۳۵ □□□□□□□□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□□□

Medical

Table of Contents

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

The effect of quality of life therapy training on the quality of life of mothers with children with autism; Experimental study

سونایاز هیوه چی ,Ⓟ ۱ دکتر گلبهار آخوندزاده© ۲

۱ دانشجوی کارشناسی ارشد پرستاری کودکان، واحد علی‌آبادکتول، دانشگاه آزاد اسلامی، علی‌آبادکتول، ایران.
۲ استادیار، گروه پرستاری، واحد علی‌آبادکتول، دانشگاه آزاد اسلامی، علی‌آبادکتول، ایران.

خلاصه مقاله: زمینه و هدف: کودکان مبتلا به اوتیسم با توجه به مشکلاتی که دارند می توانند کیفیت زندگی مادر را تحت تاثیر قرار دهند. مداخله‌های متعددی از جمله مداخله‌های حمایتی، درمان شناختی-رفتاری، آموزش مدیریت خلق منفی، تعامل والد-کودک و مداخلات خانواده‌محور برای مادران این کودکان توصیه شده است که یکی از این درمان‌ها، کیفیت‌زندگی‌درمانی است. لذا این مطالعه به منظور تأثیر آموزش کیفیت زندگی درمانی بر کیفیت زندگی مادران دارای کودک مبتلا به اوتیسم انجام شد .روش بررسی: در این مطالعه تجربی ۶۰ مادر دارای کودک مبتلا به اوتیسم ۶ تا ۱۳ ساله مراجعه کننده به کلینیک افق شهرستان گنبد کاووس در سال ۱۴۰۲-۱۴۰۱ به روش در دسترس انتخاب و با استفاده از جدول اعداد تصادفی در دو گروه ۳۰ نفری آزمون و کنترل قرار گرفتند. از پرسشنامه کیفیت زندگی سازمان بهداشت جهانی قبل و بعد از مداخله استفاده شد. پروتکل مداخله به صورت گروهی طی ۸ جلسه ۹۰ دقیقه¬ای به مدت ۲ ماه در گروه آزمون انجام شد. جهت آنالیز داده¬ها از آنالیز کوواریانس، آزمون‌های تی‌مستقل و تی‌زوجی استفاده شد .یافته ها: میانگین سن کودکان مبتلا به اوتیسم در گروه آزمون ۱/۷۸ ± ۹/۶۶ و در گروه کنترل ۱/۹۲ ± ۹/۲۳ بوده است، همچنین میانگین سن مادران دارای کودک مبتلا به اوتیسم در گروه آزمون ۴/۵۸ ± ۳۳/۹۶ و در گروه کنترل ۶/۲۲ ±۳۳/۶۱ بوده است، که از نظر آماری اختلاف معناداری بین دو گروه مشاهده نگردید .(1/0=P) 50 درصد کودکان گروه آزمون و ۵۳ درصد کودکان گروه کنترل دختر بودند. طبق نتایج این مطالعه، نمره کل کیفیت زندگی در دوگروه آزمون و کنترل قبل و بعد از مداخله اختلاف معناداری را نشان داد .(۰۱/۰=P) از لحاظ ابعاد کیفیت زندگی طبق آزمون تی زوجی در گروه آزمون قبل و بعد از مداخله اختلاف معنی‌داری در بعد سلامت محیطی(۰۳/۰=P)، سلامت روانشناختی(P = ۰۱/۰) ، سلامت جسمی (P = ۰۴/۰) و سلامت عمومی نشان داد(P = ۰۴/۰) ، و در گروه کنترل قبل و بعد از مداخله در بعد سلامت روانشناختی اختلاف معنی‌داری مشاهده شد .(P = ۰۱/۰) نتیجه گیری: آموزش کیفیت زندگی درمانی می تواند بر کیفیت زندگی و ابعاد آن در مادرانی که کودکان مبتلا به اوتیسم دارند، اثربخش باشد .واژه های کلیدی: مادران،کودکان مبتلا به اوتیسم،کیفیت زندگی .

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

validation of screening tools ASQ: SE-2 in Iranian children

نااریا ابوالقاسمی [1] ©, حمید رضا لرنژاد [2] ℗

[1] □□□□□□□□□□ □□□□□□□□□, □□□□□□□□□□□□□□, □□□□□ □□□□□□ □□□□□□□- □□□□□□□□□ □□ □□□□□□□ □□□ □□□□□□□□ □□□□□□□□□□, □□□□□□□, □□□□□-lornejad@health.gov.ir
[2] □□□□□□ □□□□□□□□□□□□□, □□-□□□- □□□□□□ □□□□□□□ □□□□□□□- □□□□□□□□□ □□ □□□□□□□ □□□ □□□□□□□□ □□□□□□□□□□, □□□□□□□, □□□□□-na_abolghasemi@yahoo.com

Abstract: Summary: The present study was conducted at culturally adapting, validating and standardizing the ASQ:SE-۲ (□□□□ □□□ □tages Questionnaires Social Emotional, Second Edition) by implementing a nation-wide cross-sectional methodological study, of Iranian children. Material & Methods: In order to implement a cross-sectional study, the country was divided into 14 areas and a multi-stage cluster sampling method was used to recruit the sample. In each area, 10 urban and 10 rural clusters (with 21 girls and 21 boys in each cluster: 1 girl and 1 boy for each age group in each cluster) were randomly selected. All statistical analyses were performed using STATA software. ASQ-SE is a tool for screening early child delays and disorders, specifically encompassing social-emotional development, and consists of 9 questionnaires for 2, 6, 12, 18, 24, ۳۰, ۳۶, ۴۸ □□□ ۶۰ □□□□□□□ □□□ □□□□□□□. □□□□ □□□□□□□□□□□□□□□ □□□ ۱۹ □□ ۳۳ □□□□□□□□□□ (□□□□ different number of questions for each age group) formulated such as to implicitly cover 7 social-emotional areas (self-regulation, compliance, adaptive functioning, autonomy, affect, social communication and interaction). Results: In the cross-sectional study, a total number of 11740 children aged 1-66 months were studied. The cutoff points for the ASQ:SE-۲ □□□□□□□□□□□□res of different age groups were determined.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

A case of Bethlem myopathy in iranian sisters

maryam kachuei [1] © Ⓟ, mohamadi [2]

هییت علمی [۱]
دانشجوی پزشکی [۲]

Abstract: Background: Bethlem myopathy (BM) is a rare congenital muscular dystrophy associated with mutations in the COL6A1, COL6A2, or COL6A3 genes. BM primarily manifests with proximal muscle weakness and contractures, affecting various connective tissues. It is a slowly progressive disorder, predominantly inherited in an autosomal dominant manner, though autosomal recessive cases have been reported. Case Presentation: We present the case of an 8-year-old girl from a low socio-economic background, the child of third-degree cousins, referred to our center in Tehran, Iran. She experienced severe pain and weakness in her extremities since the age of 4, leading to significant disability. Neurological examination revealed proximal muscle weakness, a waddling gait, and a positive Gowers's maneuver. Genetic testing confirmed a variant of uncertain significance (VUS) in an autosomal recessive pattern. The patient's 15-year-old half-sister also had BM. Discussion: BM is characterized by its distinct clinical features, genetic basis, and slowly progressive nature. Differential diagnosis is essential to distinguish it from other neuromuscular conditions. Management primarily focuses on symptom relief and enhancing patients' quality of life. Conclusion: This case highlights the challenges in diagnosing BM, the need for a high index of suspicion, and the importance of recognizing the diverse clinical presentations of this rare condition. Enhanced understanding can aid in early diagnosis and tailored management.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

A Comparison Study of the Tehran Norms to the Reference Norms of The Bayley Scales of Infant and Toddler Development (Bayley III)

Farin Soleimani [1] © ℗

[1] Welfare and Rehabilitation Sciences, Tehran, Iran.

Abstract: Objectives: The Bayley Scales of Infant and Toddler Development (3rd ed.; Bayley III) are widely used to assess cognitive, language, and motor development of children aged 1–۴۲ months. It is unclear whether or not the reference norms of the Bayley III are acceptable for use in other populations or lead to over- or underestimating the developmental status of target children. This study aimed to compare the Tehran norms to the reference norms. Materials & Methods: We used Bayley III norms to assess cognitive, language, and motor development of 1,674 healthy children from health care centers in Tehran. Differences between the scaled scores were calculated based on the Tehran and reference norms. A one-sample multivariate analysis of variance (MANOVA) was used to control the mean difference scores over all subtests. When MANOVA showed significant differences between the scaled scores based on the Tehran and reference norms, we used univariate analysis to see which subtest and age group led to these significant differences. Finally, the proportions of children with low scores (scaled scores 7 or -1 SD and 4 or -۲ SD) were compared on 2 norms were compared using the MacNemar test to determine the over- or underestimation of developmental delay. Results: The scaled scores based on the Tehran norms varied across values based on the reference norms in all subtests. The mean differences were significant in all 5 subtests (p .05) with large effect sizes for receptive and expressive communication, fine and gross motor subtests of .20, .23, .14, and .25, respectively, as well as with a small effect size for the cognition subtest of .02. Large effect sizes for all age groups were found for cognition, expressive communication, and fine motor subtests. More children scored below 1 and 2 SD using the Tehran norms. Using the reference norms resulted in underestimation of developmental delay regarding cognitive, receptive and expressive communication, and fine and gross motor skills. Conclusion: Population-specific norms should be used to identify children with low scores for referral and intervention. The Tehran norms differed from the reference norms for all subtests, and these differences were clinically significant. Keywords: Bayley Scales of Infant and Toddler Development, Development, Testing norms, Children.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

A look at treatment and new ways to treat patients with metabolic disorders

© Ⓟ [1] داود امیرکاشانی

[1] دانشگاه علوم پزشکی و خدمات بهداشتی و درمانی ایران

Abstract: Despite significant advances in the diagnosis and treatment of metabolic disorders, there are still many challenges in both diagnosis and treatment. Although suitable treatment has been chosen for a small number of disorders, but in some of these disorders, either there is still no adequate treatment or the selected treatments are not very effective. In the recent lecture, I will discuss important issues in the field of treatment of metabolic patients and its effects on improving the structural and mental problems of these patients.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

An eight-year-old boy with status asthmaticus and status epilepticus due to CNS Tuberculosis

Sasan Saket [1] © ℗, Zahra Taghizadeh Herat [2], Alireza Haghbin Toutounchi [2], Mohammad Hadi Mohseni [2], Fariba Shirvani [3], Mohsen Koosha [4]

[1] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□□ □□ □□□□□□□□□, □□□□□ □□□□□□□□ & Mofid Children's Hospitals, Tehran, Iran. * ORCID: 0000-0002-7118-0964.

[2] □□□□□□□□ □□□□□□□□□□□□□□□, □□□□□□□ □□ □□□□□□□□□, □□□□□□□ □□□□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□□

[3] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□, □□□□□□□ □□ □□□□□□□□□, □□□□□ Hossein Hospital, Tehran, Iran. * ORCID: 0000-0002-4893-6452.

[4] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□□□□□□, □□□□□□□ □□ □□□□□□□□□, □□□□□ □□□□□□□□ □□□□□□□□□, Tehran, Iran. * ORCID: 0000-0002-1660-3178.

Abstract: Background: Tuberculosis (TB), a bacterial infection caused by Mycobacterium tuberculosis, remains a global health concern, particularly in pediatric patients. It can present in various ranges of complications and involve different organs. Neurologic involvement such as spinal TB or cerebral TB are infrequent and rare presentations. Due to the rarity of cerebral presentation of TB, these patients might be at risk of being misdiagnosed. Case presentation: An eight-year-old boy was brought to the emergency department of our hospital with loss of consciousness, respiratory distress and generalized tonic-clonic movements and upward gazing which had begun 2 hours before. For 2 months prior to his recent admission, he had respiratory infection with fever and productive coughs. Also, he had several episodes of loss of consciousness, and his seizures lasted from less than five to more than 30 minutes. On arrival, he had generalized tonic-clonic seizures, encephalopathy and widespread wheezing, coarse crackles in the lower base of lungs bilaterally and respiratory distress. He was admitted to the PICU and the treatment started with suspicion of status asthmaticus, status epilepticus, and meningitis. Imaging studies showed hydrocephaly and cerebral necrotizing encephalitis. After sending samples for CSF analysis the treatment of TB started. To alleviate the intracranial pressure a ventriculoperitoneal shunt was applied in his right hemisphere. Imaging studies showed hydrocephaly and cerebral necrotizing encephalitis. Conclusion: Pediatric CNS TB is a complex and potentially devastating condition. Recent advancements in diagnosis and treatment have improved outcomes, but challenges remain. Early recognition, prompt diagnosis, and comprehensive management are crucial to ensuring the best possible outcomes for affected children. In this article, we have presented a detailed cerebral TB case. Although neurological involvement in TB is rare, the complications can be catastrophic. So then, it is very important to improve our knowledge and skills in this field. Key Words: Tuberculosis – Pediatric - necrotizing encephalitis - status asthmaticus - status epilepticus

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Application of Electrodiagnostic tests in SMA patients

℗ © [1] دکتر مسعود قهوه چی اکبری

[1] □□□□□□□□ □□□□□□□□ □□□ □□□□□□□□□□□□□□ □□□□□□□□□□□, □□□□□□□□□□ □□□□□□□ □□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□□ Sciences

