinology and Metabolism*. 2010; **11** (5): 561 – 567.

Scorpion Sting, a study in Kerman Province, Iran

Scorpion sting is a public health problem in various areas of the world. Iran has numerous scorpion species. South of Kerman Province is one of the regions with the highest prevalence of scorpion stings. Thus a study of the epidemiologic and predisposing factors for scorpion stings in this region seemed to be essential.

This study was a prospective case series conducted from 2003 – 2006. All cases of scorpion bites were referred to Kahnuj Hospital, Kerman, Iran. After examination and treatment, they were enrolled in the study for evaluation of epidemiologic characteristics and predisposing factors. Statistic analysis was performed using SPSS version 15 software. The Chi-square test was used to compare categorical variables.

Totally, 301 cases of scorpion sting were referred to the hospital. Most scorpion bites occurred between 24 to 6.00 a.m. and were mostly on the hands and feet. A total of 50% of the victims slept outdoors and 20% had garbage around their homes. There were only two deaths due to scorpion sting.

Precautionary measures such as building repairs and sleeping indoors can decrease the incidence of scorpion stings.

Authors: Hosseinasab A, Alidoosti K, Torabinejad MH.

Source: *Journal of Medical Council of Islamic Republic of Iran*. 2009; **27** (3): 395 – 405.

Evaluation of Molar Teeth and Periodontium in Children with Congenital Heart Disease

Children with congenital heart diseases require special dental treatment. Therefore, awareness of such specific needs is essential for these patients and their families.

The aim of the present study was to investigate the health status of molar teeth and periodontium in children with congenital heart diseases and evaluate the awareness of parents about their children's specific dental care needs.

A complete dental and oral examination was carried out on 32 children aged 7 to 11 with congenital heart disease, after which the parents' awareness over their children's specific dental care was assessed with the use of a questionnaire.

Of 108 permanent molars, 14.8% had caries and 34.3% were associated with enamel defect. Complete examination of 226 deciduous molars was also indicative of decay and enamel defect in 45.6% and 3.5%, respectively. Of all patients, 40.62% were found to have gingivitis and 18.7% had dental abscess. Regarding the parents' awareness, only 56% of children were shown to have a previous history of a dental visit and 68.7% of the parents were aware of their children's specific needs for antibiotic prophylaxis.

Based on the above findings, these children require regular dental visits and necessary information on preventive dental care, treatment, and oral hygiene should be given.

Authors: Zeinaloo AA, Pishva N, Razavi S, Edalat M.

Source: *The Journal of Qazvin University of Medical Sciences (JQUMS)*. 2009; **13 (3)**: 41 – 46.

Instructional Games Effect on Learning of Some Mathematics Concepts in Educable Mentally Retarded Students

The purpose of this research was to determine the effects of instructional games on learning some mathematical concepts in male students who were educable mentally retarded.

The method of this research is quasi-experimental. By convenient sampling of two elementary schools in Tehran, mentally retarded male students were selected. All first grade students were randomly assigned to the experimental and control groups (8 students in each group). The mathematical concepts were presented to the experimental group via instructional games and a regulatory teaching style was conducted with the control group. Four investigators inventive instructional games, four inventive sub-tests as well as an investigator's inventive post-test were used. Data were analyzed by Mann-Whitney U test.

There was a significant difference between the two groups in the total score of mathematics concepts ($P=0.025$). Additionally, the intervention caused an increase in the means of numbers in the experimental group in each of the concepts when compared to the control group, but no significant difference was noted. Instructional games can improve the learning of mathematical concepts in mentally retarded students.

Authors: Akhvasat A, Bahrami H, Poormohammadrezye Tajrishi M, Biglarian A.

Source: *Quarterly Journal of Rehabilitation*. 2009; **10 (3)**: 8 – 18.

Bacterial Contamination of Water Supply in Dental Unit Water Lines

Assessment of microbial contamination in dental unit waterlines has been focused on due to the high risk of dangerous infections in immunocompromised patients. The purpose of this study was to evaluate bacterial contamination of the water supply in dental unit water lines at The Dentistry School of Zahedan, Sistan and Balouchestan Prvince, Iran.

In this descriptive analytical study, an investigation of 400 water samples that were collected from four parts of each unit including: air/water syringe, turbine handpiece (before and after flushing), cup filler and one water sample collected from the city water reservoir at Zahedan Faculty of Dentistry during 2008 was undertaken. Water samples were taken on Saturdays (the first working day of the week in Iran) and Wednesdays (the last working day of the week), both before and after treatment on the same unit. Samples were transported in closed sterile containers to the microbiology laboratory. All samples were incubated on blood agar and McConkey plates for 72 hours at 37°C. Bacterial contamination was subsequently evaluated. Data were analyzed by ANOVA and *t*-test.

The total mean bacterial count was 6914 cfu/mL. Mean bacterial contamination on Saturdays (8859 cfu/mL) were higher than Wednesdays (4969 cfu/mL). Mean bacterial contamination before treatment was (5155 cfu/mL) which was less than at the end of treatment (8673 cfu/mL) on the same unit. Mean bacterial contamination of the Prosthetics Clinic (13439 cfu/mL) was higher than in the other clinics. The mean bacterial contamination of the Periodontology Clinic (3012 cfu/mL) was the least.

The result of this study demonstrated a high microbiological level in the dental unit water lines. Therefore dentists must be made aware of the high level of microorganisms in the dental unit's water and thus minimize the risk of infection to both staff and patients.

Authors: Honarmand M, Shahraki S, Mollashahi L.

Source: *Journal of Zahedan University of Medical Sciences and Health Services (TABIB-E-SHARGH)*. 2009; **11 (4)**: 53 – 62.