

Neurology & Psychiatry Abstracts

Oral Presentation

Spinal Dermal Sinus, the Importance of Early Diagnosis and Treatment

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Objective: Spinal dermal sinus tract is a rare congenital dysraphism which occurs in approximately one in every 2500 live births. They are seen more frequently at the extremes of neuroaxis with the majority of spinal sinuses occur in the lumbosacral region. They may have diverse and occasionally serious presentations; in fact many cases come to clinical attention by neurologic deficit and/or infectious complications including life-threatening conditions such as meningitis. In this study we present our experience with a group of children afflicted with this relatively rare form of spinal dysraphism including their presentation, radiological findings, surgical observations and urological evaluations, emphasizing the importance of timely diagnosis and management.

Methods and Subjects: This is a retrospective study conducted in Children's Medical Center from January 2001 to December 2008. Medical records of all children treated for spinal dermal sinus were reviewed. Information regarding patients' demographic variables, type of presentation, symptoms, physical examination, radiologic and urological studies, surgical findings and histopathological evaluation were collected.

Findings: Patients' age ranged from 3 days to 8.44 years. Dermal sinuses were located most frequently in the lumbar and lumbosacral regions. The most common causes for referral were abnormal skin findings (57.1%) and infection (31.4%). Notably 8 patients presented with meningitis. The overall rate of neurologic abnormalities was 37.1%, four of whom presented acutely with rapidly progressive paraplegia and meningitis. The most common MRI finding was tethered cord (63%). At least one urological evaluation was performed in 30 patients, which revealed abnormal results in 77% of them. All patients underwent complete resection of the tract and repair of associated abnormalities. Most tracts terminated within the intradural space. Fifteen patients (42.8%) had inclusion tumor with the dermoid tumor being the most common. None of the

patient demonstrated neurological deterioration postoperatively.

Conclusion: Detection of subtle cutaneous anomalies like dermal sinus in a child can be crucial in preventing serious neurologic, urologic and orthopedic morbidities. Surgical intervention should be done as soon as possible and in advance of development of neurologic deficit. In order to prevent complications, timely surgical intervention including complete resection of sinus tract with intradural exploration and correction of associated abnormalities is of utmost importance. First line physicians should become more aware of the importance of cutaneous findings over midline neuroaxis.

Key Words: Dermal sinus; Spine; Diagnosis; Surgery

Oral Presentation

Diazepam versus Clobazam for Intermittent Prophylaxis of Febrile Seizures

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Objective: To compare the efficacy and adverse effects of intermittent clobazam versus diazepam therapy for preventing the recurrence of febrile seizures.

Methods and Subjects: This prospective randomized controlled trial was performed on neurologically normal children aged from 6 months to 5 years with a history of simple febrile seizures and normal electroencephalogram without any evidence of acute central nervous system infection. The patients were randomly prescribed with oral clobazam (37 cases) or diazepam (35 cases) when they develop a febrile disease. They were advised to use the medications during the first 48 hours of the onset of fever. All patients were monitored regarding developing seizure and adverse effects of the drugs. Other managements of the fever such as using antipyretics and tepid sponging were also recommended. All patients were followed for 12 months. Data were analyzed using chi-square test.

Findings: Overall 243 episodes of fever occurred during the period, including 116 episodes in the clobazam group and 127 episodes in the diazepam group. Recurrence of seizures occurred in 2 (1.7%)

subjects in the clobazam group, and in 4(3.1%) cases in the diazepam group. Fisher exact test:0.474. Twenty cases (54%) in the diazepam group and 5 (14.2%) cases in the clobazam group developed drowsiness and sedation during the follow-up period (chi-square test=0.0001).

Conclusion: Intermittent clobazam therapy seem advantageous to diazepam due to similar efficacy but significantly lower adverse effects such as drowsiness and sedation.