Abstract: EMG is a useful diagnostic tool in children suspected of having acquired or inherited neuromuscular disease and complements the advances in molecular genetic testing duringthe past decade. As in adults, a brief history and focused physical examination is critical in directing the tests performed, especially because they may be terminated prematurely. Full-term newborns typically have nerve conduction velocities that are approximately half those expected in an adult. Nerve conduction velocities increase steadily during the first 3 to 5 yr of life, because of growth in axon diameter and thickening of myelin. Thus, adult nerve conduction values cannot be reliably expected until 3 to 5 yr of age, although some children's responses reach those values earlier. In a child younger than 3 to 5 yr, it is important to consult age-matched reference values in interpreting the results of nerve conduction studies. Electrodiagnosis remains an important diagnostic tool in: ۱.□□□□□□□□ □□□□□ :□□□-۵□ □□□□□□□ □□A to demonstrate the neurogenic nature of the illness. ۲.□□□□□ □□□□□ □□□□□□□, □□□□□ □□□□□□□□ □□□□□□□□□□□ □□□□ □□□□□□□□ □□□□□□□□ □ □□□□□ differential diagnosis, electrodiagnostic testing can be helpful and is more often utilized early in the workup. 3.Negative molecular work up (negative SMN1 deletion and SMN1mutation testing). ۴.□□□□□□□□□□ □□□ □□□□□□□□□□□ □□ □□□□□□□□ □□ □□□□□ □□□□□ □□□□□□ □□ □□□□□□ □□□□□□□□□□□□□ is a major feature. Summary: The information provided by electrodiagnosis is functional and not static, telling the practitioner how the nerve and muscle are functioning. Electrodiagostic tests remains an important diagnostic tool in atypical cases such as non-۵□ □□□□□□□ □□A, later onset disease to demonstrate the neurogenic nature of the illness.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Brain Waves frequency before Waking Up in Children

[2] شبنم جلیل القدر ,℗ © [1] مرسده قدسی

[۱] در دانشگاه علوم پزشکی قزوین نیروی درمانی مرکز طبی کودکان،دوره فلوشیپ خواب
[۲] دانشگاه علوم پزشکی قزوین

خلاصه مقاله :فرکانس امواج مغزی قبل از بیداری در کودکان هدف: بیداری با باز کردن چشم و برقراری ارتباط با محیط شروع می شود. مطالعه حاضر با هدف بررسی فرکانس امواج قبل از بیدار شدن در بین کودکان انجام شد .مواد و روش‌ها: در این مطالعه مقطعی، مطالعه بر روی ۲۰۰ بیمار در طی دوسال در مرکز خواب کودکان قزوین انجام شده است . امواج مغزی کودکان ۱۵ثانیه قبل از بیدار شدن از خواب مورد بررسی قرار گرفت. داده ها به صورت دستی از پلی سومنوگرافی (PSG) ثبت شده در طول خواب تجزیه و تحلیل شدند .نتایج: امواج الفا موج اصلی قبل از بیداری است. فرکانس امواج مغزی ریتم کاهشی رااز فرکانس ۱۵ هرتز دنبال میکند. کودکان با تکرار فرکانس کاهشی در ثانیه های قبل از بیداری هوشیار میشوند .نتیجه‌گیری: بیداری در بیماران مرکز ما با یک محرک خاص واز نوع امواج آلفا و تکرار فرکانسی کاهشی خاص در لوب پس سری اتفاق میافتد.تمام بیماران به طور مشابه این فرکانس کاهشی را داشتند .

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Brain waves frequency before waking up in children's

Mersedeh Ghodsi [1] © ℗, Shabnam Jalilolghadr [2]

[1] □□□□□ □□□□□□□□ □□□□□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□□□□□ □□□□□□□□ □□□□□□□□□□□ □□□□,
Qods Hospital, Qazvin University of Medical Sciences, Qazvin, Iran. Iran University of Medical Sciences, Tehran University of medical Sciences.Tehran, Iran.
[2] . □□□□□□□□□ □□ □□□□□□□□□, □□□□□ □□□□□□□□ □□□□□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□□□□□
Growth Research Center Research Institute for Prevention of Non-communicable Diseases, Qazvin University of Medical Sciences, Qazvin, Iran.

Abstract: ABSTRACT Background and Objective: After going through the alpha brain wave before waking, a person usually enters the conscious phase physiologically by opening of the eyelid and can communicate with the environment. In this study, we investigate the rhythm pattern in children's brain waves before waking up in children admitted to the QAZVIN GHODS sleep clinic. Materials and Methods: Out of 200 patients admitted, we selected those without physical or respiratory diseases. Only 42 children woke up spontaneously in the morning. Data accepted from the 16 leads of PSG with the complete recording of limb and respiration. We investigated this patient after PSG examination with AHI between mild moderate to sever. Then, we analyzed the frequency of brain waves before waking up based on the standards 30s, 10s, and 1 second. Results: we discover the Decreasing brain frequency rhythm pattern of patience from fifteen to one second before waking up PSG. Conclusion: This study suggested the decreasing alpha brain pattern before waking up in the morning. Keywords: Brain wave frequency, sleep medicine, awakening, alpha brain waves.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Childhood Guillain–Barre syndrome in the SARS-CoV-2 era: Is there any causative relation?

Elham Pourbakhtyaran [1] ℗, Morteza Heidari [1], Masood Ghahvechi Akbari [2], Mahmoud Mohammadi [1], Reza Shervin Badv [1], Gholamreza Zamani [1], Ali Reza Tavasoli [1], Zahra Rezaei [1], Setareh Mamishi [3], Elmira Haji Esmaeil Memar [4], Seyyed Mohammad Mahdi Hosseiny [4], Homa Ghabeli [1], Roya Haghighi [1], Mahmoud Reza Ashrafi [1] ©

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□, □□□□□□□
University of Medical Sciences, Tehran, Iran
[2] □□□□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□ □□□□ □□□□□□□□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□
Center, Tehran University of Medical Sciences, Tehran, Iran 4 Pediatric Infectious Dise
[3] □□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□
[4] □□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□

Abstract: During the SARS-CoV-2 pandemic, a vast number of neurological complications have been reported. Here, we reported an association between SARS-CoV-۲ □□□□□□□□□□ □nd Guillain-Barre´ syndrome (GBS). This prospective study, performed in Children's Medical Center, Tehran, Iran, a referral hospital from March 2020 to August 2021. Demographic data, associated symptoms, clinical and electrophysiologic features, SARS-CoV-۲ □□□□□□□, □□□ disability scores on admission and discharge time, and other important data were recorded and analyzed. From 37 patients with GBS, 28 were male and 9 were female (male to female ratio: 3.1). The mean age was ۸.۱۹□۳.۴۹ □□□□□□, □□□□□□□□ □□□□□ ۲.۵ □□ ۱۵ □□□□□□. □□□□□□□□□ □□□□□-CoV-۲ □□□□□□□□□□ □lues, including fever, cough, and diarrhea were recorded in 18 patients. Among them, SARS-CoV-۲ □□□ was detected in 7 patients, considered confirmed cases. SARS-CoV-۲ □□□ □□□ □□□itive in just 1 patient. The median time from the onset of infection to neurological symptoms was 11.25±8.44 days (ranging from 2 to 30 days). Acute axonal type motor polyneuropathy and acute segmental demyelinating motor polyradiculoneuropathy was the most prevalent type in both SARS-CoV-۲ positive and negative patients and the second most frequent type was acute segmental demyelinating motor polyradiculoneuropathy. The disability scale in most of the patients on admission and on discharge was 3 in 43.2% and 54.1%, respectively.Consistent with previous studies, we found no increase in patient recruitment during the pandemic compared to previous years, however, our study indicated that SARS-CoV-۲ □□ □□□□□□□□□ed with poorer outcomes. Studies with more sample size are required to determine if there is a causative association or not.
keywords: Guillain-Barre´ syndrome, children, SARS-CoV-۲

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

CNS involvement in a case of early infantile Pompe disease(case presentation)

© ℗ [1] نرجس رجاءبهشتی

[1] فوق تخصص مغز و اعصاب اطفال، دانشکده علوم پزشکی، گروه نورولوژی اطفال، دانشگاه تهران، تهران، ایران.

Abstract: Acid maltase deficiency is the cause of Pompe disease, also known as GSD type 2, which can result in accumulation of the glycogen in skeletal muscle, heart, liver, renal tubules, lymphocytes, and CNS. The classic infantile onset presents with cardiomegaly, hepatomegaly, enlargement of the tongue, weakness, and hypotonia. We want to describe a case of Pompe disease who presented her first symptoms in infancy and received ERT early in the course of her disease . Now she presents with seizures and CNS involvement in the neuroimaging study. Acid maltase deficiency is the cause of Pompe disease, also known as GSD type 2, which can result in accumulation of the glycogen in skeletal muscle, heart, liver, renal tubules, lymphocytes, and CNS. The classic infantile onset presents with cardiomegaly, hepatomegaly, enlargement of the tongue, weakness, and hypotonia. We want to describe a case of Pompe disease who presented her first symptoms in infancy and received ERT early in the course of her disease and now presents with seizures and CNS involvement in the neuroimaging study. keywords:Early infantile Pompe disease, ERT, CNS involvement

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Common imaging findings in pediatric brain MRI in emergent settings.

آلا ترابی [1] © ℗

[1] [illegible], Iran

Abstract: Common magnetic resonance imaging findings in pediatric emergent settings. There are several indications for brain MRI in children with emergent settings. The most important ones were discussed in this session. Intracranial hemorrhage:Traumatic intracranial hemorrhage and non traumatic intracranial hemorrhage can be diagnosed in MRI which can provide further information about the duration and underlying pathologies. Diffuse axonal injury Acceleration/deceleration forces diffusely injure axons deep to the cortex, producing unconsciousness from the moment of injury. The corpus callosum is most commonly affected and the initial CT scan may be normal or underestimate the degree of injury. MRI with DWI and SWI sequences the study of choice. Brain herniation is a life-threatening condition that requires prompt diagnosis. In brain MRI we can diagnose the presence, type and underlying etiology of the herniation. Ventriculomegaly is defined as enlargement of the ventricles. Simply, there are two causes: Hydrocephalus (communicating non-communicatin(and Parenchymal atrophy. Ischemic stroke The identified risk factors for childhood AIS are artheriopaties, chronic systemic disease with inflammation, sickle cell anemia, cardiac diseases and hypercoagulable states, metabolic diseases, trauma, infection, dehydration and cancer. Arterial ischemic stroke DWI is the most sensitive sequence for stroke imaging. On PD/T2WI and FLAIR infarction is seen as high SI. These sequences detect 80% of infarctions before 24 hours. Cerebral venous thrombosis Venous thrombosis has a nonspecific presentation and therefore it is important to recognize subtle imaging findings and indirect signs that may indicate the presence of thrombosis. On a routine MR or CT you should think of the possibility of venous thrombosis when you see: Direct signs of a thrombus, Infarction in a non-arterial location, especially if it is bilateral and hemorrhagic, Cortical or peripheral lobar hemorrhage, Cortical edema Deep medullary vein thrombosis The deep medullary veins (DMVs) are located in the subcortical white matter which drain the deep white matter and the striate body. Brain magnetic resonance imaging (MRI) is the modality of choice for the diagnosis of DMV thrombosis. On brain MRI, DMV thrombosis is defined as linear T2 hypointense/T1 hyperintense lesions of the periventricular white matter spreading in a radial pattern from the lateral surface of the ventricles. Pyogenic meningitis can occur due to hematogenous spread of infection, from direct inoculation secondary to trauma or surgery, or from neighboring infections. MRI is the imaging modality of choice. Increased signal in FLAIR images in the cerebral sulci secondary to purulent exudates in the CSF. Thin linear enhancement of the leptomeninges is seen.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Dihydrolipoamide Dehydrogenase (DLD) Deficiency in an Iranian Patient with Recurrent Intractable Vomiting: Successful Treatment with Thiamin supplement

Toktam Moosavian [1] ©, sharareh kamfar [2] ℗, غزاله جمالی پور صوفی [3]

[1] University of Medical Sciences, Tehran
[2]
[3] Sciences, Isfahan, Iran

Abstract: Abstract Introduction: Dihydrolipoamide dehydrogenase (DLD) deficiency is a rare disease of genetic origin due to the malfunctioning of a shared subunit of three mitochondrial multi-enzyme complexes. Phenotypes of this disease are a set of clinical manifestations ranging from neonatal disorders to myopathy or recurrent episodes of liver failures and vomiting for which there is currently no adequate or definitive treatment. Case presentation: We presented a 16-year-old boy with a history of recurrent vomiting of unknown cause from age two. Normal value ranges for the basic metabolic panel was reported in previous years. The patient was admitted with Wernicke encephalopathy after the last vomiting attack, which also showed metabolites of organic acids compatible with DLD deficiency. Whole exome sequencing revealed a known pathogenic variant in the DLD gene, and then he was diagnosed with DLD deficiency. Our patient was treated with a high dose of thiamine supplementation and continued treatment. He has not experienced any vomiting attacks or related problems in the last two years and has responded well to the treatment prescribed. Conclusions: Normal urine organic acid levels in patients with recurrent vomiting cannot roll out DLD deficiency. However, although thiamine deficiency usually induces Wernicke's encephalopathy, it can also be implicated in PDHc deficiency, and high-dose thiamine therapy (with doses up to 30 mg/kg) is recommended for deficient patients. Keywords: Dihydrolipoamide dehydrogenase (DLD) deficiency, Urine organic acid, Recurrent vomiting, Wernicke encephalopathy, Thiamin supplementation

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Duchenne muscular dystrophy , natural history, and standard cares

