

Young Researchers Abstracts

Oral Presentation

Assessment of Allergic Sensitization in Children with Asthma

N Alizadeh-Korkinejad; M Sadeghi Shabestari;
B Rahnama

1. Immunology, Asthma and Allergy Research Institute, Tehran University of Medical Sciences; Tehran, IR Iran
2. Department of Immunology, Tabriz university of Medical Sciences, Tabriz, IR Iran

Objective: The health and economic impact of childhood asthma is considerable and there is worldwide concern about the increasing prevalence of asthma disease. Our knowledge about allergic sensitization in asthma helps us for planning a better preventive and therapeutic schedule. The aim of this study is evaluation of allergic sensitization of asthma disease in children hospital of Tabriz, a referral center of northwest of Iran.

Methods and Subjects: In a cross-sectional descriptive setting, we evaluated 227 children (aged 0-16 years) with different kinds of allergic diseases attending to the children hospital of Tabriz through a 12-month period. The definite diagnosis of asthma was done by allergy subspecialist according to signs and symptoms of Asthma and Pulmonary Function Test results. The skin prick test was applied for common food allergens and aeroallergens.

Findings: Two hundred twenty seven children, 127 males and 100 females, with different kinds of allergic diseases were enrolled in the study. The frequency of asthma was: 46 (20.3%) [27 (58.6%) males and 19 (41.3%) females]. The mean age was 6.33 ± 3.56 years. All of them were outpatient. The frequency of other allergic diseases were: allergic rhinitis (23.3%), atopic dermatitis (20.3%), food allergy (16.3%), urticaria (12.8%), drug reactions (10.6%) and anaphylaxis (0.9%). Asthma was the most prevalent allergic disease in patients aged 4-6 years old. In 11 asthmatic patients, suffered from sinusitis simultaneous. Results of skin prick test in asthmatic patients were: Food 17(37%) including: Banana 57%, tomato 57%, wheat flour 42%, spinach 28%, almond and pepper and egg and peanut 14%. Other allergens were: Dander 14 (30.5%), Pollen 13(28.2%), Mite 13(28.2%) and Latex 3 (6.5%).

Conclusion: The current study showed that the prevalence of asthma in children attending to our center is the same as other reports in literature. Food allergens

are the most prevalent allergens in skin prick test from results of asthmatic patients, probably due to the fact that our patients were children, so adequate diet is necessary for well controlling asthma.

Key Words: Asthma; Child; Allergy; Urticaria

Poster Presentation

Assessment of the Consensus about (Adeno) Tonsillectomy between Pediatricians and Otolaryngologists

Fariborz Ghaffarpasand; Abdolhassan Faramarzi;
Abdolkarim Kadivar; Marzieh Forghani

Student Research Committee, Fasa University of Medical Sciences, Fasa, IR Iran

Objective: Adenoidectomy and tonsillectomy operations are frequently performed surgical procedures among children. In our center some of these operations are not accepted from pediatricians' point of view. So we accomplished this study in order to evaluate the correlation between the otolaryngologists and pediatricians' point of view about the indications of (adeno) tonsillectomy in our centre.

Methods and Subjects: This study was a cross-sectional study being performed in ENT unit of Motahari clinic and pediatric unit of Dastgheib hospital. 200 children (1-18 years) were visited by otolaryngologist first and a questionnaire containing indications of (adeno) tonsillectomy was filled for them. The pediatrician visited the patient the same day and filled the same questionnaire. Likert scale was used for grading the indications. Kappa statistics were used to assess the agreement.

Findings: The most frequent indication for adenoidectomy was recurrent acute tonsillitis. The strongest correlation between otolaryngologists and pediatricians' point of view was cardiac valvular disease secondary to streptococcal tonsillitis ($\kappa=0.56$) and the lowest correlation was adenoid face ($\kappa=0.001$). There was a poor agreement between otolaryngologist and pediatricians' view about adenotonsillectomy ($\kappa=0.06$).

Conclusion: The results of this study show the discrepancy between otolaryngologists and pediatricians' view about the indications for tonsillectomy in our center. This discrepancy causes the unaccepted tonsillectomies or adenoidectomies from pediatricians' point of view. Unifying the indications of

tonsillectomy and adenotonsillectomy in these two specialties may reduce this discrepancy.

Key Words: Adenotonsillectomy; Otolaryngologist; Pediatrician; Indications

Oral Presentation

Common CFTR Mutations in Cystic Fibrosis Patients in North of Iran

Ali Ghabeli Juibary, Haleh Akhavan-Niaki, Mohammad R. Esmaeili Dooki, Ali Ghabeli Juibary

Babol University of Medical Sciences, Babol, IR Iran

Objective: Cystic fibrosis (CF) is the most common inherited disorder in Caucasian populations, with over 1400 cystic fibrosis transmembrane conductance regulator (CFTR) mutations. The type of mutations and their distributions varies widely between different countries and/or ethnic groups.

Methods and Subjects: Thirty non relative Iranian cystic fibrosis patients living in Mazandaran province were screened for the 5 CFTR gene mutations using Reverse Dot Blot/ polymerase chain reaction (RDB/PCR). Analysis of exons 7, 10, 11, 20 and 21 of the CFTR gene was performed in patients for the following mutations: deltaF508, N1303K, G542X, R347P and W1282X.

Findings: As a result of this screening, only one mutation was found: deltaF508 mutation was found in 13 (21.66%) alleles which have one of the lowest frequencies ever reported. Thus, a total of one mutation covers 21.66 % of CF alleles.

Conclusion: These finding will be used for planning future screening and appropriate genetic counseling programs in Iranian CF patients.

KeyWords: Cystic Fibrosis; CFTR; Mutation; Iran; Mazandaran; Reverse Dot Blot; Delta F508

Oral Presentation

A Survey of Viewpoints of Clinical Nurses about the Role of Exercise in Recovering Patient Childes: a Qualitative Study

Mahsa Khodayarian; Azam Hedayati; Davoud Fotuhi

Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Objective: Patient childes are less familiar with exercise than healthy ones and need more exercise for increasing their physical power. Nurses and physicians

should enhance positively childes' desire to exercise. Thus this study was accomplished with the purpose of determining the viewpoints of clinical nurses about the role of exercise in recovering of patient childes.

Method and Subjects: This study was done by qualitative approach and semi-structured interviews from 9 clinical nurses in pediatrics wards in one educational hospital in Yazd. Purposeful sampling was applied and continued to data saturation. The text of interviews was saved literally and content analysis was used to identify the categories and subcategories found in the nurses descriptions.

Findings: The results showed all nurses accented on the importance of exercise in decreasing physical and mental tensions of patient childes and expediting their recovery trend. The majority of the participants were not aware of suitable exercise for patient childes and they declare that haven't attend in any related workshop, yet. The most important barriers in implementation of childes specific exercise programs were discussed as shortage of suitable place and facilities for exercising and trained instructor.

Conclusion: Regular exercise is one of the ways for acquiring health in childes. but unfortunately the hospitalized childes have low physical activity that can increase their susceptibility toward different illnesses. Therefore, the interested and trained nurses can provide the list of activities with involving the childes' families and suggest the exercises that are fitted to their age, interest, and physical status and subsequently shortening their hospitalization duration.

Key Words: Clinical nurses; Exercise; Patient childes; Qualitative study

Oral Presentation

Prognostic Value of Immunologic Factors in Pediatric Cataract Surgery

Fariborz Ghaffarpasand; Alireza Ghaffarieh; Sadollah Puyan; Nazafarin Honarpisheh; Shadi Fallah Ranjbar

Student Research Committee, Fasa University of Medical Sciences, Fasa, IR Iran

Objective: Intra ocular lens (IOL) implantation is the most commonly used method for aphakia correction in children. However, the visual outcome is poor in most unilateral cases because of amblyopia and postoperative inflammation. This study aims to determine the characteristics of the age specific immune response in IOL implantation in different postoperative courses.