Key Words: Febrile seizure; Intermittent prophylaxis; Clobazam; Diazepam

Oral Presentation

Cerebral Palsy Can Be Genetically Transmitted

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Cerebral Palsy (CP) is a common problem and is the most common cause of severe physical disability in childhood. CP is one of the three common chronic neurological handicaps of children. The world wide incidence of CP is approximately 2-2.5 / 1000 Live birth. CP is characterized by aberrant control of movement or posture of a patient, appearing early in life, and not the result of a recognized progressive or degenerative brain disease. CP is: 1- An umbrella term. 2- Is permanent but not unchanging. 3- Involves a disorder of movement and /or posture and of motor function. 4- Is due to a non-progressive interference, lesion or abnormality. 5- The interference, lesion or abnormality is in the immature brain. Multiple lines of evidence, point to the fact that CP is rarely caused by perinatal problems. Infact there is strong evidences that suggest genetic influences on the occurrence of CP. Prematurity, primary genetic disorders, inborn errors of metabolism, heritable thrombophilias, cerebral dysgenesis and teratogenic influences are major categories of prenatal-genetic etiologies. Prematurity represents a condition with a genetic predisposition with CP being a secondary phenomenon caused by the prematurity. There are reports of a CP phenotype in association with some metabolic disorders, such as Urea cycle disorders, Lesch-Nyhan syndrome and Pyruvate dehydrogenase deficiency. There is convincing evidence that porencephaly and hemiplegic CP are associated with factor V Leiden abnormalities. Cerebral dysgenesis are well-documented causes of CP that can be transmitted genetically. This article reviews some genetic influences on the origin of the CP.

Key Words: Cerebral Palsy; Genetic; Inborn errors of metabolism

Oral Presentation

Principle of Antiepileptic Therapy in Children

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Children with epilepsy, particularly infants, differ from adults not only in the clinical manifestations of their seizures, but EEG patterns, etiologies, and response to antiepileptic drugs. The AED chosen for therapy should be highly effective for a particular seizure type, safe and well tolerated. AED should have low toxicity and few adverse effects. Cost-effectiveness is also desirable. In infants and younger children, oral suspensions, chewable tablets, and sprinkle formulations may be useful. Some AEDs come in a sustained-release form or have particularly long half-lives that allow once or twice-daily dosing. The AED dose should be increased until seizures stop, or adverse effects occurs. The first AED fails in 20 to 40 percent of children with epilepsy so the second AED is added in this case. If the initial AED is ineffective, it can be tapered earlier, as the dose of the second drug is increased. Single-drug therapy is the goal of epilepsy treatment. Monotherapy is associated with better compliance, fewer adverse effects, less potential for teratogenicity, and lower cost than is polytherapy. However, there are instances when the synergistic interaction of two AEDs improves seizure control. Children with certain generalized epilepsy syndromes occasionally require a combination of valproate and ethosuximide or lamotrigine. A second AED may also be considered in children with several different seizure. Certain combinations should be avoided when mechanisms of action overlap and toxicities are additive, such combinations of phenobarbital, primidone, and benzodiazepines, all of which are central nervous system depressants. Phenytoin and carbamazepine also have overlapping mechanisms. Many commonly used drugs can alter the metabolism of AEDs and vice versa. Hepatic enzyme inducers will lower the levels of drugs metabolized in the liver, and liver enzyme inhibitors will slow the metabolism of the same drugs. Cimetidine, propoxyphene, erythromycin, fluoxetine, and clarithromycin are examples of enzyme inhibitors. Withdrawal of antiepileptic drug (AED) therapy should be considered in most children after two years without seizures regardless of the etiology of the seizures. The likelihood of recurrence after a two-year period

without seizures is approximately 30 to 40 percent. Longer seizure-free periods are associated with only a slightly lower incidence of recurrence and therefore longer observation periods are not warranted. Children with neurologic deficits should also be considered for AED withdrawal if they have been seizure-free for an extended period of time. AEDs should be tapered rather than halted abruptly particularly, benzodiazepines and barbiturates.

Key Words: AED; Children; Treatment

Poster Presentation

Evaluation of Patients with Werdnig Hoffman Disease Referred to Madani Hospital of Khorramabad

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Objective: Spinal muscular atrophy type 1 or werdnig Hoffman disease is a motor neurodegenerative disease in infancy that started in fetal period and progress to neonatal period and early infancy and leading to death because of respiratory failure, sepsis our pneumonia. Pathogenesis of werdnig Hoffman disease is resulting from apoptosis of neuronal cells in anterior horn of spinal cord that start in fetal period and progress to neonatal period and early infancy. Goals of study were evaluation of patients with werdnig Hoffman disease referred to Madani hospital of Khorram Abad in 1381 to1388.