© ℗ [1] دکتر غلامرضا زمانی

[1] فوق تخصص اعصاب کودکان, مرکز طبی کودکان, دانشگاه علوم پزشکی تهران

Abstract: Duchenne muscular dystrophy (DMD) is an X-linked, muscle wasting disease that affects 1 in 3500-۵۰۰۰ □□□□□. □he disease is caused by mutations in the DMD gene that codes for dystrophin. . Dystrophin plays a crucial role in maintaining the integrity of muscle fibers. Without dystrophin, muscle fibers are susceptible to damage during contraction, resulting in ongoing muscle fiber degeneration, inflammation, and replacement by fibrous and fatty tissue. This process leads to progressive muscle weakness and degeneration. Typical presenting symptoms of disease include difficulty in walking, frequent falls, waddling gait, and difficulty in rising from the floor (Gower's sign). Fatigue during physical activities and delayed motor milestones may also be observed. DMD follows an X-linked recessive inheritance pattern. The dystrophin gene is located on the X chromosome. Males have one X chromosome and one Y chromosome, while females have two X chromosomes. Females carrying a single mutated dystrophin gene are typically unaffected due to X-chromosome inactivation. However, males have only one X chromosome, so if it carries the mutated dystrophin gene, they will develop DMD. The diagnosis of DMD is confirmed through genetic testing, which identifies mutations in the dystrophin gene. Key findings include large gene deletions, duplications, or point mutations. Serum creatine kinase (CK) levels are significantly elevated in DMD due to ongoing muscle damage, although it is not specific to this condition. Complications associated with DMD include respiratory insufficiency due to respiratory muscle involvement, cardiomyopathy leading to heart failure, scoliosis (abnormal curvature of the spine), joint contractures, and delayed cognitive development in a subset of patients. The management of DMD involves a multidisciplinary approach to provide standard cares in different disciplines and prevent the complications or delay the natural history in this disease . Corticosteroids, such as prednisone or deflazacort, are commonly used in the management of DMD. They help slow disease progression by reducing inflammation, preserving muscle strength, and delaying the onset of complications. In addition to Steroid , Calcium & Vit D Supplement, nutritional ,orthopedic, cardiac and Respiratory care, rehabilitation program and vaccination are the other package of standard cares for these patients .however despite promising advanced treatments such as exon skipping and gene therapy that change the severe phenotype to milder one in some of the cases , more powerful treatment strategies are needed to solve this genetic disease and until then genetic counselling and preventive measure are crucial in high risk families. Keywords: Duchenne, standard care, Advanced treatment

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Immunodeficiency, Centromeric Region Instability, and Facial Anomalies Syndrome (ICF) in a Boy with Variable Clinical and Immunological Presentations

Mohammad Vafaee-Shahi [1] ℗, Mohammad Hassan Bemanian [2], Saba Arshi [2], Mohammad Nabavi [2], Morteza Fallahpour [2], Sima Shokri [2], Afshin Rezaeifar [2], Hossein Shahzadi [3], Fatemeh Atashrazm [2] ©

[1] □□□□□□□□□□ □□□□□□ □□□ □□□□□□□□□□□□ □□□□□□□□ □□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□□□□□□ □□□ □□□□□□□□□□□, □□□□□ □□□□□□□□□□□ of Medical Sciences, Tehran, Iran
[2] □□□□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□□□□□ □□□□□□□□□□□, □□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□□
[3] □□□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□, □□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□□

Abstract: Immunodeficiency, centromeric instability, and facial anomalies (ICF) syndrome is a rare primary immunodeficiency disorder characterized by recurrent infections and low immunoglobulin levels due to variable combined immunodeficiency, and centromeric region instability, and facial dysmorphism. We describe a 12-year-old boy with recurrent respiratory tract infections, facial anomalies, scoliosis, and psychomotor retardation. He had recurrent pneumonia with low serum IgG and IgM levels during infancy and preschool age. Later at the age of 10, he developed recurrent ear infections. An IgA and IgM deficiency was found accompanied by a normal B-cell and T-cell count as well as an impaired candida-induced T-cell proliferation. Further evaluations revealed a missense mutation in the DNMT3B gene on chromosome 20. Chromosomal analysis showed a sunburst multi-radial feature on chromosome 1, which is a hallmark of ICF syndrome. The genetic mutation and chromosomal abnormality along with clinical findings are compatible with the diagnosis of ICF syndrome. We describe a 12-year-old boy with recurrent respiratory tract infections, facial anomalies, scoliosis, and psychomotor retardation. He had recurrent pneumonia with low serum IgG and IgM levels during infancy and preschool age. Later at the age of 10, he developed recurrent ear infections. An IgA and IgM deficiency was found accompanied by a normal B-cell and T-cell count as well as an impaired candida-induced T-cell proliferation. Further evaluations revealed a missense mutation in the DNMT3B gene on chromosome 20. Chromosomal analysis showed a sunburst multi-radial feature on chromosome 1, which is a hallmark of ICF syndrome. Similar to the majority of the reported cases, our patient had a Immunodeficiency, Centromeric Instability, Facial Anomalies Syndrome missense mutation in the catalytic C terminal region of the protein, which caused p.D722E substitution. This mutation has been previously reported in another study in an Iranian population. In this study, Yazdani et al, studied 550 patients with predominantly antibody deficiency. Twelve out of these 550 cases were shown to be ICF cases, 7 of whom were ICF1 with DNMT3Bmutation. Interestingly, 6 out of 7 of these cases had homozygous p.D722E mutations similar to our patient keyword:Chromosomal instability; DNA methyltransferase 3B; Immunodeficiency; Scoliosis.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Infotherapy; The new perspective of medical information in face of infodemic crisis

دکتر صدیقه محمداسماعیل [1] ©, دکتر شیبا کیانمهر [2] Ⓟ

دانشیارگروه علم اطلاعات و دانش شناسی، دانشگاه آزاد اسلامی، واحد علوم تحقیقات تهران [1]
دکترای کتابداری و اطلاع رسانی پزشکی، دانشکده پیراپزشکی، دانشگاه علوم پزشکی تهران، [2]

خلاصه مقاله :هدف: شناسایی ابعاد ومولفه های مؤثر در استقرار رویکرد اطلاع درمانی مبتنی بر شواهد در مواجه با بحران اینفودمی در مراکز درمانی و بهداشتی کشور با استفاده از روش فراترکیب است .روش پژوهش: در این پژوهش که به لحاظ هدف از نوع مطالعات کاربردی بوده، از روش پژوهش کیفی و تکنیک فراترکیب برای گرداوری داده ها و ترکیب یافته های کیفی استفاده شده است و ۳۵ منبع مبنای این مطالعه قرار گرفته است .یافته ها: با تحلیل مقالات و نظر خبرگان، دو بعد اصلی و ۱۲ ریز بعد، مشتمل بر: الف) اطلاع: شامل۶ ریز بعد؛ کسب اطلاعات، شناسایی اطلاعات، به اشتراک گذاری اطلاعات، افزایش آگاهی، رفع نیازهای اطلاعاتی، افزایش دانش سلامت ؛ و ب) درمان: شامل۶ ریز بعد؛ رضایتمندی بیماران، رفتار مراقبتی، کاهش هزینه درمان بستری، کاربست اطلاعات سلامت، آموزش حفظ سلامت، و پیشگیری از بیماری بدست آمدند .نتیجه گیری: نظر به توجه خاص سازمان بهداشت جهانی و دولت ها به امر «سلامت برای همه» و تأکید شدید بر پیشگیری از بیماری ها، استقرار رویکرد اطلاع درمانی می تواند پاسخگوی نیاز کنونی جوامع در زمینه سلامت همگانی به ویژه در مواجه با بحران اینفودمی باشد. مطالعات نشان داده‌اند که رسانه‌ها معمولاً اغراق می‌کنند. حتی ممکن است برخی از مطالب اشتباه بوده و برای کسانی که به آن‌ها اعتماد می‌کنند، خطرناک باشد و هزینه‌های ثانویه ی هنگفتی را تحمیل کند. این مسأله، لزوم بررسی سندیت و صحت اطلاعات سلامت منتشر شده در رسانه‌ها را آشکار می‌سازد. در این راستا، استقرار رویکرد اطلاع درمانی و فراگیری آموزش مداوم در این عرصه، به منزله ابزار تسهیل کننده دسترسی به هنگام اطلاعات و اشاعه آن برای هر دو طیف پزشک و بیمار، و نیز چشم انداز نوین اطلاع رسانی پزشکی یعنی اطلاع درمانی در مواجه با بحران اینفودمی است و راهکاری مبتنی بر شواهد محسوب می گردد .

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

lipid myopathy case report

سعید انوری [1] © Ⓟ

[1] □□□□□□□ □□□□□□□□□ □□□□□□□□□□□□□□

Abstract: Lipid myopathy case report Lipid storage myopathies (LSMs) are a heterogeneous group of genetic disorders that present with abnormal lipid storage in multiple body organs, typically muscle. Patients can clinically present with cardiomyopathy, skeletal muscle weakness, myalgia, and extreme fatigue. 0ur patient was a 8.5 year old boy. He probably did not have any problems until one or two months before the visit, and after that, he gradually developed a progressive weakness of the proximal limbs. He weighted 25 kg and had head circumference 51.5 Cm. Birth weight was 2 Kg he was born due to normal vaginal delivery. He was the second child in the family and was hospitalized for three days after birth. His parents were related. There was no problem in the family history. He studies in the third grade In the examination, the patient had weakness of the proximal muscles of the limbs flexor muscle of the neck, Gowers sign was positive. DTR did not decrease clearly. EMG and NCV was compatible with non irritable myogenic changes in some sampled muscles. Hb=12.5, MCV= 89.3, LDH=1668, CPK=762, ALT=86, AST=119, serum NH3= 121, serum lactate=25 Brain MRI and Total Spinal MRI was normal. In muscle biopsy, we saw lipid storage myopathy. MADD was suggested to the Patient and a dramatic response was obtained with a high dose of riboflavin. keywords: lipid, myopathy, weakness

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Medical Assessment for a Suspected Eating Disorder in a Child or Adolescent

مرضیه عصاره [1] © Ⓟ

[1] □ □□□□□□□□, □□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□ □□□□□□□□ □□□□□□□□□, □□□□□□□
University of Medical Sciences, Karaj, Iran

Abstract: Medical Assessment for a Suspected Eating Disorder in a Child or Adolescent This evaluation aims to establish current eating disorder symptoms, develop a preliminary diagnosis, exclude other causes of weight loss or vomiting, evaluate for any associated medical complications, and, as appropriate, initiate a plan for treatment and ongoing monitoring. A mental health professional may be needed to perform a psychological assessment to evaluate for common comorbid psychiatric illnesses such as affective or anxiety disorders. the health care provider should usually start by obtaining a history with both parent and patient together. Observing the interaction between child and parent(s) can be informative. Subsequently, the physician should speak individually with the child or adolescent and the parent(s) to ask each party about specific related disordered behaviors. Skilled interviewing can reveal any “hidden agenda” and clarify any discrepancies in perspective between parent(s) and child. With regard to the presented problem, the chief complaint may be weight loss, but it also may be amenorrhea, weakness, dizziness, fatigue, abdominal pain, nausea, vomiting, or a combination of complaints. A detailed history can usually differentiate an eating disorder from another etiology for symptoms. A thorough physical examination is an essential component of the assessment of a child or adolescent suspected of having an eating disorder. Height should be obtained using a wall-mounted stadiometer gown. The physician should calculate BMI and obtaining vital signs, including oral temperature and orthostatic measurements of heart rate and blood pressure. It is not uncommon for significant bradycardia, hypotension, and hypothermia to be present. Physical examination may reveal loss of subcutaneous fat, prominence of bony protuberances, and lanugo hair on the back, trunk, and arms. Dental enamel erosion and enlargement of the parotid and salivary glands may be present in those who purge. Assessment of sexual maturity rating is important to evaluate for pubertal delay or arrest. Laboratory tests are not diagnostic, but they may help confirm an eating disorder diagnosis by excluding other causes of weight loss or vomiting.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Molecular targeted therapy in liver cancer

© ℗ [1] مسعود وثوق

[1] □□□□□ □□□□□□□□□□ □□□ □□□□ □□□□ □□□□□□□□ □ □□□□□□□□□□□□□ □□□□□□□□□

Abstract: Hepatocellular carcinoma (HCC) is one of the leading causes of cancer-associated death. Hepatocarcinogenesis involves numerous processes, including the Sonic Hedgehog (SHH) signaling pathway and ER stress, which participate in the initiation, progression, migration, recurrence, and maintenance of HCC cancer stem cells. Furthermore, SHH signaling and ER stress regulates various cellular behaviour such as proliferation, differentiation, cell survival, self-renewal, and epithelial-mesenchymal transition (EMT). Furthermore, the expression level of genes associated with the SHH signaling pathway and ER stress were assessed using quantitative real-time polymerase change reaction (qRT-PCR). In this study, it is demonstrated that inhibition of SHH signaling pathway/XBP1 using GLI-specific Decoy ODN led to a decline in the growth rate and progression of HCC cells, decreased migration capacity, and attenuated EMT progression. According to these data, it could be supposed that inhibition of the SHH pathway/ER stress using GLI/XBP1-specific Decoy ODNs, in combination with established medical settings, could be considered as a new potential therapeutic approach in HCC. According to these data, it could be supposed that inhibition of the SHH pathway/ER stress using GLI/XBP1-specific Decoy ODNs, in combination with established medical settings, could be considered as a new potential therapeutic approach in HCC. Hepatocellular carcinoma (HCC) is one of the leading causes of cancer-associated death. Hepatocarcinogenesis involves numerous processes, including the Sonic Hedgehog (SHH) signaling pathway and ER stress, which participate in the initiation, progression, migration, recurrence, and maintenance of HCC cancer stem cells. Furthermore, SHH signaling and ER stress regulates various cellular behaviour such as proliferation, differentiation, cell survival, self-renewal, and epithelial-mesenchymal transition (EMT). Glioma-associated oncogene family zinc finger (GLI) and XBP1 are transcription factors playing important physiological roles in the development of many organs and are deregulated in cancer. In this study, we highlighted the importance of GLI and XBP1 transcription factors on cancerous phenotype of Huh-7 cells using Decoy oligodeoxynucleotide (ODN) and inhibited GLI/XBP1 binding to the promoters of downstream genes. GLI-specific/XBP1 Decoy ODNs were transfected into Huh-۷ cells and the transfection efficiency was measured using fluorescent microscopy. Next, the effects of GLI-specific/XBP1 Decoy ODN transfection on the Huh-۷ □□□□□’ □□□□ords: Hepatocellular carcinoma, Decoy oligodeoxynucleotide, Glioma-associated oncogene (GLI), ER stress, XBP1, Sonic Hedgehog signaling pathway.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Movement Disorders