Methods and Subjects: Eighty-seven children (87 eyes) aged from 3 to 15 who were referred to our center

due to cataract underwent lensectomy with implantation of the posterior chamber intra-ocular lens (IOL). The number of peripheral blood active T lymphocytes, CD4+, CD8+, HLA DR+ lymphocytes and antibody response to lens (α -crystalline) and retina (S-antigen) proteins were determined.

Findings: Overall 51 (58.6%) boys and 36 (41.4%) girls with mean age of 9.79 ± 4.86 (range 3-15) years were studied. We recorded the pronounced growth of representation of the T-cell link increase in the relative ($P=0.04$) and absolute ($P=0.013$) content of CD3+ lymphocytes, absolute content of CD4+ ($P=0.002$) and CD8+ lymphocytes ($P=0.0001$). The content of HLA-DR+ lymphocytes ($P=0.002$) also increased significantly. The CD4+/CD8+ ratio increased from 1.34 ± 0.14 to 1.23 ± 0.11 ($P=0.031$). A high rate of the positive and doubtfully positive results of the serum test for α -crystalline and S-antigen was typical of both complicated groups.

Conclusion: The most unfavorable prognostic sign is sensitization to S-antigen on the background of increase in HLA-DW-lymphocytes and decrease in the other parameters of immunity that can indicate the autoimmune state. In such cases the risk of postoperative long-term inflammation with its transformation into a persistent course is high even after the atraumatic operation.

Key Words: Intraocular Lens (IOL) implantation; Cataract; Inflammatory Parameters; Children

Oral Presentation

Hepatitis B and Hepatitis C among the Homeless Youth Tehran, Iran

Nina Faramarzi¹, MD; Abdollah Karimi², MD; Sedighe Tabatabaie², MD

1. Medical Student, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, IR Iran
2. Mofid Children Hospital, Shahid Beheshti University of Medical Sciences, Tehran, IR Iran

Objectives: Nowadays the issue of street children is one of the most important issues of societies from industrial city to developing cities. There are approximately one hundred million children spending their life in streets. With regard to the last description of the International Organizations for street children, many of statistical result and numbers are reported less than the actual facts. Many countries are suffering from the individual's relation, the issue of street children despite possessing common properties, and by controlling this phenomenon each country will get in specific picture.

Methods and Subjects: 203 street children picked up from different places of Tehran and settled at welfare center, where provides shelter for street children, were chosen for this study. These children were clinically examined by pediatrician and requested to answer the questionnaire (asking their gender; age; birth place; educational status; the origin of the family; sleeping place; occupation, income and social security of parents; number of siblings; reasons for being in streets; period of living in the streets; street friends; means of earning money; substance use. Smoking level was classified as heavy (10 and more per day), medium (1-9 per day) and rare (1-2 per week). In order to determine the existence of Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) infections, ELISA, PCR and RT-PCR methods were performed on serum samples.

Findings: Among 203 street children studied in this research, 196 children were boys and 7 children were girls. 6 cases (3%) were HBsAg positive, 54 cases were HBsAb positive (26.6%) and 16 cases were HBcAb positive (8%). 7 cases (3.5%) were HCV Ab positive. All the positive cases were boys. There were 3 Iranian and 3 Afghanian kids among HBsAg positive cases. They did not smoke, they did not have tattoo, all of them had family which one of them lived alone and other 5 cases lived with their family and their average age was <14. In HCV Ab positive cases there were 5 Iranian and 1 Afghanian kids. 3 children did not have family, 6 children did not smoke and one of them was addicted to crack and had tattoo on his body. The average age of this group in three cases was $14 >$ and in four cases $14 <$ years. 4 cases were HBV PCR positive and 6 cases were HCV RT-PCR positive.

Conclusion: According to this results, additional laboratory examination for screening of acquired infectious disease such as hepatitis seem to be necessary. Although in this type of infection clinical symptom may appear a few months after exposure to the virus, it can be transmissible in this latent period.

Key Words: Hepatitis B; Hepatitis C; Street children

Poster Presentation

Nutrition and Student Performance at School

Mahdi Akhbardeh, MD

Boston, USA

This article reviews research from published studies on the association between nutrition among school-aged children and their performance in school and on tests of cognitive functioning. Each reviewed article is accompanied by a brief description of its research

methodology and outcomes. Articles are separated into 4 categories: food insufficiency, iron deficiency and supplementation, deficiency and supplementation of micronutrients, and the importance of breakfast. Research shows that children with iron deficiencies sufficient to cause anemia are at a disadvantage academically. Their cognitive performance seems to improve with iron therapy. A similar association and improvement with therapy is not found with either zinc or iodine deficiency, according to the reviewed articles. There is no evidence that population-wide vitamin and mineral supplementation will lead to improved academic performance. Food insufficiency is a serious problem affecting children's ability to learn, but its relevance to US populations needs to be better understood. Research indicates that school breakfast programs seem to improve attendance rates and decrease tardiness. Among severely undernourished populations, school breakfast programs seem to improve academic performance and cognitive functioning.

Key Words: Nutrition/performance in school

Oral Presentation

Seroprevalence of Human Herpes Simplex, Hepatitis B and Epstein-Barr viruses in Children with Acute Lymphoblastic Leukemia in Southern Iran

Fariborz Ghaffarpasand; Seyeb Babak Mahjour; Mehran Karimi; Abbas Ghaderi

Student Research Committee, Fasa University of Medical Sciences, Fasa, IR Iran

Objective: Epidemiologic studies suggest that at least one step in the process of acute lymphoblastic leukemia (ALL) development involves an infectious agent. The aim of this study was to investigate the seroprevalence of Herpes Simplex Viruses (HSV1 and HSV2), Epstein-Barr Virus (EBV) and Hepatitis B Virus (HBV) in children with ALL in southern Iran.

Methods and Subjects: 90 patients with ALL and 90 age-sex matched healthy participants were enrolled in this study. Antibodies (IgG) against HBsAg, HSV1, HSV2, EBV different antigens including Epstein-Barr nuclear antigen-1 (EBNA-1), viral capsid antigen (VCA) and early antigen (EA) were measured by enzyme-linked immunosorbent assay (ELISA).

Findings: There were 54 (60%) male and 36 (40%) female in both study groups with mean age of 8.47 ± 3.61 and 8.61 ± 2.84 years in case and control group respectively ($P = 0.812$). The prevalence of antibodies

against HBsAg ($P = 0.002$), HSV1 ($P < 0.0001$), VCA ($P = 0.021$) and EA ($P < 0.0001$) antigens of EBV were significantly higher in ALL patients.

Conclusions: We showed that the seroprevalence of EBV, HSV1 and HBV was higher in patients with ALL. Hence, childhood ALL may be associated with an infection with these viruses, although nor latent infection nor congenital infection cannot be excluded by this method.

Key Words: Acute Lymphoblastic Leukemia; Epstein-Barr Virus; Hepatitis B Virus; Human Herpes Simplex Virus

Poster Presentation

Food and Activity in Out of School Hours Care in Victoria

Mahdi Akhbardeh, MD

Boston, USA

Objective: To describe characteristics of the Victorian out of school hours care (OSHC) sector to assess its potential role in promoting healthy lifestyles to children and their families. Design: Written questionnaires were sent to 1100 Victorian OSHC programs to collect information about the services, foods and activities offered to children, the training and resources utilised by staff and the type of information sent home to parents/guardians.

Methods and Subjects: A total of 426 Victorian OSHC coordinators completed questionnaires in the present descriptive study (39% response rate). Setting: Out of school hours care provides care for 5–12 years olds before school, after school and/or during school holidays.