Methods and Subjects: This is a retrospective study in patients with werdnig Hoffman disease referred to Madani hospital of Khorram Abad in 1381 to1388. 15 Patients referred to Pediatrics clinic and treated out patient our admitted in hospital. Tools of study were patient's files and varieties were sex, age, patient's symptoms, sign and length. Then data performed and analyzed.

Findings: In 15 patients with werdnig Hoffman disease 73% were boys, average age of referring to hospital were 4 months. The most symptoms were hypo tonic and head lag. 80% of patients were first cousins. 3 patients were sibling and all of them died before 5 months. In all patients EMG proving werdnig Hoffman disease. 10 patients admitted for pneumonia and respiratory failure or sepsis. 5 patients did not admit. In 66% recurrent admissions were positive.

Conclusion: In this study the most patients were boys and the average of proven disease was 4 months. Family histories were positive in most patients. Hypotonic and head lag were the most symptoms and signs. Therefore in all infants, werdnig Hoffman disease must be evaluated and prenatal diagnosis must be done in positive history of werdnig Hoffman disease.

Key Words: Werdnig Hoffman disease; Hypotonia; Spinal muscular atrophy

Poster Presentation

Hemiparesia Due to Post-traumatic Carotid Artery Dissection in 9 Years old Boy; A Case Report

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Background: Anually in children Hemiparesia secondary to vascular disorders occurs an incidence of 1-3 / 100000. Thrombosis of the internal carotid artery may Results from blunt trauma to the posterior pharynx due to fallen on a pencil or Popsicle stick. This damage produces a tear in the intima of the vessel which may lead to formation a dissection aneurysm. Emboli shed to cerebral vessel and result thrombus formation. Symptoms appear may be delayed for up to 24 hr after the accident.

Case Presetation: In this report a 9 years old boy admitted to Madany hospital of Khrram Abad for left Hemiparesia. The symptoms started with a frontal headache and visual disturbances after 2 days history of right sided neck blunt trauma due to a kick by his classmate. In first physical examination left Hemiparesia, muscle weakness and visual field disorders were revealed. Brain CT scan was large area of hypodense lesion on right occipital region. Echocardiography study was normal. Hematological, liver, kidney tests were normal. Electrolytes, coagulation tests were normal. Antiphospholipid Antibody, Antithrombin 3, protein S, C were in normal range. Carotid vessels Doppler sonography reveals right internal carotid artery dissection. Finally he treated with Heparin, Aspirin, warfarin and he was discharged from hospital with partial Hemiparesia.

Key Words: Hemiparesia; Dissection; Trauma; Carotid vessels

Oral Presentation

Efficacy and Safety of Gabapentin in Lennox–Gastaut Syndrome

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Objective: The Lennox-Gastaut syndrome (LGS), is one of the catastrophic epileptic syndromes of childhood. It is characterized by the triad of intractable seizures of various types, a slow (<2.5-

hertz) spike-wave pattern in EEG and mental retardation. Main treatment is based on antiepileptic drugs. Gabapentin (GBP) binds to alpha-2-delta subunit of a voltage-dependent calcium channel, which may inhibit inward calcium currents and decrease neurotransmitter release. The purpose of study was to evaluate the efficacy and safety of gabapentin in intractable epilepsy of children with LGS.

Methods and Subjects: In a quasi-experimental study, 50 children with LGS referred to Shahid Sadoughi University pediatric neurology clinic, from March 2008 to February 2009 in Yazd, were evaluated.

Findings: 27 boys and 23 girls with mean age of 5.23 ± 1.4 years, evaluated. Mean of seizure frequency (per week) before and after treatment were 90 (range=1-250) and 46 (range=0-120) times, and GBP was effective in seizures reduction (P=0.04). Efficacy was confirmed if patient became seizure free or achieved >50% reduction in seizure frequency for 3 months after starting therapy. With GBP treatment, 8% became seizure free, 22% had more than 50% reduction of seizure frequency and 17% of them had increasing seizures. The best response was seen in combination of GBP and valproic acid which in 50% of them, the drugs were effective. No serious side effects were seen. Transient side effects were seen in 10% (somnolence and ataxia in 3 and headache in 2 children).

Conclusions: GBP in combination with valproic acid should be considered as an add-on therapy in management of intractable epilepsy in LGS.