Mahmoud Reza Ashrafi [1] ℗, Ali Nikkhah [1] ©

[1] □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□

Abstract: Movement Disorders result from dysfunction of deep subcortical gray matter structures termed the basal ganglia .Basal ganglia consists of : Caudate nucleus, Putamen, Globus pallidus, Subthalamic nucleus, Substantia nigra . The term movement disorders refers to a group of nervous system (neurological) conditions that cause either increased movements or reduced or slow movements. These movements may be voluntary or involuntary. Movement Disorders Impair the regulation of voluntary motor activity without directly affecting strength, sensation or cerebellar function. Movement disorders can be classified as : Hyperkinetic (Presenting with abnormal involuntary movements) and Hypokinetic (Characterized by slowness and difficulty in initiating and maintaining a voluntary movements) . Hyperkinetic sush as Ataxia, Chorea, Ballismus, Tremor, Myoclonus, Tics and Dystonia . The most important of Hypokinetic abnormal movement is Parkinsonism . Common types of movement disorders include: Ataxia. This movement disorder affects the part of the brain that controls coordinated movement. Ataxia may cause uncoordinated or clumsy balance, speech or limb movements, and other symptoms. There are many causes of ataxia, including genetic and degenerative disorders. Ataxia may also be caused by an infection or another treatable condition. Chorea. Chorea is characterized by repetitive, brief, irregular, somewhat rapid, involuntary movements. The movements typically involve the face, mouth, trunk and limbs. Chorea can look like exaggerated fidgeting. Dystonia. This condition involves sustained involuntary muscle contractions with twisting, repetitive movements. Dystonia may affect the entire body or one part of the body. Tourette syndrome. This is a neurological condition that starts between childhood and teenage years and is associated with repetitive movements and vocal sounds.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

MRI findings in children with intractable epilepsy compared to children with medical responsive epilepsy

Susan Amirsalari [1] © ℗, Azime Khosronejad [2], Elham Rahimian [3]

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□ □□□□□□□□□□□
[2] □□□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□
[3] □□□□□□□□□□□□□□□□□□ □□ □□□□□□□□□□ □□□□ □□□□□□□

Abstract: Objective: Epilepsy is a common brain disorder characterized by a persistent tendency to develop seizures in neurological, cognitive, and psychological contents. Magnetic Resonance Imaging (MRI) is a neuroimaging test facilitating the detection of structural epileptogenic lesions. This study aimed to compare the MRI findings between patients with intractable and drug-responsive epilepsy. Material & methods: This case- control study was conducted from 2007 to ۲۰۱۹. □□□□ □□□□□□□□□ □□□□□□□□□□□□ □□□□□□□□□□□□ □□□□ ۱-۱۶- year-old patients with intractable epilepsy referred to the Shafa Neuroscience Center (n=72) (a case group) and drug-responsive patients referred to the pediatric neurology clinic of Baqiyatallah Hospital (a control group). Results: There were 72 (23.5﷼ patients in the intractable epilepsy group and 200 (76.5﷼ patients in the drug-responsive group. The participants' mean age was 6.70 ±4.13 years, and there were 126 males and 106 females in this study Normal brain MRI was noticed in 21 (29.16﷼ patients in the case group and 184 (92.46﷼ patients in the control group. Neuronal migration disorder (NMD)was also exhibited in 7 (9.72﷼ patients in the case group and no patient in the control group. There were hippocampal abnormalities and focal lesions (mass, dysplasia, etc.) in 10 (13.88﷼ patients in the case group and only 1 (0.05﷼ patient in the control group. Gliosis and pore cephalic cysts were presented in 3 (4.16﷼ patients in the case group and no patient in the control group. Cerebral and cerebellar atrophy was revealed in 8 (11.11﷼ patients in the case group and 4 (2.01﷼ patients in the control group. Corpus callosum agenesis, hydrocephalus, brain malacia, and developmental cyst malacia, and developmental cyst were more frequent in the case group; however, the difference between the groups was not significant. Conclusion: The MRI findings such as hippocampal abnormalities, focal lesions (mass, dysplasia), NMD, porencephalic cysts, gliosis, and atrophy are significantly more frequent in children with intractable epilepsy than in those with drug-responsive epilepsy. Keywords: Drug-responsive epilepsy; Intractable epilepsy; Magnetic Resonance Imaging (MRI)

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Neurodevelopmental delay; Early detection can lead efficacious cure

© Ⓟ [1] دکتر محمد زنوزی راد

[1] بیمارستان فوق تخصصی آرام (البرز). گروه کودکان ۲.ستاد علوم و فناوریهای شناختی کشور.۱

Abstract: The disorders included under the umbrella category of NDD are usually not considered as independent entities since impairments of different areas often co-occur and multiple diagnoses are the rule rather than the exception (Yeargin-Allsopp et al., 2008). Several tools and methods are available to identify early behavioral markers of NDD. For instance, retrospective studies analyzed parental recall of developmental differences and concerns during the child's first years of life, such as language, speech, and motor delays or atypical sleep, feeding, or play behavior. NDD might affect the child's psychological and physical well-being, resulting in chronic disease and disabilities throughout adulthood. Systematic reviews exploring early markers of neurodevelopmental disorders are needed to build evidence-based surveillance tools. Being able to recognize red flags for neurodevelopmental disorders (NDD) is crucial to provide timely intervention programs. The NDD management process incorporates the role of many individuals in the child's life. The parents/guardians, social relationships, and environment play critical roles in the early intervention of NDD.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Neurologic consultation in cogenital heart disease

℗ © [1] دکتر مرتضی رضوانی

[1] دانشگاه علوم پزشکی تهران هییت علمی درمانی بیمارستان بهرامی

Abstract: Neurologic consultation in children with congenital heart disease neurologic consultation in patiant with congenital heart disease is importantto ensure comprehensive care and management of these patients. Congenital heart disease (CHD) refers to structural abnormalities of the heart present at birth, which can vary in severity from mild to complex. Here are some reasons why neurologic consultation is necessary for children with CHD: 1. Neurodevelopmental concerns: Children with CHD are at an increased risk of neurodevelopmental delays and cognitive impairments. This may be due to various factors such as reduced oxygen supply to the brain, abnormal blood flow, genetic syndromes associated with CHD, or complications during surgical interventions. A neurologic consultation can help assess and monitor the child's neurodevelopmental progress, provide early intervention services, and guide appropriate educational support. 2. Seizures and stroke: Some children with CHD may experience seizures or strokes due to abnormal blood flow or clot formation. A neurologist can evaluate these symptoms, order appropriate imaging studies (such as MRI or CT scans), and recommend antiepileptic medications or other interventions as needed. 3. Neurologic complications of cardiac surgeries: Children with complex CHD often require multiple cardiac surgeries throughout their lives. These surgeries can sometimes lead to neurologic complications such as stroke, cerebral hemorrhage, or neurologic deficits. A neurologic consultation is crucial in managing these complications, providing appropriate treatment, and monitoring the child's neurologic status post-surgery. 4. Evaluation of other neurologic symptoms: Children with CHD may present with other neurologic symptoms such as headaches, developmental regression, muscle weakness, or movement disorders. A neurologist can evaluate these symptoms, perform a thorough neurological examination, and order further investigations if necessary. 5. Medication management: Children with CHD often require multiple medications, including those that may have potential neurologic side effects. A neurologic consultation can help monitor and manage any adverse effects of these medications, adjust dosages if needed, and ensure optimal treatment. In summary, neurologic consultation is essential for children with congenital heart disease to address neurodevelopmental concerns, manage neurologic complications, evaluate other neurologic symptoms, and optimize medication management. This multidisciplinary approach ensures comprehensive care for these patients and improves their overall outcomes.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Neurological Manifestations of Adenosine Deaminase 2 Deficiency

Morteza Heidari [1] © ℗

[1] □□□□□□ □□□□□□□□□ □□□□□□, □□□□□□□□□ □□□□□□□□□ □□□□□□□□, □□□□□□□□'□ □□□□□□□ □□□□□□, □□□□□□□□□□ □□□□□□ □□ Excellence, Tehran University of Medical Sciences, Tehran, Iran

Abstract: Abstract Deficiency of adenosine deaminase type 2 (DADA2) is a systemic autoinflammatory disorder characterized by vasculopathy, immune dysregulation, and hematologic abnormalities. Neurological manifestations of DADA2 can be the first and sole manifestation of DADA2. The most notable neurological manifestations of DADA2 are strokes that can manifest with various neurological symptoms and are potentially fatal. Other neurological involvement included neuropathies, focal neurological deficits, ophthalmological findings, convulsions, and headaches . 77.5% of patients with neurological manifestations had at least signs of one cerebrovascular accident, with lacunar strokes being the most common and 35.9% of them having multiple stroke episodes . In summary, neurological manifestations affect a significant proportion of patients with DADA2, and the phenotype is broad. Therefore, stroke, encephalitis, posterior reversible encephalopathy syndrome, mononeuropathy and polyneuropathy, and Behçet's disease-like presentations should prompt the neurologist to exclude DADA2, especially in childhood. Keywords: DADA2, Stroke

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

New Therapeutic medications for SMA

Mahmoud Reza Ashrafi [1] © ℗

[1] [illegible]

Abstract: Spinal muscular atrophy (SMA) is an autosomal recessive motor neuron disease caused by mutations in the survival of motor neuron 1 gene (SMN1) that result in reduced production of functional SMN protein. For more than 100 years since its initial description, therapy for SMA, has mainly involved supportive and palliative care. A multidisciplinary team with experience in the care of SMA patients is usually most effective for delivery of care. Early diagnosis is important in all types of spinal muscular atrophy (SMA), as the success of treatments or medical interventions may depend on identifying individuals as early as possible to begin treatment before irreversible neuronal loss. The most robust response to SMA treatments has clearly been shown to occur in treating presymptomatic patients. Thus, early detection through newborn screening is paramount to ensuring efficient treatment access prior to manifesting symptoms of the disease. There are 3 treatments approved by the U.S. Food and Drug Administration (FDA) for SMA. Spinraza (nusinersen, Biogen Idec), an antisense oligonucleotide, was approved in 2016 for the treatment of any subtype of SMA and targets SMN2 to create more functional SMN protein. It is administered via intrathecal injection, with 4 loading doses (day 0, day 14, day 28, and day 63) and maintenance doses every 4 months thereafter. Zolgensma (onasemnogene abeparvovec, Novartis AG/AveXis) was approved on May 24, 2019, to treat patients aged less than 2 years with any subtype of SMA. Zolgensma is a gene therapy administered in a single intravenous dose that uses the adeno-associated virus serotype 9 vector (AAV9) to deliver a copy of the SMN1 gene to replace the native defective or absent gene. The third treatment, Genentech's Evrysdi (risdiplam) is an orally administered, systemically distributed small molecule that promotes the inclusion of exon 7, which increases the expression of full-length SMN2 messenger RNA and levels of SMN protein. Risdiplam is approved for the treatment of patients 2 months of age or older with SMA on Aug 7, 2020. FDA Approves Genentech's Evrysdi (risdiplam) For Use in Babies Under Two Months with Spinal Muscular Atrophy (SMA) on May 31 2022. There is no more exciting development in medicine than the introduction of new, highly effective treatments for a condition that affects children and leads to substantial disability and death.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

pediatric insomia:diagnosis, tratment and complication

khatereh khamenehpour [1] © Ⓟ

[1] □□□□□□□□ □□□□□□ □□□□□□□□ □□□□□□, □□□□□□□□ □□□□□□□□□ □□□ □□□□□□□□□□ □□ □□□-□□□□□□□□□□□□□ □□□□□□□□, □□□□□□
University of Medical Sciences, Qazvin, Iran

Abstract: pediatric insomnia" was defined as a "repeated difficulty with sleep initiation, duration, consolidation, or quality that occurs despite age-appropriate time and opportunity for sleep and results in daytime functional impairment for the child and/or family. The nighttime sleep difficulty determined fatigue/malaise; attention, concentration, or memory impairment; impaired social, family, occupational, or academic performance; mood disturbance/irritability; daytime sleepiness; behavioral problems; reduced motivation/energy/initiative; proneness for errors/accidents; and concerns about sleep. The prevalence of insomnia varies depending on the age of children and ranges from 25% in infants to 15% in young adolescents. First In order to treat insomnia, the underlying causes such as untreated diseases or sleep hygiene should be investigated . Behavioral therapy such as Extinction,Bedtime fading,Positive routines,Scheduled awakenings,Positive reinforcement and Parental education should be considered before use drug treatment for insomnia. Hypnotic drug such as benzodiazepin, antihistamine , melatonin must be used in cases with selective chronic insomnia. pediatric,insomnia,behavioral therapy, melanin,hypnotic drug

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Polytherapy in pediatric refractory epilepsy