Findings: Over 80% of coordinators reported offering fruit, breads, cereals, and milk and dairy products. One-third offer vegetables as part of meals or snacks. One-third reported offering cakes, biscuits and/or slices, and chips and/or pastries. About 17% reported offering water, whereas 24% reported offering cordial/soft drinks and fruit juice. Cooking was offered as an after-school activity by about half of those surveyed. Active games were common (62%) as were indoor active games and sports (36%). Sedentary activities were also commonplace (37–51%). Only about 30% of OSHC coordinators had participated in nutrition and/or physical activity training in the previous two years. Few OSHC programs sent home health information to parents/guardians.

Conclusion: Opportunities exist to help Victorian OSHC programs with nutrition and physical activity information, resources and training. Although the

findings of the present study are specific to Victoria, they highlight the potential role of the growing OSHC sector to help improve the health of children.

Key Words: Child care; Child nutrition; Health promotion; Physical activity; School-age children

Oral Presentation

Longitudinal Trends in Consumption of Vegetables and Fruit in Finnish Children in an Atherosclerosis Prevention Study

Mahdi Akhbardeh, MD

Boston, USA

Objective: To assess prospectively the consumption of fruit and vegetables and its' correlation to the parental consumption in boys and girls taking part in an atherosclerosis prevention study (Special Turku Coronary Risk Factor Intervention Project for Children (STRIP) study). Hypothesis: Nutrition counselling focused on cardiovascular health effects vegetable and fruit consumption.

Methods and Subjects: A prospective, randomised, clinical trial. Subjects: Children were recruited to the STRIP study between 1989 and 1999. At the age of 7 months, children were randomised to the intervention (n=540) or the control group (n=522) and were followed up until the age of 11 years. Intervention: Families in the intervention group have, since randomisation, received biannual individualised dietary counselling aimed at reduction of cardiovascular risk factors, especially saturated fat intake. Food records were used to assess fruit and vegetable consumption of children and parents.

Findings: The percentage of total energy intake provided by fruit and vegetables decreased when the children grew older (P for age <0.001). The 1- to 10-year-old intervention boys consumed more vegetables (mean difference 3.18 g/day; CI 1.48–4.86; P<0.001) and fruit (mean difference 10.1 g/day; CI 5.28–14.94; P<0.001) than did the control. Mother's consumption correlated with the consumption of their daughters and sons, whereas father's consumption correlated only with the consumption of their sons.

Conclusions: Finnish children taking part in the atherosclerosis prevention study had a remarkably low fruit and vegetable consumption, which furthermore decreased with age. The children's consumption correlated with the parental consumption, except between boys and mothers. A slight intervention effect was present only among boys

Key Words: Children; Fruit; Vegetables; Cardiovascular disease

Oral Presentation

Assessment of Aggression Rate in Adolescent Girl Athletes of Martial Arts and Comparison with Control Group

Sara Lotfiyan, MD; Vahid Ziaee, MD; Homayon Amini, MD

Sports Medicine Research Center, Tehran University of Medical Sciences,

Objective: Martial arts have a significant growth in recent decades, and young girls' attention to these sports has increased with regard to contact nature of these sports. There have always been questions about the effect of them on adolescents' behavior, especially aggression. The purpose of this study was assessment and comparison of total aggression and its subscales-reactive anger, instrumental anger, anger control- rates in four groups of karateka, judoka, swimmers and non athlete.

Methods and Subjects: this study was done in case-control method in 11 to 19-year old girls using the "Adolescent Anger Rating Scale" to assess the aggression rate.

Findings: 291 questionnaires (judo 70, karate 66, swimming 59, non athlete 96) were analyzed. The mean age of participants was 15.49(1.93) years old and the average age of swimmers was less than other groups. Total anger scores were significantly different among the groups (p=0.001), that reduce from judoka, to non athlete, karateka, and swimmers, in order. Total anger scores of swimmers was significantly less than non athlete control group. Instrumental and reactive anger subscales had also significant differences among the groups, but the difference of anger control among the groups was not significant. In one by one analysis, only instrumental anger scores of judoka were significantly more than swimmers, and reactive anger of swimmers was significantly less than non athlete group. However, with regard to the age differences among different groups, the difference of total anger score was not significant

Conclusion: The results of this study suggest that the aggression rate was higher in judoka compared to other groups, the difference of which with swimmers was significant. With regard to age, it was expected that judoka get a lower aggression score, which was not evident in statistical analysis.

KeyWords: Aggression; Adolescent; Judo; Karate

Oral Presentation

Evaluation Therapeutic Management and Nursing Considerations of Children after Acetaminophen PoisoningSaeed Mehrzadi¹; A Satari²

1. Shahid Chamran University, Ahvaz, Iran.
2. Faculty of Nursing, Arak University of Medical Sciences, Arak, Iran.

Acetaminophen is increasingly used as a mild analgesic / antipyretic drug, especially as a substitute for aspirin and is the most common source of drug poisoning among children. Pathophysiology: Acute over dose of acetaminophen result in hepatic damage, the damage is not from the drug it self but from one of its metabolites, which in large quantities is toxic to the liver cell. Clinical manifestations: Signs and symptoms occur in four stages if the poisoning untreated. The first stage 2-24 hours after ingestion there are signs of nausea, vomiting, sweating, anorexia and pallor. The second stage of 24 to 36 hours which occurs between ingestion and onset of hepatic symptoms. The third stage, pain in the upper right quadrant followed by signs of hepatic damage last no more than 7-8 days. The fourth stage, in which the liver enzyme SGOT begins to drop and recovery occurs. Therapeutic management: 1) Initial management is induced emesis or lavage, if the ingested dose is greater than 140 mg/kg. 2) nasogastric tube use. 3) Intake out put use. 4) activated charcoal many used. Nursing considerations: Nursing goals are essentially the same as those discussed for salicylate poisoning the nurse needs to be familiar with acetaminophen preparations, such as cold remedies, to identify possible instances of ingestion

Key Words: Therapeutic management; Nursing cares; Children; Acetaminophen; Poisoning

Poster Presentation

Bell palsy

Amin Satari, BS; S Mehrzadi, MD

Shohada Hospital, Dehloran

Bell palsy is an acute unilateral facial nerve palsy that is not associated with other cranial neuropathies or brain stem dysfunction and usually self-limiting. It is a common disorder at all ages from infancy through adolescence and usually develops abruptly about 2 weeks after a systemic virus infection. The preceding infection

such as Epstein-Barr, herpes simplex and mumps virus. The annual incidence of Bell's palsy is about 20 per 100,000 population, and the incidence increases with age. Symptoms of Bell's palsy usually begin suddenly and reach their peak within 48 hours. Early treatment (within 3 days after the onset) seems to be necessary for therapy to be effective that consists of: 1) steroids (prednisone) 2) Antiviral (aciclovir or valaciclovir) 3) surgical procedures. The prognosis for individuals with Bell's palsy is generally very good and excellent. The extent of nerve damage determines the extent of recovery.

Key Words: Bell's palsy; Facial nerve; Infection virus

Poster Presentation

Antibiotic Resistance Patterns of Enteropathogenic E.coli Serogroups Isolated from Under 5 Year Old Children with Diarrhea

Abolfazl Akbari; Mohammad Mehdi Soltan Dallal, Fatemeh Fard Sanei

Faculty of Public Health, Tehran University of Medical Sciences, Tehran, IR Iran

Objective: Enteropathogenic E.coli (EPEC) strains have high prevalence in children and are of the most important diarrheagenic agents in developed and developing countries that may cause severe diarrhea even death. Prevalence and antibiotic resistance patterns differ in different areas and is dependent on many factors. Knowledge of the patterns is necessary for physicians in order to treatment of infections. This research aimed to detection of EPEC serogroups in diarrheal under 5 year old children and study the patterns of antibiotic resistance of these strains.

Methods and Subjects: 278 samples collected from children with diarrhea visited in Ali Asghar hospital. Bacterial isolates confirmed as EPEC serogroups on the basis of standard biochemical and serological tests. AntibioGram test was performed using 16 different antibiotic discs by disc diffusion agar (Kirby-Bauer) method.