Key Words: Lennox-Gastaut syndrome; Gabapentin; Epilepsy

Poster Presentation

Diskitis as Manifestation of Gate Disturbance

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Background: Gate disturbance is a common presentation of neurologic disease in children. Limping is a kind of gate dysfunction that occurs due to neurologic and skeletal disease. Diskitis is one of the causes of limping specially in child less than 3 years. The goal of the article is review of causes of limping and diskitis as one of important causes of limping and case presentation in 17 Shahrivar hospital in Rasht.

Case Presentation: A 22 mo old referred due to gait disturbance since 4 days ago. Growth and development was normal. Patient was afebrile with

good mental status and with mild irritability, active and passive range of motion of pelvis was normal and skin over spinal area was normal and there is no any spinal deformity. Patient had refuse of walking and limping with shortness of stance phase, painful walking was possible. Lab datd: WBC: 5700 with PMN 50%, ESR in fist time: 38 and second time: 85, CRP+3, CPK:38. Brucella screen test, ANA, RF were negative. Brain CT (in primary center), pelvic sonography were normal. In lumbar MRI had hypersignal intensity in L2-L3 space. So with suspicious to diskitis intravenous cloxacillin for 2 weeks and oral cephalixin for other 2 weeks was started immediately. Patient had good course so after 7 days walk independently. ESR became 25, CRP:negative.

Conclusion: Diskitis should be considered in all children who refuse to walking and whose normal neurologic finding specially in child less than 3 year old.

Key Words: Diskitis; Gait Disturbance; Limping

Oral Presentation

Effectiveness of Iron Therapy on Breath Holding Spells in the Children without Anemia

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Objective: The pathophysiology and mechanism of Breath Holding Spells (BHS) remain controversial, and the pathophysiological relationship between BHS and anemia has not been clarified, although iron supplementation appears to be effective in many patients. The author aimed to evaluate the effectiveness of iron therapy in children with BHS without anemia.

Methods and Subjects: In this study, the author assessed 63 children with a diagnosis of BHS without anemia, aged between 6 months to 2 years. All of the patients were treated with ferrous sulphate solution 4 mg/kg/day orally for three months, and the response to the treatment was evaluated by the assessment of the frequency and severity of spells.

Findings: The study group included 33 boys (52.4%) and 30 girls (47.6%), giving a gender ratio of 1.1:1 with 11.46±3.78 months of mean age. Cyanotic spells observed in 73% before and 81% after, pallid in 14.3% before and 10.3% after, and mixed in 12.7% of cases before and 8.6% after treatment. Positive family history detected in 39.7% of patients. Mean frequency of spells was 6.63 ± 2.52 before and 2.49 ± 1.59 after iron therapy, per month (p<0.0001). Severe spells consist of 27% (17 cases) before, and 15.5% (9 cases) after iron therapy (p=0.008). Complete control

of BHS was observed in 5 patients (7.9%), partial in 47 patients (74.6%), weak in 4 cases (6.3%), and no response in 7 children (11.1%) after iron therapy.

Conclusions: The Results of this study suggest that iron therapy can significantly reduce the mean frequency and severity of BHS.

Key Words: Iron; Child; Breath holding spells

Oral Presentation

Common Grounds Between Migraine and Epilepsy in Pediatrics

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A controversial debate exists about relationship between migraine and epilepsy. It is also true that a common neuropath-physiological mechanism underlying the two different diseases cannot be ruled out. In one hand, recent studies including the data published by Italian researchers in "HEADACHE" shed light on the neuronal events mediating both the aura and the headache phases of migraine: identifying a cortical origin of migraine aura and susceptibility to attacks based on cortical hyper-excitability. In the other hand, genetic studies provided some evidences regarding the pathogenesis of some clinical forms of epilepsy and migraine, suggesting a channel dysfunction which influences both types of diseases. It is well known that people with infantile idiopathic epilepsy show concomitant migraine in up to 60% of the cases and 4% to 8% of the sufferer of migraine are affected with epileptic seizure. In this writhing we shall concentrate on 3 main topics: Association of epilepsy and migraine. Identifying specific paroxysmal seizure discharge in EEG in migraineurs. Positive family history of epilepsy in peoples who suffer from migraine.

Key Words: Migraine; Epilepsy; Headache

Oral Presentation

The Predictors of Intractable Seizures in Iranian Children

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Objective: Refractory epilepsy defined as a failure of more than 2 first line antiepileptic drugs to seizure control with an average of more than one seizure per month for 18 months. 20-40% of the patients with newly diagnosed epilepsy will become refractory to

treatment. We conducted an observational study of patients with refractory epilepsy to evaluate their response to treatment and attempt to determine the factors associated with a poor response to therapy.