© Ⓟ [1] فرهاد محولاتی شمس ابادی

[1] فوق تخصص مغز و اعصاب کودکان

Abstract: Monotherapy has been considered the gold standard for drug treatment of epilepsy. Despite advances in the treatment of epilepsy, 30–۴۰٪ □□ □□□□□□□□ □□□□□□ □□□□□□□□□□□□□ □□ □ single anti-epileptic drug (AED). The global introduction of new AEDs with fewer drug interactions and novel mechanisms of action over the past years as adjunctive treatment in refractory epilepsy has triggered interest in optimizing polytherapy. For refractory epileptic patients, polytherapy is not only acceptable, but is standard practice. If the decision to choose an optimal first-line AED was difficult, finding an optimal two (or more) drug combinations is challenging. Rational polytherapy, the process of selecting drug combinations with results superior to selecting drugs at random, may remain an art, but quantifiable strategies for arriving at the most effective possible combination are clearly needed. The potential advantages of rational polytherapy are to achieve better seizure control with fewer side effects, as well as control of multiple seizure types that respond to different drugs. With a widening range of available mechanisms of AED action, much activities has been focused on the defining and refining rational polytherapy with AEDs that have differing pharmacological properties. Rational choice of drug combinations is based more on avoidance of pharmacodynamics or pharmacokinetic side effects than on evidence for supra-additive efficacy. We review the theoretical considerations based on AED mechanism of action and the challenges in finding such optimal combinations.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Salivary Factors Related to dental caries in Autistic Children

Reihaneh Khalilianfard [1] © ℗, Noosha samiefard [1], Shaghayegh najari [1]

[1] □□□□□□□ □□ □□□□□□□□□□□□□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□□□ (□□□□), □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□ □□□ □□□□□□□□ Network (USERN), Tehran, Iran

Abstract: Background: Autism Spectrum Disorder (ADS) is a developmental disorder affecting communication and behavior. Early diagnoses help people get the support and services they need. Children with autism are at a higher risk of developing tooth decay due to various factors. This study aims to investigate salivary factors related to caries in these children in comparison with healthy children. Conclusion: There are differences in salivary factors between patients diagnosed with autism and healthy individuals, including a reduced salivary pH, abnormal oral microbiome composition, and decreased protective factors such as IgA. All of which suggesting the fact that autistic children with autism require enhanced hygiene practices and a higher frequency of follow-up appointments. Keywords: Autism, salivary biomarkers, children, dental caries

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Sleep and Neuromasculare Diseases

Shabnam Jaliolghadr [1] © ℗, Hoormehr Nozari [1]

[1] □□□□□□□□ □□□□□□ □□□□□□□□ □□□□□□, □□□□□□□□ □□□□□□□□□ □□□ □□□□□□□□□□ □□ □□□-□□□□□□□□□□□□□ □□□□□□□□, □□□□□□
University of Medical Sciences, Qazvin, Iran

Abstract: Sleep disorders are a common problem in neuromuscular disorders. The most common sleep disorders are Insomnia, Parasomnias, Hyper somnolence, Sleep-Disordered Breathing (SDB) and etc. SDB are found in more than 40% of children with neuromuscular disorders. Type of SDB in patients include: nasal airflow limitation, nocturnal and then diurnal hypoventilation, obstructive apneas, central apneas or combination, cor pulmonale, and respiratory failure. The main nocturnal SDB symptoms are dyspnea, frequent awakenings, witnessed apneas, snoring, nocturia and seizures. The diurnal symptoms suggestive of desaturation during night hours are headache and loss of vigilance during the day. The important complications are pulmonary artery hypertension, cor pulmonale, neurocognitive dysfunction. To make a diagnosis, the physician will use the child's medical history, sleep history, and physical exams. Other clues are pulse oximetry, spirometry, and blood gas analysis. The presence of prominent chest muscular weakness or diaphragmatic weakness for any reason, resulting in a forced vital capacity (FVC) of less than 60%. The gold standard diagnostic test is polysomnography (PSG). The "sleep related hypoventilation/ hypoxemia'' diagnostic criteria are as mention below: (A) A neuromuscular or chest wall disorder is present and believed to be the primary cause of hypoxemia, (B) PSG or sleeping ABG shows at least one of the following: (i) An SpO2 during sleep of less than 90% for more than 5 min with a nadir of at least 85%. (ii) More than 30% of total sleep time at an SpO2 of less than 90%. (iii) PaCO2 during sleep is abnormally high or increased relative to levels during wakefulness, (C) The disorder is not better explained by another current sleep disorder, another medical or neurological disorder, medication use or substance use disorder. Positive airway pressure (PAP) therapy has been useed to treat patients. PAP therapy should be initiated for very soon and in isolated nocturnal hypoventilation. The role of PAP is to assist or "replace" the weakened respiratory muscles in order to correct alveolar hypoventilation by maintaining a sufficient tidal volume and minute ventilation. PAP can improve quality of life (QoL) and prolongs also lifespan. Other treatments such as Modafinil, steroid is available and useful depend on indication. In summery , children with neuromuscular diseases should be routinely evaluated for symptoms of sleep dysfunction and SDB and treat by multidisciplinary approaches .

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Study of clinical and genetic characteristics of limb-girdle muscular dystrophy in Iranian patients

Hossein Farshadmoghadam [1] © ℗

[1] Children Growth Research Centre, Research Institute for Prevention of Non-Communicable Disease, Qazvin University of Medical Science, Qazvin, Iran Corresponding affiliation: Assistant Professor of Pediatric Neurology, Department of Pediatrics, Children

Abstract: Background Limb–girdle muscular dystrophy (LGMDs) is a bothersome muscle disease associated with weakness of the shoulder and pelvic girdle. Objectives: The study is aimed to determine the genetic diversity and relative frequency of various forms of LGMD in Iranian children. Methods: In this descriptive research, 60 children referred to the neurology or emergency department of the Pediatric Medical Center during April 2019 to April 2020 were studied. Additional tests (muscle biopsy and genetic testing) were performed in order to confirm the diagnosis of LGMDs. Quantitative evaluations such as disease level, motor, respiratory, and cardiac functions and molecular analysis were performed using statistical analysis. Results: Out of ۶۰ □□□□□□□□□ □□□□ □□□□□□□□□ □□□□□□□□□ □□□ □□□□□□□□□□ □□ □□□□□□ □□□□□□□□□□□ □□□□□□□□□ dystrophy, a total of 41 patients with a mean age of 11.1 were studied. 22 patients were diagnosed with genetic tests and 19 patients with muscle biopsy. 26.8% had alpha sarcoglycanopathy, 24.4% had beta sarcoglycanopathy, 17.1% had gamma sarcoglycanopathy, 7.3% had calpainopathy, 7.3% had dysferlinopathy, 7.3% had dystroglycanopathy, 7.3% had titinopathy and one patient had laminopathy. Among genetically proven individuals, 27.3% had SGCB mutation and 18.2% had SGCA mutation. Conclusions: The prevalence of alpha and beta sarcoglycanopathy phenotypes in the study population shows that the severity of clinical involvement may be predicted by SGCB gene mutation and sarcoglycan expression.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

Sydenham chorea

Nahideh Khosroshahi [1] © ℗

[1] □□□□□□□□□□ □□□□□□□□□□

Abstract: Definition: Sydenham chorea is a rare neurological disorder characterized by sudden onset chorea, usually in childhood. Chorea is defined as random-appearing, continuous (while awake), involuntary movements which can affect the entire body. This often includes the face and tongue. Epidemiology: Sydenham chorea, also known as St. Vitus dance, is a neuropsychiatric manifestation of rheumatic fever with an incidence varying from 5 to 35%. Although the incidence of SC has declined markedly, particularly in developed countries, it remains the most prevalent cause of acute chorea in children worldwide .It may occur alone or concomitantly with other manifestations of rheumatic fever. Sometimes associated with emotional lability and other neuropsychiatric features. Approximately 10% of patients with ARF can present with Sydenham's chorea, in which case diagnosis is relatively easy. Etymology: It is named after British physician Thomas Sydenham (1624–۱۶۸۹). □□□ □□□□□□□□□ □□□□□□, □□□□□□ □□□□□ □□□□□□, □□ □□ □□□□□□□□□ to Saint Vitus, a Christian saint who was persecuted by Roman emperors and died as a martyr in AD 303. Etiology: Sydenham chorea is caused by an infection with bacteria called group A streptococcus. This is the bacteria that cause rheumatic fever (RF) and strep throat. Group A streptococcus bacteria can react with a part of the brain called the basal ganglia to cause this disorder. Pathogenesis: Sydenham's chorea results from an auto-immune reaction against a prolonged S. pyogenes infection, where the body forms antibodies against antigens of the bacteria known as epitopes. Similar epitopes are found in the basal ganglia, an area in the brain which controls movements Treatment : Probably the best documented drug is haloperidol but valproate is now most specialists' first-line choice. Other anticonvulsants such as carbamazepine is effective. Dopamine receptor-blocking drugs such as pimozide are used for non-responders or those with chorea paralytica. Clinical manifestation : Involuntary brief random movements of your arms and body, which give an impression of restlessness, Clumsiness , Difficulty maintaining hand grip , Hand wringing , Slight grimacing ,Stumbling and falling. Prognosis: Most children make a full recovery in three to six months. A small number of children continue experiencing symptoms for up to two years.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

The early childhood development, the role of pediatricians and family physicians

© Ⓟ [1] سیف اله حیدرآبادی

[1] استادیار دانشگاه علوم پزشکی تبریز

Abstract: The domain of child development has always been influenced by biomedical model. That is, we are always looking for a medical problem in developmental problems. According to this model, in most cases of developmental problems, we first look for a medical diagnosis and etiology and then try to solve the developmental problem medically. Although the biomedical approach to developmental problems is necessary and accurate, the model is not complete and has limitations. Now we know that the development of the brain is the result of the interaction of biology (including genes, diseases, nutrition...) and experiences and learning. The early years are very important for child development due to the high speed of synapsing and the high neuroplasticity capacity of the brain. Positive experiences facilitate brain development, while negative experiences or deprivation of experience threaten it. The development of brain begins before birth. Researches continuously show that the mother's mental problems during and after pregnancy can have a negative impact on the child's development. Among other non-medical reasons that can affect the development and behavior of a child are deprivations, toxic stresses and childhood adversities. Environmental deprivations refer to situations where a child lacks appropriate environmental experiences, which can negatively impact their development and behavior. For example, they may not receive adequate verbal, cognitive, educational, and sensory stimuli. Due to various reasons, the caregiver's sensitivity and appropriate responsiveness may be compromised, and there may be a lack of a suitable and rich environment with appropriate stimuli. For example, parents who are depressed, facing mental health issues may exhibit less sensitivity and responsiveness towards their child's cues. In addition to environmental deprivations, the presence of adverse childhood experiences can also impact children's development. They include but not limited to poverty, single parent, parents struggling with addiction or alcohol, child abuse, incarcerated relative, divorce, physical and emotional neglect. The higher the number and intensity of these adversities, the higher the likelihood of developmental and behavioral problems. The pediatricians and family physicians are in the best position to identify developmental delays and medical/non-medical risk factors that can jeopardize the child's development. They can greatly contribute to improving the child's developmental status by conducting developmental screenings, assessing the presence of risk factors, providing appropriate education to families and refer for early intervention.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

The importance of clinical feature for final genetic diagnosis of Duchenne/Becker muscular dystrophy patients with single exon deletions

MohammadKazem Bakhshandeh [1] © ℗, Asghar Ghorbani [2]

[1] [illegible]
[2] [illegible]

Abstract: Duchenne muscular dystrophy (DMD) and Becker muscular dystrophy (BMD) are the most common inherited myopathy in live males. This X-linked recessive genetic disease due to mutations in the dystrophin gene located at Xp21.2, has incidence rate of 1 in 3600 –۶۰۰۰. [illegible] ۲۰۱۵ [illegible] ۲۰۲۲ [illegible] ۳۰۵ [illegible] ۳۸ years (mean age of 9.14 years). Multiplex ligation-dependent probe amplification technology (MLPA) on 305 patients detected 201 deletions (65.9%) and 20 duplications (6.6%). 84 patients (38%) had deletion or duplication of one exon, and 137 patients (62%) were affected by deletion or duplication of more than one exon. 3 patients with single exon deletion were further analyzed with “next-generation” sequencing technology (NGS) to confirm the identified variants. This sequencing of 3 patients showed frameshift mutation in one of them. Clinical feature of this 4 years old boy was severe as Duchenne muscular From 2015 to 2022 we analyzed 305 cases suffering from BMD/DMD aged from three months to 38 years (mean age of 9.14 years). Multiplex ligation-dependent probe amplification technology (MLPA) on 305 patients detected 201 deletions (65.9%) and 20 duplications (6.6%). 84 patients (38%) had deletion or duplication of one exon, and 137 patients (62%) were affected by deletion or duplication of more than one exon. 3 patients with single exon deletion were further analyzed with “next-generation” sequencing technology (NGS) to confirm the identified variants. This sequencing of 3 patients showed frameshift mutation in one of them. Clinical feature of this 4 years old boy was severe as Duchenne muscular dystrophy but MLPA reported as exon 10 deletion compatible with milder phenotype of Becker muscular dystrophy. This finding indicated that some patients with single-exon deletions may actually carry a point mutation. keyword: Becker muscular dystrophy; Duchenne muscular dystrophy; Iranian patients; MLPA; NGS; Novel variants.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

The relationship between manual ability and self-care in children 1-8 years with spastic cerebral palsy: a cross-sectional study

حمید دالوند [1] © Ⓟ

[1] گروه کاردرمانی- دانشکده توانبخشی- دانشگاه علوم پزشکی تهران

Abstract: Introduction: Limitations in the ability to perform manual functions decrease the individual's participation in activities of daily livings. Thus, it is required to study the relationship between manual skills and self-care activities in children. This study amid to investigate the relationship between manual ability and self-care in children with spastic cerebral palsy at the ages of 1 to 8 years. Methods: In this cross-sectional study, 125 children aged 1-۸ □□□□□ □□□□ □pastic cerebral palsy were studied, which were chosen by convenience sampling method from 8 occupational therapy clinics in Tehran in 2022. The evaluation tools were Manual Ability Classification System (MACS), Mini-Manual Ability Classification System (Mini-MACS), Pediatric Evaluation of Disability Inventory (PEDI), and cognitive level form designed in the SPARCLE project. After collecting the data, Stata software14 was used for the data analysis using chi-square, Spearman correlation coefficient, Mann-Whitney, Kruskal-Wallis and regression. Results: In this research, the mean age of the children was 54.2±15 months and 43.2% had a cognitive level greater than 70. The mean self-care and mobility in children were 49.65±30.60 and ۴۰.۷۸□۲۶.۹۷, □□□□□□□□□□□□. □□□□ □□□□□□□□□□ □□□, □□□□-□are and mobility of children showed a significant increase (P0.001). No significant difference was seen between boys and girls in self-care and mobility (P0.05). By changing the education level of the main caregiver, no significant difference was found in self-care and mobility (P0.05). With the increase in children's cognitive ability level and level of MACS, self-care and mobility improved significantly (P0.001). Moreover, the level of MACS and mobility with the highest beta values (-۰.۵۳۰ □□□ ۰.۵۱۲, respectively) showed a greater contribution to the prediction of self-care. Conclusion: The results showed that with increasing age, cognitive ability level and level of MACS, self-care and mobility in children with spastic cerebral palsy improve significantly. Therefore, it is suggested to pay more attention to manual ability in order to improve self-care and mobility in these children. Keywords: Manual ability Classification system (MACS), Mobility, Self-care, Spastic cerebral palsy.