Findings: Prevalence of EPEC strains particularly serogroup poly IV in under 1 year old children were more than other serogroups. All strains (100%) were sensitive to meropenem and imipenem. 63.2% strains were resistant to nalidixic acid, tetracycline and amoxicillin. 89.5 % strains were sensitive to ceftazidime and gentamycin. Results indicated most strains completely or intermediately were resistant to nalidixic acid, tetracycline and amoxicillin.

Conclusion: antibiotic resistance of EPEC strains to nalidixic acid, tetracyclin and amoxiciline is increasing. We should use new and effective antibiotics for certain treatment due to increasing resistance towards antibiotics.

Key Words: Antibiotic resistance; Enteropathogenic *Escherichia coli*; Children; Diarrhea

Oral Presentation

Children's Drawing: A Way to Discover their Personalities and Problems/ Can Drawings Tell Us about a Child's Personality or Emotional Stability?

Seyedeh-Zahra Mousavi Khorshidi; Leila M Jouybari, MD

Students Committee Research Center, Golestan University of Medical Sciences, Gorgan, IR Iran

Objective: Studies into the relationship between personality and painting date back nearly 70 years. Researches show that painting helped many of the children to tell us about their personal problems. The mood of a child's painting may be in sharp contrast to its overt behavior. When they draw a human indeed reflect the body images and desires. **Objective:** This study aimed to examine how preschool children express their emotion through drawing, and was carried out by examining children's thematic drawings of human figure.

Methods and Subjects: In this study in 2009, 408 preschool children from 9 primary schools in Gorgan (Northern Iran) participated using a convincing sampling. They were asked to draw a human figure on a white A4 paper. We did set no limitation for the color or gender of their drawings. The drawings were assessed by means of checklist.

Findings: 51.47% of children were boy and average age of them was 6.34 year old. Paintings reviews revealed that generally 53.92 percent of children painted a normal human which is indicate child consistency. 48.03 percent of children were selected the middle of the paper for drawing (being oriented and present), while 51.96 percent of children drew in corner of the paper (being low-value). 60.78 percent used vertical direction for drawing (being reasonable). 41.17 percent of children drew a small size man (timidity and fear) and 56.86 percent of them drew a happy one. In 34.8 percent of drawings the man's lips were compressed (stress and pressure).

Conclusion: Children like to draw, and through their drawing they reveal worrying issues. Children's

paintings showed that a majority of them are compatible, logical and happy but a minority percent of them suffered from lack of security, aggression, feeling low value, low attractiveness, fear and tension.

Key Words: Preschool children; Human figure drawing; Personality

Oral Presentation

Prevalence of Acid-Base Imbalance and its Probable Causes in Admitted Patients with Failure to Thrive in Tehran Pediatrics Center Between 2002 to 2007

Nastaran Mahboobi¹, MD; Farzaneh Motamed^{1,2}, MD; Nilofar Hadjizadeh^{1,2}, MD; Mehri Nadjafi^{1,2}, MD

1. Children's Medical Center, Pediatrics Center of Excellence, Tehran, IR Iran
2. Department of Pediatrics, Tehran University of Medical Sciences, Tehran, IR Iran

Objective: Failure to thrive (FTT) describes children's growth problems which can be the result of organic and non-organic disorders. There are several reports of acid-base imbalance in FTT patients that could not be related to organic factors. To our knowledge, etiologies of acid-base imbalance have not been discussed in those reports. Therefore, we hope this study will strike new ideas about patients with FTT.

Methods and Subjects: A retrospective chart review of all admitted FTT cases in Tehran Pediatrics Center between 2002 and 2007 has been performed. The first Arterial Blood Gas (ABG), underlying diseases, serum electrolytes levels, patients' age and gender, and their hospitalization period were the main information obtained from the patients' files. Correlations between the variables were determined via Chi square test, using SPSS software.

Findings: From 439 relevant files, 315 cases were compatible to our study and from them 97 cases (39.4%) had acid-base imbalance. In 15 patients (28.8%) with metabolic acidosis and in 15 patients (33.3%) with metabolic alkalosis NOFTT was observed. Non-organic FTT (NOFTT), metabolic disorders, and chronic renal failure were the most prevalent causes of metabolic acidosis respectively. In addition, in FTT patients with metabolic alkalosis, NOFTT, gastroesophageal reflux and cystic fibrosis were the most frequent causes.

Conclusion: Regarding the results, NOFTT was the most prevalent cause of acid-base imbalance in FTT patients. Although the association between NOFTT and metabolic acidosis has been illustrated previously, this

study showed that it can also be associated with metabolic alkalosis. To clarify this observation, more studies are suggested.

Key Words: Failure to thrive (FTT), acid-base imbalance, pediatrics

Poster Presentation

The Survey of Association between Cardiovascular Fitness and Inflammatory Markers in Boys Aged 11-14 Years

Ali Asghar Fallahi¹, Abbas Ali Gaeni², PhD; Abdoalreza Kazemi², Ramin Kordi¹, MD, MSc, PhD

1. Sport Medicine Research Center, Tehran University of Medical Sciences, Tehran, IR Iran
2. Sport Physiology, College of Physical Education, University of Tehran, Tehran, IR Iran

Objective: Inflammatory markers are predictive factors for atherosclerosis in childhood and adolescence and cardiovascular disease in adulthood. We investigated whether markers of inflammation including a) cytokine (IL-6), b) acute-phase reactant [C-reactive protein (CRP)], c) white blood cell (WBC) count and its subgroups are associated with maximal oxygen consumption (VO₂max) in overweight and normal children.

Methods and Subjects: Subjects were 26 boys aged 11-14 years included in two groups of overweight (n=10) and normal weight (n=16) children. VO₂max was measured employing an incremental graded exercise test. IL-6 and CRP levels as well as WBC count were measured. Multivariable regression was employed to evaluate whether inflammatory markers were associated with VO₂max.

Findings: Mean VO₂max for all subjects (n=26) was 36.35±10.42 ml/kg/min. This rate was lesser for overweight subjects (25.77±5.04) than in normal weight children (41.54±5.96). Log IL-6, log CRP, and WBC count were correlated with VO₂max. Also subgroups of WBC including Leukocytes, Lymphocyte, Neutrophils, Monocytes and Eosinophils associated with VO₂max.

Conclusion: IL-6, CRP and WBCs were inversely associated with aerobic or cardiorespiratory fitness levels measured by VO₂max in children. This was independent of BMI of the subjects. Also subgroups of WBC including Lymphocyte, Neutrophil, Monocyte and Eosinophil counts were inversely associated with VO₂max and were higher in the low VO₂max group compared to the high VO₂max group. Our results suggest that VO₂max could predict the inflammatory status of children. Also our results indirectly suggest that aerobic exercise in overweight and normal weight

children might have cardiovascular protective effects. This finding has implications for public health.

Key Words: Inflammation; VO₂ max; Children; Obesity

Poster Presentation

Reye's and Reye's-like Syndromes, the Mechanism, Causation and Prognosis

Masoumeh Tavakoli Yaraki, Fatemeh Karami Tehrani

Tarbiat Moddares University, Tehran, IR Iran

Reye syndrome is a biphasic rare but severe illness that occurs mainly in children and adolescents (incidence of 0.79/ 1.000.000 children in France¹), with a mean mortality rate of about 40% that seems to be higher in males than females. Reye's syndrome exists, a definitive diagnosis requires an examination of the ultrastructure of the cell, which is not always practical. Any element of uncertainty about the diagnosis, particularly when so many acquired and inherited diseases can present with very similar syndromes, makes exacting clinical research difficult. A viral prodrome with infection of the upper respiratory tract or bowel, or varicella is followed several days later by an abrupt onset of encephalopathy heralded as profuse, effortless vomiting. Recent observations demonstrated that 90% of children affected by Reye's syndrome had been treated with salicylate therapy during a viral infection. Aspirin is metabolised rapidly to Salicylate is metabolized within hepatocyte mitochondria and endoplasmic reticulum to significant amounts of hydroxyhippurate and this metabolite inhibits the mitochondrial functional enzyme because of similarity to its substrate. Hepatomegaly, cerebral oedema, liver steatosis and fatty degeneration in visceral organs. The incidence of Reye's syndrome is different in various areas of the world, depending on genetic predisposition and exogenous factors. Reye's-like syndromes can often be associated with pre-existent metabolic disorders like primary or secondary β -oxidation defects or impaired gluconeogenesis. Transaminase, hyperammoniaemia, a prolonged prothrombin time and marked hypoglycaemia are laboratory signs. An attempt at monitoring of neurologic, respiratory, cardiovascular, coagulative, metabolic and water and electrolyte balance situation is necessary for possible interventions. The most hopeful line of study appears to be a detailed epidemiological study of cases as they occur in any geographical area attempting to identify and thus avoid possible aetiological factors.