Methods and Subjects: We studied 150 children with refractory epilepsy in Mofid Children Hospital, Tehran, Iran between October 2006 to October 2008. Demographic, clinical and paraclinical information of patients were collected in structured questionnaire forms and analyzed to determine the relation between different variables and medication response.

Findings: In total, 150 children (85 male, 65 female) with mean age 83.5±51.1 months were included in the study. Analysis of Results revealed that the following factors were significantly more common in children with refractory epilepsy: early age of onset, history of neonatal asphyxia and icter, preterm labor and microcephaly. Among the patients, those with neuron-developmental delay, symptomatic epilepsy, abnormal activities in electroencephalogram and abnormal findings in neuron-imaging appear to be more likely unresponsive to most of the antiepileptic drugs.

Conclusion: Early age of onset, history of neonatal asphyxia and icter, preterm labor and microcephaly are more common in patients with refractory epilepsy but in these patients, seizures of those with neuron-developmental delay, symptomatic epilepsy, abnormal activities in electroencephalogram and abnormal findings in neuron-imaging are least likely to control with therapy.

Key Words: Refractory Epilepsy; Risk Factors; Childhood

Oral Presentation

Sport in Epileptic Children

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Although children with epilepsy are at increased risk for injury, limitation on activities should be relatively few. When restrictions are excessive, they may lead to significant psychological difficulties with impaired self-esteem. Making guidelines that can be applied to all children with epilepsy is impossible because of seizure variation. The most reliable reference for parents counseling about sport activities is the neurologist who is taking care of the child. There is no need for restriction of recreational activities and routine sports practiced in schools and higschools in IRAN like Football, Handball, Volleyball, Basketball, Ping pong. In these sports, because of foot contact with the earth the risk of loosing consciousness and falling down is minimal. Swimming should be done under closed supervision of an adult who knows the principal of cardiopulmonary resuscitation. Bike

riding can be pursued safely by most children, but it should be avoided in children with frequent uncontrolled seizure. Activities in which the child is high off the ground such as rock, rope climbing and skydiving should be discouraged. Skating, rollerblading and skate boarding should be restricted only in children with uncontrolled seizure. Martial sports are not restricted, but severe head trauma must be avoided.

Key Words: Epilepsy; Sport; Physical activity

Oral Presentation

The Child Development Index in Qazvin Province and Iran

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Objective: The Child Development Index (CDI) is an index combining performance measures specific to children – health, nutrition and education - to produce a score on a scale of 0 to 100. A zero score would be the best and the higher the score, the worse children are faring. This index arose from a need to promote and develop public policies targeted toward children in the first years of life. This provides an instrument for the formulation and monitoring Early Childhood Development (ECD) in communities.

Methods and Subjects: Measurement the index required having three information including the under-five mortality rate per 1,000 live births (health dimension), the percentage of under fives who are moderately or severely underweight, i.e., being below two standard deviations of the median weight for age of the reference population (nutrition dimension) and the percentage of primary school-age children who are not enrolled in school (education dimension). The indicators of the year 2007 were obtained through the Health Center of Qazvin Province, the Qazvin provincial governorship and the Ministry of Health and Medical Education. To reach the index, the quantities of the three indicators are added and divided by three.

Findings: Regarding the quantities of the indicators in three dimensions of health, nutrition and education in Qazvin Province as: 21(per 1000), 5.7(%) and 0.77(%) (respectively), The CDI in the province was calculated as 9.16. The said indicators in the country at the same time were 10.12, 15.7 and 6.42, respectively; which yielded the CDI of 10.75 for the country.

Conclusion: Based on the last universal documented reports, the place of I.R.Iran among 137 surveyed countries in 2006 has been 71. Regarding these reports, Japan with 0.4 and Niger with 58 had the best and the worst indices in the world. Although

comparing the provincial and national indices shows a better situation in Qazvin province, the place of the country in universal ranking indicates that a special attention is needed to promote the index.