سخنرانی: نورولوژی روانپزشکی و تکامل و خواب

WHAT WE NEED TO KNOW: infantile botulism

Simin Khayatzadeh Kakhki [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□, □□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□, □□□□□□□ □□□□□□□□'□ □□□□□□□□,
Tehran University of Medical Sciences, Tehran, Iran

Abstract: Infantile botulism is the result of clostridium botulinum infection, an anaerobic spore-forming, gram-positive bacillus live on soil and dust, in infant less than one year. The bacteria can get on surfaces like carpets and floors and also can contaminate honey. Herein, we report a case of about 3-month old boy referred to our hospital due to hypotonia and ruled out of sepsis. She was referred to our hospital because of poor feeding and lethargy. She was the previous only breast-fed, well infant with no history of honey ingestion or processed foods. There was no fever or other systemic presentation. During two days of admission in the other hospital lab data and lumbar puncture was normal. Due to lack of improvement she was referred to our hospital. The first they of assessment the baby had hypotonia and flattened facial expression with ptosis, sluggish pupillary reflex, poor suck and cry, diminished DTR and respiratory distress. Due to strong doubt , the patient treated with botulism antitoxin. Stool sample showed positive result. After one months, she was discharged and there wasn't any complication during follow up. In conclusion, infantile botulism is a medical emergency. Do not wait for laboratory confirmation to initiate consultation or treatment. Keywords: Infantile botulism, botulism antitoxin, floppy baby

سخنرانی: نوزادان

Initiating and advancing enteral feeds in premature infants

© Ⓟ [1] بهناز بصیری

[1] دانشگاه علوم پزشکی همدان

Abstract: As survival rates for preterm infants improve more emphasis is being put on improving the quality of outcome by concentrating on optimising nutritional management. The goals of nutritional support in the preterm include: Meeting the recognised nutritional requirements of the preterm infant. Achieving an acceptable standard of short term growth. Preventing feeding-related morbidities, especially necrotising enterocolitis (NEC). When to start feeding: Evidence supports early enteral feeding. Stable infants of any gestation, with no contraindications, should commence enteral feeding as close to birth as possible . If feeding contraindicated/feeding intolerance, colostrum should be used buccally as mouth care . Regular assessment should be undertaken for evidence of any feed intolerance, particularly “high risk . Although there is uncertainty in some areas of nutritional support in preterm infants, standardisation of practice across networks is associated with a reduced incidence of NEC. Colostrum as mouth care aims to: Keep the oral mucosa moist, clean and intact and minimize oral infection Keep the lips moist, clean and intact, Promote comfort, alleviate pain and discomfort. Trophic feeds, defined as initial milk feeds of up to 1ml/kg/hr, aim to prepare the gut for subsequent advancement of enteral feeds. There is no good evidence that slow advancement of feeding in very low birth weight infants reduces the risk of NEC. Reaching full enteral feeds faster results in earlier removal of vascular catheters, less sepsis and fewer other catheter-related complications. The SIFT trial concluded there is no evidence that slower advancement in feeds reduces risk of NEC, even in those infants thought to be at “high risk” The benefits of these include stimulating peristalsis, immunomodulatory effects and the growth and maturation of the gut mucosa including the development of tight junctions between the mucosal cells.The maximum volume classed as a “trophic feed” is 1ml/kg/hour or ۲۴□□/□□/□□□. □□□□□□□□ □□□□□ □□□□□□ □□ □□□□□□□□□□ □□ □□□□ □□□□□□□□□□ □□ □□□□ □□□□ □□□□ infants in order to utilise maternal colostrum and stimulate gut trophic hormones.The colostrum used for mouth care is separate to the 1ml/kg/hr used for trophic feedingThere is no recognised consensus on duration or method of delivery. Trophic feeds should commence as soon after delivery as possible at 1ml/kg/feed 1-۲ □□□□□□. □□□phic feeding of preterm infants with IUGR and abnormal antenatal Doppler results does not appear to impact significantly on the incidence of NEC or feed intolerance

سخنرانی: نوزادان

A comparison of clinical and laboratory features in neonatal proven sepsis and COVID-19

© Ⓟ [1] راضیه سنگسری

[1] تهران دانشگاه علوم پزشکی تهران بیمارستان مرکز طبی کودکان ایران

Abstract: Background: With the subsiding of the Covid-۱۹ □□□□□□□□, □t is an opportune time to conduct a more precise study on the characteristics of this virus in comparison to bacterial sepsis in neonates. Unlike pediatric and adult groups, the clinical manifestations of Covid-۱۹ □□□ □□□□□□ in neonates, but can be confused with bacterial sepsis. In this study, we wanted to compare the lab data and clinical manifestations in both groups because early detection of the disease can decrease the period of unnecessary antibiotic therapy. This cross-sectional study was conducted between ۲۰۲۰ □□□ ۲۰۲۳ □□ □□□□□□□□ □□□□□□□□ □□ □□□ □□□□ □□ □□□□□□□□ □□□□ □□ □□□□□□□□□□ □□□□□□□ Center, Tehran. Iran. In this study, we compared the lab data and clinical characteristics of neonates with a positive blood culture or a positive RT-PCR for covid-۱۹. □□□□□-seven neonates in covid-۱۹ □□□□□ □□□ □ixty-eight neonates in the bacterial sepsis group entered. Clinical presentations of cough, diarrhea, fever, late-onset sepsis, neutropenia, and leukopenia were seen significantly in Covid-۱۹ □□□□□□□□ □roup. Instead, vomiting, convulsions, apnea, mottling, ventilation requirement, positive CRP, thrombocytopenia, and also thrombocytosis were significantly more in the bacterial sepsis group. Unlike neonates with proven sepsis clinical features in Covid-۱۹ □□□□□□□□ □ere nonspecific. The high ACE2 concentration in epithelial cells of the respiratory and gastrointestinal tract may explain the related symptoms in neonates affected with covid-۱۹. □□□□□□□□: □□□□□□□□ □□□□□-۱۹□ □□□□□□□□□ia; sepsis; antibiotic therapy.

سخنرانی: نوزادان

An examination of birth injuries among neonates and associated risk factors; a multicenter study

امیر نداف [1] © Ⓟ

[1] □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□ □□□□□□□□, □□□□□ □□□ □□□□□□□□ □□□□□□□□ □□□□□□ □□□□□□ □□□□□□
Research Institute Vali Asr Hospital, Imam Khomeini Hospital Complex Tehran University of Medical Sciences

Abstract: Neonatal birth traumas, encompassing a diverse spectrum of injuries, arise during delivery and labor and represent a significant concern in perinatal care. This study aims to identify the risk factors implicated in the occurrence of birth injuries. Methods: This case-control study was conducted in 3 referral hospitals from 2019 to 2020. Data were collected from neonates' medical records. Potential effective factors, including maternal and perinatal status, were compared in two groups of newborns based on birth trauma. Logistic regression was conducted to determine the association between various risk factors and birth injuries. Results: A total of 129 neonates, including 43 traumatized cases and 86 healthy controls, entered the study. Head and neck injuries comprised 60.4 % of all birth traumas, bone fractures occurred in 18.6 % of neonates, and brachial plexus injuries were 9.3%. The cesarean section rate was 55.5% in total. Regression analysis showed that lower levels of maternal education (B=-۰.۶۵۹, □=۰.۰۲۲), □□□□□□□□ □□□□□□□□□ (B=-۲.۷۹۵, □□□□□۰.۰۰۱), □□□ □□□□□ □□□□□ □□□□□ (□=۰.۱۲۹, □=۰.۰۱۸) □□□□ □□□□□□□□□□□□□□ correlated with higher rates of birth trauma occurrence. Maternal age, hypertension, diabetes, and type of presentation were not significantly associated with birth trauma in our study. Conclusion: Maternal educational level along with other factors like delivery type and APGAR score, are reliable predictors of birth trauma occurrence. Understanding the risk factors associated with birth injuries is essential for improving perinatal care and minimizing adverse outcomes. Keywords: Birth injuries, birth trauma, Parturition, Risk factors, Newborn

سخنرانی: نوزادان

Association of neonatal anomalies with maternal health and education level: A population-based study in Iran

kayvan mirnia [1] © Ⓟ

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□□□□,□□□□□□□□□ □□□□□□□ □□□□□□,□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□

Abstract: Background: The etiology of fetal anomalies is multifactorial. Socioeconomic status is a well-recognized risk factor that impacts overall health and well-being. However, the relationship between maternal socioeconomic status and the incidence of fetal anomalies is not well-established. This study aimed to evaluate the effects of maternal factors, including education level, on neonatal health outcomes.Methods: This retrospective nationwide case series study utilized data from Iran's birth registration system, collected between 2015 and 2016. The association between maternal and neonatal variables, such as age, education level, residency, consanguinity, maternal health complications, birth weight, gestational age, sex, and congenital anomalies, was examined.Results: Data from 1,491,883 mothers and their neonates were included in this study. The mean age of mothers was 28.2 years (range: 11-۵۰ □□□□□). □□nsanguineous marriage was identified as the most significant risk factor for anomalies, while higher birth weight (2500 grams) and gestational age (37 weeks) were associated with a lower. This retrospective nationwide case series study utilized data from Iran's birth registration system, collected between 2015 and 2016. The mean age of mothers was 28.2 years (range: 11-۵۰ □□□□□). □□nsanguineous marriage was identified as the most significant risk factor for anomalies, while higher birth weight (2500 grams) and gestational age (37 weeks) were associated with a lower frequency of anomalies. Maternal age above 45 years, diabetes, preeclampsia, and fetal female gender were positively correlated with neonatal health problems Contrary to existing literature, our nationwide large-sample population study revealed a significant association between high maternal education and fetal anomalies. This study also highlights the importance of maternal age during pregnancy, which surpasses the level of pregnancy care. Further research is warranted to explore the underlying factors and causation of these associations. keyword: Educational Status, Pregnancy, Newborn, Risk Factors, Socioeconomic status,Neonatal anomaly

سخنرانی: نوزادان

Can a Single Value of Cardiac Troponin I Predict Short term Adverse Outcomes in Premature Newborns?

kamyar Kamrani [1] © ℗, Mohammad Reza Zarkesh [1]

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□

Abstract: Cardiac troponin I (cTn I) has been demonstrated as a possible useful biomarker for myocardial injuries. The present study aimed to evaluate potential relationships between this biomarker and neonatal morbidities among preterm neonates. This cohort study was carried out at an Iranian Hospital (Tehran-Iran; 2021). Newly-born preterm neonates entered the study. Blood sampling was performed immediately after neonatal intensive care unit (NICU) admission and sent to the laboratory to detect levels of plasma cTnI. The correlations between the levels of plasma cTn I and each neonatal outcome were evaluated as the primary outcome. A total of 101 NICU hospitalized neonates with the mean gestational age, 1st, and 5th minutes Apgar scores of ۳۳.۷۵۰□۲.۱۲۵ (□□□□□: ۲۹-۳۷) □□□□□, ۷.۶۴۷۱□۱.۷۶۶, □nd 9.188±1.205 entered the study. The mean and median of Troponin I levels were 0.131±0.126 and 0.0920 ng/ml. The results pointed out that neonates who died during hospitalization or required CPR (cardiopulmonary resuscitation) had lower troponin I in comparison with their controls; nonetheless, the differences were not significant (P=0.950 & P=0.557). The mean±SD of troponin I was not significantly different between neonates with and without PDA (p=0.741), asphyxia (P=0.298), and intubation (P=0.212). The occurrences of necrotizing enterocolitis, respiratory distress syndrome, bronchopulmonary dysplasia, intraventricular hemorrhage, and sepsis were not also significant factors for the alteration of troponin I (P0.05). Since there were no relationships between cTn I and neonatal outcomes, great caution should be implemented regarding the use of single cTn I value as a diagnostic marker for short-term neonatal adverse outcomes. Further investigations with larger sample sizes are strongly suggested. keywords: Cardiac troponin I, Morbidity, Newborn, Premature birth