Key Words: Reye syndrome; Reye's-like syndrome; Salicylate therapy; Transaminase

Poster Presentation

The Role of Schools Nurse in Prevention and Screening from H1N1 (Hog influenza) in Schools

Saeed Ghasemi; Saeed Babajani; Fatemeh Kalroozi

BA Student Amy Nursing, AJA Medical Sciences University, Tehran, IR Iran

The hog influenza is severe and very contagious disease in hogs which is produced by several kinds of hog influenza viruses. Subtype is h1n1 that is seen in moderate places. sometimes the hogs can contaminate with more than one kind virus at the same time that causes newly-synthetic of this virus in the hog body and because of the mutation in this virus, causes the transmission of this virus to the man body that the first case has been reported in Mexico in April 2009. In June 2009, according to WHO, 30000 cases, confirmed in 74 reported countries, which is the sign of being pandemic of the disease. It is estimated that in 5-15 percent of the world population it will be epidemic. In this article, the surveying of the schools hygiene nurse role in prevention from h1n1 in babies because of weaker safety system and attending in school, is stated. This article is one kind of review article that in its collecting, the library studies have been used and reference to the newest authentic magazines and Latin and Persian scientific sources and searching in PubMed and scholar Google searching motors, have been used. The period of incubation of disease is 1-4 days. The transmission of virus is with direct and indirect touching and suspended particles in the air, coughing and sneezing. The signs of disease are seen in 7 days that the signs in babies, include the sudden beginning of fever, coughing, sore throat, coryza (runny nose), dehydration, fever, febrile seizures, lethargy and myalgias, so the schools hygiene nurse, with regard to bring week of safety system in children has an important role in prevention in children with instruction of following cases: repeated washing of hands with water and soap. Avoiding from close touching with ones who are ill or have fever and coughing, wearing surgery mask, regarding good hygienic habits include enough sleeping and resting, using liquids and when seeing doubtful cases with signs, the student should be screened and be separated from the rest of student and be referred to medical sources.

The schools hygiene nurse with supervision and notice to the hygiene of throat and pharynx and monitoring the

signs and instruction and information and finding the cases, surveying and intervention, has an important role in prevention of h1n1 in schools.

Key Words: Hog influenza; Schools hygiene nurse

Poster Presentation

Nursing Role in Families of Children with Attention Deficit Hyperactivity Disorder

Fateme Esmaelzadeh

Tehran University of Medical Sciences, Tehran, IR Iran

Attention deficit hyperactivity disorder (ADHD) is a prevalent and chronic childhood disorder characterized by developmentally inappropriate activity level, impulsivity, and inability to sustain attention and concentration. Occurrence of this disorder can be a crisis in whole family and influences the function of parent and others in the family. This paper discusses the nursing role in families of children with attention deficit hyperactivity disorder.

This structured review article is based on searching relevant scientific articles published during 2002 - 2009. Core symptoms of the disorder are impairment in multiple domains of functioning and often coexist with other psychiatric disorders such as depression, and anxiety disorders. Families of children with ADHD have more problems than normal families, as children with ADHD and their parents usually experience low quality of life. Interaction with ADHD children is problematic, but these problems improve as the child with ADHD grows up and leaves home. Regarding improving outcomes in ADHD, nurses and other healthcare professionals should utilize more support, education and guidance for families. Nurses as members of healthcare team should educate families about understanding relevant and effective ways for diagnosis and treatment of ADHD. Nurses also should teach the parents about disorder and its symptoms, probable psychiatric disorders, various helpful and supportive resources and changes in parenting style and the home environment which can be helpful for management a child with ADHD.

Comprehensive management plan for ADHD should consider the parents opinions about effectiveness of various treatment plans which requires awareness of parents from disorder and its multiple dimensions. Nurses may play an effective role in supporting and teaching the family of children with ADHD for improving outcomes of disorder.

Key Words: ADHD; Family; Nurse

Poster Presentation

Quality of Life in Major Thalassemia and Intermedia Thalassemia in Shiraz**Zahra Ghaemi, Midwifery student; Parivash Moradi, Midwifery student; Mahnaz Zarshenas**

Shiraz University of Medical Sciences, Shiraz, IR Iran

Objective: Mortbidity and mortality related to major thalassemia have been reduced significantly with modern medical treatment and quality of life should now be considered an important index of effective health care. Patients with thalassemia intermedia now also have choices other than transfusion. However it is not clear if the quality of life of this group of patients has improved.

Methods and Subjects: In this study 100 patients were participation. They completed a sf 36 and eq-5 d questionnaire during transfusion at Dastghib Hospital in Shiraz.

Findings: This study showed 68% patients had limited in activity compared to 40% intermedia thalassemia. Also 85% major thalassemia had limited climbing one flight of stairs compared to one year ago. 85% patients had pain with major and intermedia thalassemia and 76% had anexity and depression.

Conclusion: As, this study showed major and intermedia thalassemia suffers from serious impairment in QOI also they suffer from anxiety and depression. As patient with thalassemia become older their needs are changed. They now face new issue such as having family. Obtaining higher education and securing employment so recommend frequents screening of all thalassemia also they should consultation in psychologic clinics.

Key Words: Thalassemia; Quality of life; Intermedia

Poster Presentation

Physical Growth in Schoolchildren Living in Babol, North of Iran: Is the United States CDC 2000 Reference Sufficient for Local Growth Monitoring in Babol?**Fatemeh Hoseinzadeh, Mehdi Montazer, Zahra Rezapour**

Babol University of Medical Sciences, Babol, IR Iran

Objective: To date, there is no national reference for height, weight and body mass index (BMI) indices in Iranian children. Since the US CDC 2000 growth

reference is widely used in Iran, the assessment of its sufficiency is essential.

Methods and Subjects: The sample consisted of 528 girls and 575 boys aged between 5 and 18 years during 2005. Samples were collected by a multistage sampling method. First, stratification was conducted based on the possible difference in socioeconomic status between children living in urban and suburban areas, then, each school was assumed to be a cluster. All participants were established to be healthy and their height, weight and BMI evaluated. The data were transformed to Standard Deviation Scores (SDS) based on the US CDC 2000 parameters, then mean SDS within and through age groups, and between genders, were tested using t-test. SPSS 14.0 was used for data analysis.

Findings: The mean SDS for all ages for height, weight and BMI were 0.2(1.00), 0.1(1.01) and -0.01 (1.16), for boys, and 0.2(1.04), 0.29(1.09) and 0.25 (1.13), for girls. These mean SDS were all significantly different from zero, except for boys BMI ($p < 0.001$). The mean SDS for weight and BMI, but not height, was significantly different between two genders. Height SDS decreased by increasing age. Weight and BMI SDS did not differ by age. The growth pattern was somehow similar between two genders.

Conclusion: Although the growth indices in the studied population were statistically different from the US reference, but these differences were all smaller than half standard percentile; thus, they were not clinically significant. Regarding the standard deviation scores and the growth patterns seen, the US reference seems sufficient for growth monitoring, except for height, in Babol school age children.