KeyWords: Child Development Index; health; Nutrition; Education

Oral Presentation

Infant Developmental Milestone Pattern of Iran in Relation to the Denver Chart

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This paper present standardized of Child development in Shiraz(Iran), A birth cohort of 317 randomly selected neonates born at the 14 maternity clinics during 2 random consecutive weeks in 1996 were followed at homes for 2 years at 12 designated occasions and the development examined by 2 trained public health officers and a community medicine expert. In gross motor and personal social sectors, girls were earlier than boys. In crying, the head control and the social smile respectively. In fine motor adaptive sector boys were advanced than girls in thumb-finger grasp, and pass cubes items. Boys development in language, personal-social and fine motor-adaptive sectors were earlier than girls in items "ooo/aaah", "papa, mama" "recognize relatives", "look for yarn". "recognize own nipple" respectively. The rest of the items passed by boys and girls were th same in both groups and not favoured to any one. The subjects developed slowere than Denverin one item of "fine motor adaptive" and "personal social" sectors. How ever Iranian infants were earlier than Devnver ones in items of other sectors. But in general no statistically sdignificant differences were detected. The paper conclude that the Denver Development Screening Test (DDST) universaly is a valid instrument for use in Iranian infant with adjusment presented.

Key Words: Infants; DDST; Denver Screening Test; Milestone

Poster Presentation

A few Simple Exercises for Progressive Psychomotor Development

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When we notice in developmental scales we find most of them are for exercise and in fact they teach to baby many skills to reach the developmental level appropriate to his age. We try to learn a few

examples in this way to dear colleagues that are on the base of neuroscience to teach this to parents of every baby, rather than term or premature.

Part 1: Sensory stimulation: Nowadays we know that cognition and concentration of child is based on the treatment with him in the first year of life and increasing sensation and perception by improvement of cranial nerves function in this age may result in higher concentration and better cognition for child in future. We choose the three system olfactory, visual and auditory stimulations for example because of their importance. Natural odors can activate reticular system and make better cognition and concentration and increasing arousal of baby. Natural lights can mature rod cells of eyes and sharp photic stimulations destroy rod cells and activate cone cells that are inappropriate for this age. Auditory stimulations with musical and gentle voice mature the limbic system and the baby will be calmer and more attentive. **Part 2: Motor skills:** We must try on infantile reflexes to progress motor development of infant in the first year of life. We suggest palmar and plantar massage for palmar grasp and plantar flexion, repeated practice on swimming reflex to detect hemiplegia and facilitate extensor and flexor muscles coordination in the first 6 months. Buttruss response after 5 months old age is a good value for vestibular system improvement that stays throughout the life and must execute repeatedly for practice in routine examination of infant.

We hope all of pediatricians use these options and gain some positive results for progressing psychomotor development for babies.

Key Words: Psychomotor development; Exercise; Motor skills

Oral Presentation

Developmental screening of children in Tehran city by DDST II and ASQ (Oral)

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Objective This research was designed to evaluate developmental status of 4-60 months children in Tehran city by two developmental screening tests (DDST II and ASQ) and also to determine the consistency coefficient between these tests, in order to provide an appropriate developmental screening tool for Iranian child health Care workers.

Methods and Subjects: DDST II and ASQ were performed on 197 children (104 girls and 93 boys), 4 to 60 months age, in four Child Health Care Clinics, in north, south, east and west regions of Tehran city. Fifteen percent of children were also evaluated by

Developmental Pediatricians. Available sampling was used. Obtained data was analyzed by SPSS software.

Findings: Developmental disorders were observed in 37% of children who were examined by DDST II, and in 18% of children who were examined by ASQ test. The estimated consistency coefficient between DDST II and ASQ was 0.2 which is weak (for gross motor 0.24, language 0.18, personal-social 0.06 and fine motor 0.05). The consistency coefficient between the physicians' examination with DDST II and ASQ were 0.2 and 0.47 respectively. Some of children didn't fail but their parents were concerned about their developmental status. It was 1% and 25% for DDST II and ASQ respectively.

Conclusion: This research showed that 18-37% of 4-60 months children had developmental delay by DDST II and ASQ in Tehran city (by considering suspected children it would be 38-43%). Thus it is essential to screen developmental status of children by appropriate screening tools in primary health care Centers. The consistency coefficient between DDST II and ASQ was weak; it means that we have to compare the Results of these two screening tools with a developmental diagnostic test for choosing an appropriate screening tool.