سخنرانی: نوزادان

Carbohydrate malabsorption in neonates

© ℗ [1] مریم سعیدی

[1] فوق تخصص نوزادان مرکز طبی کودکان دانشگاه علوم پزشکی تهران

خلاصه مقاله- :عدم تحمل لاکتوز: لاکتوز توسط آنزیم لاکتاز روده به گلوکز و گالاکتوز تبدیل می شود و سپس این مونوساکاریدها توسط حامل های وابسته به سدیم جذب می شوند. نقص در آنزیم لاکتاز باعث تجمع لاکتوز در روده کوچک شده و اسهال شدید متعاقب مصرف کربوهیدرات را ایجاد می کند.به علاوه در افرادی که کمبود لاکتاز دارند، ۷۵٪ لاکتوز دست نخورده وارد روده بزرگ می شود و در آنجا توسط باکتری های روده تبدیل به اسیدهای چرب با زنجیره کوتاه و گاز هیدروژن می شود. این اسیدهای چرب توسط کولون جذب می شود و بعنوان منبع انرژی استفاده می شود از طرفی اسهال را اسیدی می کند .گاز هیدروژن تولید شده مبنایی برای تست های تشخیصی تنفسی هیدروژن در این بیماران می باشد. دلایل عدم جذب لاکتوز: -علل اولیه یا ارثی : در این مورد نقص آنزیمی ارثی لاکتاز باعث عدم تحمل لاکتوز وعلایم اسهال، درد شکم و نفخ بعد از خوردن شیر یا فرآورده های بدست آمده از شیر در این بیماران از دوره نوزادی می شود .کمبود ارثی لاکتاز یک اختلال نادر اتوزومال مغلوب است. بیماران در مواردی مبتلا به هیپرکلسمی و نفروکلسینوز نیز می شوند. پیش از اینکه شیرخشک ها و فرآورده های غذایی فاقد لاکتوز وارد بازار شوند، این بیماری معمولا کشنده بود. ولی امروزه با جایگزین نمودن شیر فاقد لاکتوز علایم بهبود می یابد. -سوجذب ثانویه لاکتوز: بطور ثانویه از اختلالات دیگرناشی شود.مانند رشد باکتری های روده؛انتریت عفونی؛ ژیاردیازیس؛سلیاک؛بیماریهای التهابی روده بخصوص کرون ؛ التهاب ناشی از دارو یا رادیوتراپی. تشخیص: تشخیص این بیماری با وجود علائم به علاوه یک تست جذب (تست تحمل لاکتوز) یا سوجذب (تست تنفسی هیدروژن) می باشد.از طرفی در آزمایش مدفوع اسیدیته مدفوع افزایش یافته و مواد احیا کننده در مدفوع دیده می شود. شرح حال تغذیه ای فرد نیز به تشخیص کمک می کند. پس از اینکه سوجذب لاکتوز تشخیص داده شد، بیمار باید برای علل ثانویه بررسی شود و در کسانیکه اختلال زمینه ای قابل درمان داشته باشند می توان عدم تحمل لاکتوز را برطرف نمود . علاوه بر آن در نوزادان و کودکان کم سال قبل از هرگونه اقدام باید احتمال عدم تحمل پروتئین شیر گاو بررسی و رد شود. درمان:مصرف شیرهای بدون لاکتوز یا لاکتوز کم. شیری فاقد لاکتوز محسوب می گردد که لاکتوز کمتر از ۰/۱ میلی گرم در ۱۰۰ میلی لیتر داشته باشد و شیر با لاکتوز کم ؛لاکتوز کمی دارد ولکن بیشتر از ۰/۱ میلی گرم در ۱۰۰ میلی لیتر است. انواع شیرهای AL110؛LF ؛ شیرهای هیدرولیز کامل با پروتئین Whey لاکتوز

سخنرانی: نوزادان

Cow's milk allergy in infants

© Ⓟ [1] دکتر راضیه سنگسری

[1] ایران تهران دانشگاه علوم پزشکی تهران بیمارستان مرکز طبی کودکان

Abstract: Cow's milk allergy is a common issue in infants, with a prevalence of 2 to 6 percent, and this number has increased in recent years. There are two categories of milk protein allergies: IgE-dependent and non-IgE-dependent. IgE-related allergies manifest as symptoms such as angioedema, rash, wheezing, runny nose, eczema, and even anaphylaxis. Non-IgE-related allergies can cause pulmonary hemosiderosis and digestive disorders. Particularly, digestive problems in children are often associated with non-IgE allergies, affecting the entire gastrointestinal system from the mouth to the colon (eosinophilic esophagitis, enterocolitis, and proctocolitis). Some infants may experience excessive restlessness and colic due to milk protein allergy. Although food proteins are the main cause of gastrointestinal allergies, respiratory allergens and other allergens can also play a role. For infants with cow's milk protein allergies, it is recommended to adjust the mother's diet and continue breastfeeding, as breast milk is the best choice. It is not advisable for these infants to start formula feeding. The mother's diet should be limited, particularly reducing or eliminating cow products. In more severe cases, other common allergens like eggs, fish, peanuts, mustard, and plant seeds should be restricted as well. It is important to note that some infants may be allergic to milk, cream, and ice cream from cow products but not to yogurt, buttermilk, and low-fat cheese. In severe cases and cases where formula feeding is necessary, a complete hydrolyzed formula can be used. If a child does not respond to this formula, amino acid-based formulas may be helpful for severe sensitivities. keywords: Breast milk, complete hydrolyzed formula, amino acid-based formulas

سخنرانی: نوزادان

Diagnostic Values of Blood Indices for Neonatal Sepsis

Maryam saeedi [1] © ℗

[1] □□□□□□ □□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□ □□□□□□□□□□ □□□□□ □□□□□□□□□□□□□□

Abstract: Abstract Introduction: Sepsis is the leading cause of death in newborns, particularly in underdeveloped countries. Early diagnosis and appropriate treatment are critical in reducing neonatal mortality. Since blood culture results are often not available for 48-۷۲ □□□□□, □□□er hematologic findings may provide useful information for early diagnosis. Method: This applied research study, conducted at the Children's Medical Center and Bahrami Children's Hospital in Tehran, Iran from 2013 to 2022, aimed to identify a reliable hematologic laboratory diagnostic method for prompt treatment initiation. Results: The study included 319 neonates, with 209 cases of culture-positive sepsis, 65 cases of culture-negative sepsis, and 45 cases without neonatal sepsis. Pearson's test demonstrated a significant correlation between thrombocytopenia, positive CRP, and high RDW with culture-positive sepsis (P =0.000), indicating a statistical difference between the three groups. The mean CRP and eosinophil levels were higher in the culture-positive group with fungal sepsis. Conclusion: In septic neonates with high CRP levels, particularly in conjunction with eosinophilia, fungal coverage should be considered. Keywords: Neonatal Sepsis, eosinophil, thrombocytopenia

سخنرانی: نوزادان

Effects of a small-baby protocol on early and long-term outcomes in extremely preterm infants

Setareh Sagheb [1] © ℗

[1] Tehran University of Medical Science

Abstract: Effects of a small-baby protocol on early and long-term outcomes in extremely preterm infants Extremely preterm (EPT; ≤ 28 weeks' gestation) infants remain vulnerable to poor outcomes . 21.2 % of EPT survivors still had severe neurodevelopmental impairment (NDI). The EP infant requires a unique focus from each multidisciplinary team member and recognition of the value of providing a different approach to the care of this vulnerable patient population. A small baby program is an efforts to ensure the successful survival and discharge of these infants without major disabilitiess. This quality improvement protocol decrease incident rates of severe IVH, mortality, morbidity, and ultimately improve long-term neurodevelopmental outcomes for survivors. The SBP start before birth(antenatal steroids ,magnesium, early parental engagement) and continue at delivery(delayed cord clamping, early cpap) and for the first 72 h of life by placing the infant in pre-warmed (35 ◦C) and humidified (70–۷۵ ٪) □□□□□□□□□□ □□□□□□□□□□□□ □□□□□□ delivery, controlling sound and light, minimizing pain, handling, and stress. Use umbilical lines for infusions and blood draws (no peripheral IVs or heel sticks). IV Vitamin K, not IM, in the first three hours of life . Prone, neutral, head midline, gentle flexion positioning. Twice daily routine handling only (stop exams for signs of stress) Medical managements also include prophylactic indomethacin, early empiric caffeine as soon as possible after NICU admission. Respiratory minimalism: early continuous positive airway pressure (CPAP) and minimize intubation, surfactant, and mechanical ventilation when possible; conservative use of supplemental oxygen (acceptable oxygen saturation ≥ 83 %) and suctioning .Hemodynamic minimalism: limit use of dopamine, steroids, sedation, and fluid boluses.

سخنرانی: نوزادان

Enteral Nutrition and Growth in Preterm Newborns

Behzad Barekatain [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□□. □□□□□□□□□□□□□□□- □□□□□□□ □□□□□□□ □□ □□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□

Abstract: Despite intensive nutritional strategies for premature infants, growth failure remains a major problem. ESPGHAN defines the main objective of adequate nutrition for premature infants (nutritional goals): Improve the short and long term outcome and Satisfactory functional development (Neurocognitive) and to have a growth in line with fetal development. Trophic or minimal enteral feedings involve hypocaloric, low-volume (typically ≤24 mL/kg per day) feeds to promote intestinal maturation and do not contain sufficient calories to sustain somatic growth. Feeding must be begun with unfortified mother's own milk. If mother's own milk is not available, pasteurized donor human milk has been recommended for preterm infants. Formula designed for a premature infant may be used if mother's own milk or pasteurized donor human milk is unavailable. at the beginning of feeding preterm formula with 20 kcal/oz It should be started and then switch to preterm formula with 24 kcal/oz when volume reach to 80-1۰۰ □□/□□/□□□. □□□□□□□□ advancement of enteral feedings (before the fourth day of life) compared with later dvancement of feedings (after four to seven days of life) leads to earlier achievement of full feeds without increasing the risk of NEC. Most protocols provide enteral feeds every two - three hours. Feedings for infants 1500 g are typically given as a gradual bolus on a pump over 30 to 60 minutes. However a more frequent feeding schedule improves feeding tolerance and reduces the time to attain full feedings. The target volume for feeds is approximately 160 mL/kg/day of fortified human milk. For all infants with birth weights 1500 g, we recommend fortifying feeds with multinutrient human milk fortifier for growth and replacement of calcium and phosphorus. case reports of transmission of Cronobacter sakazakii in powdered fortifiers or formulas. Different methods of adding breast milk fortifiers consist of Standard addition method, Addition of enrichment based on breast milk analysis and Adding enrichment based on blood BUN level. Regarding the time of stopping breast milk enrichment, it is generally recommended When the infant can provide all the milk he needs by sucking the mother's breast or when the weight reaches 2000 grams. In some underweight infants, the enrichment continue up to 40 and even 52 week PCA, Until the clinical and laboratory symptoms of the OOP improve and in infants with a birth weight of less than 1200 grams and patients with bronchopulmonary dysplasia until the infant's weight reaches 3000 grams.

سخنرانی: نوزادان

Evaluation of Cerebrospinal fluid (CSF) amino acid pattern in neonates with refractory seizures

Shirin shamel [1] © ℗

[1] استادیار دانشگاه علوم پزشکی تهران

Abstract: Seizures are the most important and common symptom of a serious neurological disorder in infancy. Amino acids can play a neurotransmitter role in the brain. Due to the fact that seizures are the occurrence of transient signs and symptoms due to over activity or abnormal activity of neurons in the brain, some anticonvulsant drugs can be useful in the treatment of seizures by inhibiting the mechanism of crude amino acid receptors. Therefore, the study of the amount and pattern of CSF amino acids in patients with seizures can be helpful in the treatment and control of seizures in patients. The aim of this study was to investigate the pattern of CSF amino acids in neonates with resistant neonatal seizures. Material and methods: This prospective study was performed on infants 1 to 56 days old who were admitted to the intensive care unit of the Children Medical Center in 2016 with a clinical diagnosis of refractory seizures by a neonatal assistant or a pediatric neurologist. Cerebral-spinal analysis was performed after taking a sample from the space between the 4th and 5th lumbar vertebrae to evaluate the amino acid level by HPLC method to diagnose the cause of seizures Results: 48.2 % of study participants were female. Clonic seizures were observed in 44.4%, subtle in 14.8%, tonic seizures in 7.4%, tonic-clonic seizures in ۱۱.۱٪ □□□ □□□□□□□ □□□□□□□□ □□ ۲۲.۲٪ □□ □□□□□□□□□□□□□. □□□□□ □□□ □ □□□□□□□□□□□ □□□□□□□□□□□ between glutamic acid amino acid level and EEG (P = 0.007). While in other amino acids, no significant relationship was observed between amino acids and EEG. Also, no significant relation was observed between CSF amino acids and type of seizure. Conclusion: Considering that neonatal seizures can be one of the predictive causes of cerebral palsy and delayed brain development in children, early diagnosis of etiology and treatment is very important in the prognosis of these infants. Therefore, it is suggested that further studies be performed with larger sample size. key words: Keywords: Amino acids, seizures, cerebrospinal fluid (CSF)

سخنرانی: نوزادان

Fortification of breast milk and high calorie formulas

℗ © [1] دکتر مریم ویسی زاده

[1] استادیار، دانشگاه علوم پزشکی تهران، فوق تخصص نوزادان

Abstract: Current recommendation for the provision of parenteral and enteral nutrition to the infant born prematurely are based on the goal of approximating the rate and composition of weight gain of a normal fetus at the same postmenstrual age . Of particular concern is the significant association berries suboptimal post natal growth and short term morbidities as well as adverse long term neurodevelopmental out comes . The finding reinforce the principle that nutritional delivery is critical in modifying disease risk in preterm infants. The diversity of approaches to feeling preterm infants underlines the need for studies to dispel myths and find reasonable solutions to define the optimal feeding route. Human milk does not completely meet the nutritional needs of premature infants; Human milk fortifiers have been addressed many of these adequacies. multi component of fortification of human milk improves post natal weight gain ,linear growth and head circumference growth. Formula of premature infants have been developed to meet the nutritional needs of growing preterm infants and have been in use for more than 30years.It must be noted that the design and testing of these formulas did not specifically include extremely premature infants .premature formula contains a reduced amount of lactose because lactase intestinal activity is low in this group, the reminder form of carbohydrate content is in the form of glucose polymers which maintain low osmolality of formula .the fat blend of preterm formulas are 20-۵۰ □□□□□□□ □□Ts, which are designed to compensate for low intestinal lipase and bile salts. Preterm formulas contain more protein than term formulas and supply 3g/100kcal.Preterm formulas is whey predominant and may provide a more optimal amino acid intake .calcium and phosphoruscontent are also honghelin preterm formulas, which results in improved mineral retention and bone mineral content.