Key Words: Physical growth; Height; Weight; Body mass index; Schoolchildren

Poster Presentation

Babol Girls win the Race in Secular Trend Competition towards Earlier Onset of Menarche**Fatemeh Hosseinzadeh, Zahra Rezapour, Mehdi Montazer**

Babol University of Medical Sciences, Babol, IR Iran

Objective: There is no standard national pubertal data for Iranian girls and it is a research priority for the Ministry of Health and Medical Education of Iran. The aim of this study is to estimate the age of menarche in schoolgirls living in Babol, south of the Caspian Sea.

Methods and Subjects: This cross-sectional study was conducted on 528 girls aged between 5 and 18 years during 2005. A Multistage sampling method was done.

First, stratification was conducted based on the possible difference in socioeconomic status between children living in urban and suburban areas, then, each school was assumed to be a cluster. Data on menses were collected by the status quo method, as girls were asked if they had experienced menarche or not. Generalized Additive Modeling (GAM) and smoothing-spline methods were performed in order to estimate the probability of onset of menarche in different ages. All analyses were carried out with S+ 2000 professional.

Findings: There were 244 (42.7%) girls who had experienced menarche. Four Models had been generated. At last, a model with d.f. =1 (degrees of freedom) was selected as the final model, based on statistical tests of deviance and the visual appearance of the fitted curves. The Median age (percentile 10, percentile 90) of onset of menarche was 12.25 (10.75, 13.75). The practical Probit curve was drawn.

Discussion: It seems that menarche in studied girls occurs earlier in comparison with reports from most other countries and also other areas of Iran. Early onset puberty is a health, medical and social concern and complementary studies, focusing on Tanner stages of pubertal development in both genders is suggested.

KeyWords: Menarche, Girls, Babol, Iran

Oral Presentation

Detection of Different Lineages of D4 Genotypes of Measles Virus during the 2002 to 2008 in Iran

Vahid Salimi, MD; A Esteghamati, MD; MM Gooya, MD; Z Norooz Babaei

Tehran University of Medical Sciences, Tehran, IR Iran

Measles virus (MV) is the causative agent of the highly contagious measles disease. This disease ranks as one of the leading causes of childhood morbidity and mortality. Despite the fact that the World Health Organization (WHO) has set up a number of programs to reduce measles mortality for children, in 2004, 20 to 30 million measles cases and approximately 500 000 deaths were reported. Molecular epidemiology of measles virus is important, not only for measure the success of measles vaccination programs but also can help to monitor circulation and elimination of the virus throughout the world. In this study the nucleoprotein genes of 27 measles virus (MV) strains circulating in Iran between 2002 and 2008 was amplified by Nested RT-PCR and subjected to sequence and phylogenetic analysis. Molecular characterization of measles studied here revealed that although the outbreaks in Iran were

associated with the same measles virus genotype D4, the viruses clearly belonged to several different lineages. The alignment of Iranian Measles virus sequences using ClustalX program showed that the sequences represented 11 lineages. Iranian strains formed seven lineages before the 2003 mass vaccination campaign and four lineages after mass vaccination campaign. In this study, we compared MV obtained before the 2003 mass vaccination campaign for measles/rubella (MR) and samples obtained after 2003 until 2008 in Iran.

Key Words: measles virus, Molecular epidemiology, RT-PCR, genotype D4

Poster Presentation

Hobnail Hemangioendothelioma (Dabska type) of Right Buttock

Zahra Behnamfar¹; S Ben Razavi², MD; M Moghimi³, MD; A Akhavan⁴, MD

1. Medical Student, Shaheed Sadooghi University of Medical Sciences, Yazd, IR Iran
2. Department of Pathology, Shaheed Sadoughi Hospital, Yazd, Iran
3. Department of Surgery, Shaheed Sadoughi Hospital, Yazd, IR Iran
4. Shaheed Ramezanzadeh Radiotherapy Center, Yazd, Iran

Objective: Dabska tumor (DT) is a very rare neoplasm with favorable prognosis. Originally described in 1969 by Maria Dabska. So far two cases of hemangioendothelioma (spindle cell and multifocal hemangioendothelioma of bone) have been reported from Iran. However, this is the first case of DT reported from this country.

Method and Subjects: We present the case of 6 -year-old boy from Saravan-Iran diagnosed with DT.

Findings: The patient was a 7-year-old boy admitted with a firm mass in the right upper thigh region. Physical examination had showed a band of dark brown lesions with pinkish borders and pasty nature measuring 17.5×15×5 cm. MRI was suggested followed by incisional biopsy. Results of incisional biopsy showed hemangioendothelioma, an indication for surgical operation. During a three-hour operation, the entire mass and outer fascia of posterior compartment of the thigh was cross-sectionally deeply resected. Post-resection pathologic studies proved the tumor to be of DT. Postoperation the patient underwent radiotherapy employing cobalt machine.

Conclusion: DT is a very rare neoplasm with no ethnic or racial predilection and because of the age of the patients range from birth to 83 years, it should be

considered as a differential diagnosis of vascular neoplasms.

Key Words: Hobnail Hemangioendothelioma; Dabska tumor; Endovascular papillary angioendothelioma

Poster Presentation

The Prevalence of Flat and High-arched Feet and their Associates in Schoolchildren of Babol, North of Iran

Fatemeh Hoseinzadeh¹, Zahra Rezapour¹, BS Mehdi Montazer, MD

1. Babol University of Medical Sciences, Babol, IR Iran
2. Department of Pathology, Mashhad University of Medical Sciences, Mashhad, IR Iran

Objective: Flatfoot is a condition in which one or more of the arches of the foot have flattened out; and high-arched foot is vice versa. The aim of this study was to estimate the prevalence of flat and high-arched feet in a population of schoolchildren in Babol, south of the Caspian Sea.

Methods and Subjects: The sample consisted of 528 girls and 575 boys aged between 5 and 18 years during 2005. A Multistage sampling method was done. First, stratification was conducted based on the possible difference in socioeconomic status between children living in urban and suburban areas, then, each school was assumed to be a cluster. We used footprints to assess feet situation, including normal, flat or high-arched feet. Multivariate logistic regression analysis was done in order to find the significant associates of flat and high-arched feet. SPSS 14.0 was used for data analysis.

Findings: The prevalence of flat and high-arched feet was 12.0% and 3.0%, respectively. No differences between two genders were seen. For flat feet, Ligament laxity (OR=2.6, 95%CI: 1.6-4.1), Age (OR=0.7, 95%CI: 0.6-0.8) and weight (OR=1.05, 95%CI: 1.03-1.08), and for high-arched feet, only height (OR= 0.96, 95%CI: 0.95-0.98) were significant associates (P<0.001). None of the demographic factors or BMI was significant.

Conclusion: The flat feet prevalence was rather high in the studied population. No controllable factors were associated with neither flat nor high-arched feet. Prospective longitudinal studies, focusing on predictors of delayed resolving of physiologic flat feet is needed, in order to detect those children who may need complex treatments in their future.

Key Words: Flat feet; High-arched feet; School children

Poster Presentation

The Role of Nutrition in the Most Common Chronic Infectious Disease

Maryam Hashemian

Sabzevar University of Medical Sciences, Sabzevar, IR Iran

Objective: Early Childhood Caries (ECC) is the presence of one or more decayed, missing, or filled tooth surfaces in any primary tooth in a child 71 months of age or younger. It is known as rampant caries, nursing caries, baby bottle tooth decay and nursing bottle syndrome. ECC is the most common chronic infectious disease of childhood worldwide. Therefore the object of this article is to describe how we can simply prevent ECC by healthy nutrition.

Methods and Subjects: The databases Elsevier and Ovid were searched using relevant key words. literature indexed up to 2009 was considered. Studies were included if they were written in English. This search revealed 42 publications.