Key Words: Children; Developmental screening; DDST II; ASQ

Poster Presentation

Migrating Partial Seizure in Infancy: A Case Report

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For the first time Coppola et al reported fourteen infants of both sexes who had a previously unreported epileptic condition characterized by nearly continuous multifocal seizures. The first seizures occurred at a mean age of 3 months, without antecedent risk factors. At 1 to 10 months, the seizures became very frequent. They were partial with variable clinical expression, and the EEG showed that the discharges randomly involved multiple independent sites, moving from one cortical area to another in consecutive seizures. Although their topography varied, the EEG ictal pattern of each seizure was very similar. It consisted of rhythmic alpha or theta activity which spread to involve an increasing area of the cortical surface. Patients regressed developmentally and became quadriplegic with severe axial hypotonia. Three patients died at

age 7 months and at age 7 and 8 years, respectively. Seizures were controlled in only 2 patients, and only 3 children resumed psychomotor development. Extensive investigation failed to determine an etiology, and there was no familial recurrence. Neuropathological examination of the brain in two cases showed only severe hippocampal neuronal loss and accompanying gliosis. After this report other investigators reported same entity in some case series. In this case report we describe an infant with clinical criteria of MPSI.

Key Words: Infancy; Partial seizures; Migrating

Poster Presentation

The Effect of Sport on Development of Motor Skills in Normal Girl Students (7-11 years) with Lincoln Oseretesky Scale

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Objective: The purpose of this study was to study the effect of sport on development of motor skills of Normal girl students in primary schools.

Methods and Subjects: 26 girls students who were in the range of 7-10 Yrs (Mean & SD, 8/11 & 1/09 yrs) selected by simple random sampling at the primary school. They were participated in this cross sectional study intervention including motor exercise activities (40 sessions). Parents were asked to sign the informed consent. Each subject was individually assessed by Lincoln Oseretesky motor development scale. Then the research data were analyzed by SPSS and t-test.

Findings: The findings of this research indicated that: total score of motor skills, total balance score, static and dynamic balance with open eyes, bilateral motor coordination, upper limbs and lower limbs coordination, velocity and dexterity movements were significantly differed (pre and post intervention, $P \leq 0/05$).

Conclusion: Findings showed that sport has positive effect on developing motor skills in normal girl students (7-11 years). The results of this study can be used to plan and design the therapeutic and educational programs in the field of motor development in governmental or non governmental centers. A comprehensive program including motor exercise activities would be suggested for girl students.

Key word: Motor skills; Lincoln Oseretesky scale; sport

Oral Presentation

Effect of Anticonvulsant Drugs, Phenobarbital and Valproic acid on Serum Level of Cholesterol, Triglyceride, Lipoprotein and Liver Enzymes in Convulsive Children

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Objectives: Studies on the effect of various antiepileptic drugs on serum lipids have reported contradictory reports. We aimed to find the effect of Phenobarbital and sodium valproate monotherapy on serum lipid profile and liver function tests in epileptic children.

Methods and Subjects: This case-control study was conducted in Amirkola Pediatric hospital. One hundred and ten people with epilepsy enrolled the study. Children with hepatic or renal disease, those receiving medications which may alter liver functions or serum lipids were excluded. Patients were allocated into two groups, first group included 63 patients received Phenobarbital and second group include 47 patients received sodium valproate both in divided dose. A venous blood sample was collected after overnight fasting. Serum triglyceride, total cholesterol, LDL, HDL and liver function tests were evaluated. Data were analyzed by SPSS version 12.

Findings: In children receiving Phenobarbital total cholesterol ($P < 0.001$), LDL ($P = 0.02$), HDL ($P < 0.001$), ALP ($P = 0.09$), SGPT ($P = 0.000$), SGOT ($P < 0.001$) significantly increased after treatment, but TG level had no significant change ($P = 0.1$). In children receiving sodium valproate, HDL ($P = 0.049$), ALP ($P = 0.06$), SGOT ($P < 0.001$), SGPT ($P < 0.001$), significantly increased after treatment but there was no statistically significant change in total cholesterol ($P = 0.06$), LDL ($P = 0.1$) and TG ($P = 0.1$).

Conclusion: Our results suggest a need for monitoring serum total cholesterol, HDL, LDL and TG levels and perhaps, prescribing a low-cholesterol diet in patients receiving antiepileptic drugs.

Key Words: Seizure; Phenobarbital; Sodium valproate