Findings: The studies were very heterogeneous, using a variety of study populations, study designs, sample sizes, and study measures. But all results showed that ECC is a diet-induced disease. Vitamin D, proteins and minerals, especially calcium and phosphorus, are essential for the development of teeth. Both the lack and the excess of these nutrients might be harmful. Protein as well as energy malnutrition may cause dental defects or hypoplasias. In turn, malformations of teeth expose them to caries. Change from a traditional milk-meat based diet to a western-type diet might be one of the reasons for the high incidence of caries in cities. The most important factors affecting the development of caries are the eating frequency of fermentable sugars and the use of fluorides. When food containing fermentable sugar is eaten, the pH of the mouth decreases, and the dental enamel starts to dissolve. If the eating frequency is high, there is not enough time for saliva to remineralize the dissolved enamel. Whereas the newly erupted teeth are very sensitive to caries.

Conclusion: For better oral health the growth of the children, their nutrition and the use of vitamin D supplements as well as the eating frequency need to be monitored. The studies findings support the use of fluoride varnish applications for very young children in an effort toward caries prevention.

Key Words: Early Childhood Caries (ECC); Nutrition; Prevention

Oral Presentation

Comparison of Nutritional Evaluation of a Sample Commercial Baby Food with a Sample of Home Made Baby Food in Rats

Iman Ghaffarpasand; Mohsen Taghizade; Z Asemi; Zohre Azarbad

Student Research Committee, Kashan University of Medical Sciences, Kashan; IR Iran

Objective: Evaluation of the quality of food proteins have a great importance because of biological and economical impacts. Since, biological, microbiological, chemical and combined methods have been used and introduced for determining quality of Proteins. Among existing methods, NPR, RNPR, TPD and PER have been suggested as appropriate methods to determine the quality of Proteins. Considering to importance of protein quality in foods, especially in downscale families, This study has been conducted to comparison of nutritional evaluation of a sample commercial baby food (Cerelac) with a sample of home made baby food based on Rice -Vetch mixed in Rats by using the mentioned methods in 2007.

Methods and Subjects: This experimental study was conducted on 64 male wistar rats, aged 21-23 days under 8 diets in 8 groups including of Cerelac and Rice -Vetch mixed (cases), Casein+Methionine (standard) and Protein free (control) diets in order to determine RNPR and PER (The method of determining RNPR and PER were same in spite of the duration of study on PER which was 28 days without limitation of Protein intake) and cases, standard and control diets to study TPD. Period of study for NPR was 14 days. Protein intake and increasing of weight was determined for NPR calculating. Period of study for TPD was 9 days. Nitrogen intake and fecal Nitrogen were determined to calculate TPD. Protein intake and change in weight of animals were determined to calculate PER. Comparison of NPR, RNPR, TPD and PER between the groups was conducted by t- test.

Findings: NPR was 4.3 ± 0.4 , 4.3 ± 0.9 and 4.2 ± 0.4 , TPD was 92.8 ± 4 , 87 ± 8 and 81.1 ± 6.1 and PER was 3 ± 0.2 , 2.5 ± 0.4 and 2.7 ± 0.6 for Casein+Methionine, Cerelac and baby food based on Rice -Vetch mixed groups respectively. So difference NPR, TPD and PER between two groups baby food is,nt significant ($P=0.7$, $P=0.1$ and $P=0.5$).

Conclusion: NPR and TPD are Home made baby food based on Rice -Vetch mixed equal than Cerelac but PER is Home made baby food based on Rice -Vetch mixed higher than Cerelac. So with attention to high price animal protein fore example Cerelac, fore

prevention protein energy malnutrition in beginning of weaning foods can use of Home made baby food based on Rice- Vetch mixed.

Key Words: Protein quality; NPR; RNPR; TPD; PER; Cerelac; Home made baby food

Poster Presentation

Centile Curves of Body Mass Index of Iranian Children Aged 25 to 60 Months that Living in the Northeast of Iran

Maryam Emdadi¹; M Safarian², H Doosti¹, MSc

1. Department of Statistics, Ferdowsi University of Mashad, Mashhad, IR Iran
2. Department of Biochemistry and Nutrition Mashad University of Medical Sciences, Mashad, IR Iran

Objective: Growth charts are widely used to monitor childhood growth. Also these charts are used to assess children's nutritional status and can provide a background to compare the measurement with as it changes with time. A total of 23730 apparently healthy boys (%51) and girls (%49) aged 25 to 60 months recruited in July 2004 for 20 days from those attending community clinics for routine health checks. Anthropometric measurements were done by trained health staff using WHO methodology. The objectives of this study were to construct centile reference charts for children aged 25 to 60 months and compare the results to the WHO reference.

Methods and Subjects: The LMSP method with maximum penalized likelihood, the Generalized Additive Models, the BCPE distribution, the AIC and GAIC (3) criterion, and Worm plot and Q-tests as goodness of fit tests, were used to construct the centile reference charts.

Findings: The BMI-for-age centile curves for boys and girls aged from 25 to 60 months were derived utilizing a population of children that living in the northeast of Iran. Finally, obtained centile curves were compared to WHO reference.

Conclusion: Significant differences between growth patterns of Iranian children versus international ones necessitate using local and regional standards and growth charts. International norms may not properly recognize population at risk for growth problems in Iranian children and therefore they may be misleading for our healthcare system.

Key Words: Body mass index (BMI); LMSP method; Childhood; Centile curve

Poster Presentation

Pattern of Acute Poisoning of Childhood and Relative Factors in Zahedan**Abolfazl Emamdadi, Medical Student; Ali Khajeh, MD; Behzad Narouie, MD**

Ali Ebn-e-Abitaleb Hospital, Zahedan University of Medical Sciences, Zahedan, IR Iran

Objective: Acute poisoning, a common pediatric emergency is one of the important cause of morbidity and mortality in children especially in developing countries. Thousands of innocent children under the age of five years are poisoned accidentally every year throughout world.

Method and Subjects: The purpose of this cross-sectional study was clarifying the characteristics of acute poisoning cases admitted to Ali ebn-e Abitaleb hospital of Zahedan. All poisoned patients under 17 years old, except for cases food poisoning, presenting to Pediatrics Emergency Department (PED) from April 2007 to April 2008 were determined. The information about each case was recorded on standardized forms and a retrospective chart review survey was done. Complete epidemiological and clinical data were obtained for 147 patients.

Findings: The mean age of all poisoned patients (mean \pm SD) was 2.93 ± 3.05 years, and the age range was 0.12 to 14 years. Fifty-nine children (86.8%) were under five years of age. Slightly more boys than girls were intoxicated at ages more than 10 years (8.5% vs. 4.68%). The majority of all cases were due to accidental poisoning (86.8% of all poisoning) which occurred mostly in children under five years old (93%). Drugs (37.41%), Kerosene (23.12), Opium/Hashish (17.68%), agricultural pesticides (6.8%), unknown substances (5.44%) and caustic/corrosive substance (4.76%) were the most frequent offending agents. Benzodiazepines forming 57.6% of all poisoning due to drugs, Followed by ingestion of Tricyclic antidepressants (TCA) (35.5%), palliative drugs (10.7%). Also, there was one case (0.6%) poisoning due to inhalation of carbon monoxide (CO). During the one year study period, only 3 patients were lost after ingestion of Kerosene. The frequency distribution shows that the majority of parents of poisoned patients had under Grade school of literacy (84.6%), while only 6% of parents have collegiate literacy.

Conclusion: Most of the poisonings were due to accidental ingestions in infancy and primary school ages without sex predilection. Drugs (especially Benzodiazepines), Opium/Hashish and Kerosene were the most commonly ingested agents. Whereas the

majority of parents of poisoned patients had under Grade school of literacy, the early awareness of poisoning and appropriate therapeutic measures taken seemed to be efficacious with very low incidence of acute poisoning and mortality rate.

Key Words: Acute Poisoning; Childhood; Drugs; Kerosene; Opium

Oral Presentation

Seroprevalence of Human Herpes Simplex, Hepatitis B and Epstein-Barr viruses in Children with Acute Lymphoblastic Leukemia in Southern Iran**Fariborz Ghaffarpasand; Seyeb-Babak Mahjour; Mehran Karimi; Abbas Ghaderi**

Student Research Committee, Fasa University of Medical Sciences, Fasa, IR Iran

Objective: Epidemiologic studies suggest that at least one step in the process of acute lymphoblastic leukemia (ALL) development involves an infectious agent. The aim of this study was to investigate the seroprevalence of Herpes Simplex Viruses (HSV1 and HSV2), Epstein-Barr Virus (EBV) and Hepatitis B Virus (HBV) in children with ALL in southern Iran.

Methods and Subjects: 90 patients with ALL and 90 age-sex matched healthy participants were enrolled in this study. Antibodies (IgG) against HBsAg, HSV1, HSV2, EBV different antigens including Epstein-Barr nuclear antigen-1 (EBNA-1), viral capsid antigen (VCA) and early antigen (EA) were measured by enzyme-linked immunosorbent assay (ELISA).

Findings: There were 54 (60%) male and 36 (40%) female in both study groups with mean age of 8.47 ± 3.61 and 8.61 ± 2.84 years in case and control group respectively ($P=0.8$). The prevalence of antibodies against HBsAg ($P=0.002$), HSV1 ($P < 0.0001$), VCA ($P=0.02$) and EA ($P<0.0001$) antigens of EBV were significantly higher in ALL patients.

Conclusions: We showed that the seroprevalence of EBV, HSV1 and HBV was higher in patients with ALL. Hence, childhood ALL may be associated with an infection with these viruses, although nor latent infection nor congenital infection cannot be excluded by this method.

Key Words: Acute Lymphoblastic Leukemia; Epstein - Barr virus; Hepatitis B Virus; Human Herpes Simplex Virus

Poster Presentation

A Neonate with Phocomelia

**Somayyeh Sarrafi-Kheyrahad; Leila Jouybari, MD;
Akram Sangoo, MD**

Student Research Center; School of Nursing & Midwifery,
Golestan University of Medical Sciences, Gorgan, IR Iran

Background: Phocomelia is a devastating, rare congenital limb malformation in which the long bones are shorter than normal, with the upper portion of the limb being most severely affected.

Case Presentation: The mother of neonate was a 24 year old, Iranian woman. She worked as farmer on bean and potato lands for many years before and during pregnancy as well. She has a poor diet in pregnancy with limited access to meat and dairy products. There was no history of malformation in her family. There was a remote relationship between couples. We found no history of stillbirth, previous infant death or malformed child, or specific disease such as diabetes, measles, hypertension, and rubella. She consumed folic acid during pregnancy and also undertaken three times ultrasonography. The neonate was a live full term female, 3200 kg weight, without arm. There were no more obvious anomalies.

Conclusion: Considering demographic information of mother draw our attention to her lifestyle and environmental issues i.e. farming and dealing with agricultural pesticides. Unfortunately, Golestan province is rated as highest consumer of agricultural pesticides in country. The authorities in this matter is very crucial.

Key Words: Phocomelia; Limb malformation; Neonate

Oral Presentation

Brain Tumor of Traumatic Origin: An Ongoing Controversy?

M Alimohamadi, MD, MD; M Shirani, MD; E Ketabchi, MD

Sina Hospital, Department of Neurosurgery, Tehran University of Medical Sciences, Tehran, IR Iran

Objective: Late development of brain mass in patients with a history of traumatic brain injury (TBI) is an ill defined entity. This report is to add a further contribution to the literature supporting the relationship between previous head trauma and development of brain tumor.

Methods and Subjects: We report an 8 year boy who presented with decreased cognition about 3 years after severe traumatic brain injury. He had a left temporoparietal contusion with mass effect and midline shift due to motor vehicle accident that was treated by emergent decompressive surgery about 3 years ago. He had reached to a steady state of mental function until about 6 months ago, that began to develop new mental problems.

Findings: Neuroimaging studies revealed a nonhomogenously enhancing mass lesion at the site of decompressive surgery. A repeat craniotomy was performed and the mass was dissected from the surrounding scar tissue and gross totally resected. Histopathologic examination revealed meningioma.

Conclusion: Posttraumatic brain tumors have been described, but in none of these has there been documented evidence of absence of tumor at the time of the injury. A rare case of meningioma at the site of previous brain contusion is presented with documented absence of the lesion at the time of occurrence of TBI.

Key Words: Traumatic brain injury; Brain tumor; Meningioma

Poster Presentation

Suffering from Visceral Leishmaniasis for Three Years: A Case Report

**Somayyeh Sarrafi-Kheyrahad; Leila Jouybari, MD;
Akram Sangoo, MD**

Student Research Center; School of Nursing & Midwifery,
Golestan University of Medical Sciences, Gorgan, IR Iran

Background: Visceral leishmaniasis is one of clinical manifestation of leishmaniasis. According some of information, almost five hundred thousand new cases are reported annually around the world.

Case Presentation: The case is a five years old girl from East of Golestan province, Northern Iran. Since age 2 she had severe sweating and abdominal distention. She hospitalized in different hospitals. Due to poor economical situation and limited access to therapy her parents were not able to provide required medication. During time she experienced abdominal pain, distention, insomnia, nausea, vomiting, and pain in the legs, lack of appetite, cachexia, recurrent otitis media, pancytopenia, anemia, throat pain and a very huge spleen. Finally, after three years suffering, in Feb 2008 she hospitalized in an educational center. She treated with antibiotics, antifungal agents and Glucantime. After a few month therapy she discharged

while had a lesser spleen in size and better general condition.

Conclusion: Because of the variety of presentations, like this current case report, a thorough work up should be considered in every patient with suspected visceral Leishmaniasis. Regards to providing health care for young children, educational and monetary supports are very essential for families with poor incoming status.

Key Words: Visceral Leishmaniasis; Preschool age child; Glucantime

Poster Presentation

The role of the nurse in prevention from osteomyelitis arising from cannulation of intraosseous in children

Saeed Ghasemi¹; Fatemeh Kalroozi

Nursing student, Army University of Medical Sciences, Tehran, IR Iran

In urgent cases like that quick access to IV in children and infants is hard, the cannulation intraosseos can be successful and in the case of safe and hygienic replacing is the savior of the child life. But this procedure is along with potential danger and illnesses that we can point to infection and osteomyelitis that in the case persons addiction, puts serious illnesses on the sick person's life. This article is a kind of review article that in its collecting, the library studies and reference to

the newest authentic books and magazines and latin and Persian scientific sources and searching in pumped and scholar google searcher motor, have been used Finding: In children, the most common advised place for cannulation of intraosseous proximal tibia. The long marrow includes a net of strong blood-vessel that is flowing into the central vein channel, and, makes a net of blood-vessel without collapse that in same condition like shock and cardiac arrest that the sick's blood-vessel are contracted, this way lets the interance of liquids and drugs into the central blood-stream. The sick of same factors like bad-nourishment, fatness, the defect of safety system, chronic illnesses and imeno sapersio drugs can accelerate and aggravate the making of osteomyelitis. Although the cannulation of intraosseous advised for children of fewer than 6yaers old, but in all ages can be useful. But in children of fewer than 3 years old, because of the weaker safety system, has a more risk for making osteomyelitis that can have same severe illnesses like sepsis, so the nurse should with regarding the sterile points include using of sterile gloves and needle, and cleaning the surface of skin, decrease the risk of infection (to one percent), as well as; the needle should be taken up at the earliest possible time; because, except this, increases the risk of infection and osteomyelitis. With regarding the sterile points and aseptic technique at the time of doing the procedure and resting in bed and suitable diet after the procedure, we can decrease the risk of osteomyelitis considerably.

Key Words: Intraosseous; Osteomyelitis; IV line