سخنرانی: نوزادان

Fungal Infection of pediatric patients in a Iranian referral hospital

Setareh Mamishi [1] ©, Shima Mahmoudi [1], Golnaz Ghazizadeh Esslami [2], Babak Pourakbari [3], Hidna Wahid Ashai [4], Mustafa Ramezanian [5] ℗, Maryam Sotoudeh Anvari [6]

[1] □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□

[2] □□□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ Medical Sciences, Tehran, Iran

[3] □□□□□□□□□□□ □□ □□□□□□□□□□□ □□□□□□□□□, □□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□, □□□□□□□ University of Medical Sciences, Tehran, Iran

[4] □□□□□□□ □□ □□□□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□

[5] □□□□□□□□ □□□□□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□

[6]- □□□□□□□□□□ □□□□□□□□□□ □□□□ □□□□□□□□□□□□ □□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ Medical Sciences, Tehran, Iran

Abstract: Introduction: Fungal infections, despite being common in pediatrics, are not often too much debated. The proportion of fungal infections among children is largely unknown. This study aimed to assess the relative frequency, causative agents, predisposing factors, treatment, and outcome of fungal infections in children. Methods: The study has included all cases with positive fungal cultures and excluded all the contaminated and duplicated samples from patients with the diagnosis of fungal infections hospitalized at Children's Medical Center, Tehran, from October ۲۰۲۰ □□ □□□□□□□□ ۲۰۲۱. □□□□□ □□□□□□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□□□ □□□□ □□□□□□□□□ □□□□□ □ positive culture in the laboratory. Exclusion criteria for the study included those whose data collected contaminated and duplicated samples or those referred from another hospital. Results: Among 250 patients with fungal infections, the most common causative agent identified was Candida albicans (n = 152, 60.80%), followed by non-albicans Candida spp. (n= 93, 37.20%), Aspergillus spp. (n=4, 1.60%), and Mucor spp. (n=1). Ninety patients (36.0%) had coinfections with different types of organisms, and the most common organism identified was Pseudomonas aeruginosa in 32 patients (12.8%), followed by Klebsiella pneumoniae (n=15, 6.0%). The majority of patients (n=153, 61.2%) were found to have underlying diseases, and the most common disease identified was cystic fibrosis (8.4%), followed by congenital heart disease (6.8%). For infection with C.albicans and non-albicans Candida spp., the most common antifungals prescribed were fluconazole, amphotericin B. Mucor spp. was treated with amphotericin B and posaconazole. For Aspergillus spp., the most common antifungals prescribed were caspofungin and voriconazole. There were 47 death cases (18.80 %) during this period of time. Conclusion: Underlying diseases increase the susceptibility to fungal infections in the pediatric population. Further, the majority of fungal infections occurred in ICUs. Also, fluconazole and amphotericin B were the most commonly prescribed antifungal agents for children in Iran. Keywords: Fungal infections, pediatrics, treatment, causative agents.

سخنرانی: نوزادان

Gastroesophageal Reflux Disease and its management in the Neonates

Maral Ghassemzadeh [1] © ℗ /مارال قاسم زاده

[1] فوق تخصص نوزادان و استادیار دانشگاه علوم پزشکی تهران

Abstract: Gastroesophageal Reflux Disease and its management in the Neonates Gastroesophageal reflux refers to the condition in which gastric content returns into esophagus or month with or without vomiting. This is a normal event which also occurs in healthy neonates and infants. In most cases this episode lasts a short course (less than three minutes), without being associated with uncomfortable situations in infants. These episodes commonly decrease with age and become much less at the end of the first year of life. As a result, the occurrence of regurgitation in children over 18 months is unusual. In cases where reflux causes heart-burn, vomiting or painful swallowing or when it becomes complicated, it is called Gastroesophageal Reflux Disease (GERD). To confirm this diagnosis all of the other underling medical conditions should be precisely assessed and ruled out. In some infants, reflux etiology is referred to cows' milk protein allergy. Generally, such infants show evidences of colitis such as bloody stool. In most of infants who experience milk reflux, weight gain is good and the infant is well nourished with no marked irritability and complicated morbidity. But infants who suffer from GERD usually have feeding refusal, poor weight gain and irritability. They may sometimes experience lung involvement such as apnea or asthma exacerbation. Although simple reflux needs no intervention, it is recommended to avoid overfeeding, burp the infant after each meal, keep the infant away from smoke help to improve the symptoms. Administrating specific types of formula is not recommended in these infants. AR formulas are just like normal formulas (based on cow's milk) in which the milk is condensed by adding starch, gum or acacia seed extracts. These types of formulas are only recommended for infants who are deprived of breast milk and have to use formulas. Interruption of breast milk and formula feeding in infants with GERD is not recommended at all. On the other hand, even in formula fed infants with simple uncomplicated reflux using AR formula is not recommended routinely. Although the use of these formulas may the amount and frequency of reflux, they are not able to eliminate the main etiology of the disease. Even sometimes by using these additives to formulas and increasing its osmolarity, the infants' reflux may be deteriorated.Calorie content of these formulas are just like normal formulas which contains 20 kcal in per 30cc of milk. Finally, the best milk type in this condition is also breast milk.

سخنرانی: نوزادان

Management of feeding intolerance in premature infants

پروانه صادقی مقدم [1] © Ⓟ

[1] دانشگاه علوم پزشکی تهران

Abstract: Sometimes premature babies show signs of feeding intolerance, which often improves without special measures, but due to the possibility of necrotizing enterocolitis (NEC)in these groups, infants with feeding intolerance should be carefully monitored. Bilious or bloody vomiting or gastric residue bloody stool, severe abdominal distension, apnea, metabolic acidosis, temperature instability, and hyperglycemia are more serious signs that may be accompanied by feeding intolerancen. In these cases, feeding should be stopped and careful examination should be done for the occurrence of NEC. Intermediate cases occur especially in very low birth weight babies. In these cases, the decision to stop or continue the feeding is managed as follows based on the severity of symptoms and associated signs and symtoms. Although routine gastric residual checking is not recommended in infants fed by gavage, the presence of bilious secretion in the gastric residua is considered a serious sign and feeding should be stopped. If the gastric residue is non-bilious and its volume is less than 3-4 cc or less than 30-5٠٪ □□ □□□ □□□□□□□□ □□□□□□□, □□□ amount of milk is not increased and the baby is closely monitored for other signs of NEC. If the residue volume increases, the feeding will be stopped in the next rounds An increase in the abdominal circumference of more than 1.5 centimeters per day or a change in the abdominal wall color are important signs that feeding should be stopped if they occur. Recent studies have not shown a positive role for prokinetic drugs such as azithromycin in improving feeding tolerance or reducing the risk of enterocolitis in premature infants. Facilitating the passage of meconium by the Glycerin enemas or suppositories has not been effective in feeding tolerance or reducing the risk of NEC. Other strategies used to improve the feeding tolerance include feeding by continuous gavage through an infusion pump instead of intermittent feeding or using hydrolyzed formulas.

سخنرانی: نوزادان

Maternal and neonatal outcomes of abnormal placentation: a case–control study

Roksana Moeini [1] © ℗

[1] □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□

Abstract: Abnormal placentation has complicated a pregnancy that may be associated with massive and potentially life-threatening hemorrhage. This can cause mater- nal and neonatal mortality and morbidity. Maternal morbidity had been reported in the literature to occur in up to ۶۰٪ □□□ □□□□□□□□□□ □□ □□ □□ □□ ۷٪ □□ □□□□□ □□□□ □□□□□□□□□ □□□□□□□□ □□□ □□ □□□□ □□□□ □□ □□□ □□□□ □□□□ common indication for peripartum hysterectomy. Also, the incidence of perinatal compilations is also increased mainly due to preterm labor and small- for-gestational-age neonates. There is limited information on neonatal outcomes in complicated pregnancies with abnormal placentation. The aim of this study was to assess the neonatal outcomes of abnormal placentation. In this case–control study, known cases of abnormal placentation between the years 2010 and 2017 were extracted. The case group consisted of pregnant women with abnormal placentation (172 cases), while controls were selected from repeated cesarean section cases with normal placentation (341 people). In the case group, 145 cases (84.3%) had placenta accreta, 12 cases (7.07%) had placenta increta and five cases (8.7%) had placenta percreta. Characteristics significantly more common in the case group included lower mean gestational age and average neonatal weight (p.001), low birth weight (LBW) and small for gestational age (SGA) (p.001), admission to the NICU (p.001), higher average number of hospitalization days in the NICU (p.05), lower average 5-minute Apgar scores (p.001), neonatal seizure (p1⁄4.004), cranial hemorrhage (p1⁄4.037), anemia (p1⁄4.002) and thrombocytosis (p1⁄4.029). The occurrence of abnormal placen- tation was associated with some underlying maternal characteristics such as high maternal age (p1⁄4.34), lower maternal weight (p1⁄4.044), multiparity (p1⁄4.11), history of previous abortion (p 1⁄4 .036), and history of cesarean (p 1⁄4 .001). The prevalence of placenta previa was significantly higher in the case group (p .001). The presence of placenta previa has a close relationship with abnormal placenta- tion and is considered to be a potential risk factor for LBW, SGA, lower 5 minutes Apgar scores, first-day seizure, cranial hemorrhage, the necessity for NICU admission and occurrence of anemia and thrombocytosis in neonates. keywords: Abnormal placentation; LBW; maternal outcomes; neonatal outcomes; NICU admission; thrombocytosis

سخنرانی: نوزادان

Monitoring neonatal parenteral nutrition

© ℗ محمدرضا زرکش [1]

[1] دانشگاه علوم پزشکی تهران

Abstract: Monitoring neonatal parenteral nutrition Parenteral Nutrition (PN) allows us to meet a neonate's requirement for growth and development when their size or condition precludes enteral feeding.Meticulous attention to asepsis, good nursing care and close biochemical monitoring are absolutely essential for successful PN therapy. When taking blood samples to monitor the preterm or term baby's neonatal parenteral nutrition: use a protocol agreed with the local clinical laboratory to retrieve as much information as possible from the sample coordinate the timing of blood tests to minimise the number of blood samples needed. Blood glucose Measure the blood glucose level: ۱ □□ ۲ □□□□□ □□□□□ □□□□□ □□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ ۱ □□ ۲ □□□□□ □□□□□ □□□□ □□□□□□ of parenteral nutrition bag (usually every 24 or 48 hours). Blood pH, potassium, chloride and calcium Measure the blood pH, potassium, chloride and calcium levels: daily when starting and increasing parenteral nutrition twice weekly after reaching a maintenance parenteral nutrition. Measure blood pH, potassium, chloride or calcium more frequently if: the preterm or term baby has previously had levels of these components outside the normal range the dosages of intravenous potassium, chloride or calcium have been changed there are clinical reasons for concern, for example, in critically ill babies. Serum triglycerides Measure serum triglycerides: daily while increasing the parenteral nutrition lipid dosage weekly after reaching a maintenance intravenous lipid dosage. Measure serum triglycerides more frequently, but not more than once a day, if: the level is elevated the preterm or term baby is at risk of hypertriglyceridaemia, for example, if the baby is critically ill or has a lipaemic blood sample. Be aware that ongoing serum triglyceride monitoring may not be needed for stable preterm or term babies transitioning from parenteral nutrition to enteral nutrition. Serum or plasma phosphate Measure the serum or plasma phosphate level: daily while increasing the parenteral nutrition phosphate dosage weekly after reaching a maintenance intravenous phosphate dosage. Consider measuring serum or plasma phosphate more frequently: if the level has been outside the normal range if there are clinical reasons for concern, for example, metabolic bone disease for preterm babies born at less than 32+0 weeks. Iron status Measure ferritin, iron and transferrin saturation if a preterm baby is on parenteral nutrition for more than 28 days. Liver function Measure liver function weekly in preterm and term babies on parenteral nutrition. Measure liver function more frequently than weekly if there are clinical concerns or previous liver function test levels outside the normal range.

سخنرانی: نوزادان

Neonatal compartment syndrome

[1] دکتر مریم سعیدی ,[1] دکتر کیوان میرنیا ,[1] دکتر راضیه سنگسری ,℗ © [1] دکتر محمد عزیز انوری

[۱] دانشگاه علوم پزشکی تهران

Abstract: Compartment syndrome of the newborn is a rare condition in which a neonate presents with upper limb swelling and skin lesion evolving into compression ischemia in the hand and arm. Although very rare, it is potentially devastating condition if diagnosis is delayed, making it one of the few neonatal orthopedic emergencies. We present a case in a term neonate who developed compartment syndrome of left forearm soon after birth. This case demonstrated that treatment with pentoxyfilline can result in salvage of the limb even when the necrosis is established. Neonatal compartment syndrome is a rare condition characterized by progressive limb ischemia and tissue necrosis manifested at birth or in the immediate postpartum period. The exact cause of this syndrome is unknown. It is suspected that mechanical compression of the upper extremity, combined with fetal position plays a major role in evolution of neonatal compartment syndrome. Intrauterine abnormalities or birth trauma may be related to this abnormality. If recognized early, surgical treatment with emergency fasciotomy or revascularization of the limb has been beneficial. Prolonged ischemia results in scarring (known as Volkmann ischemic contracture of muscle), nerve injury, permanent disability and potential loss of portion of the extremity.(1,2)

سخنرانی: نوزادان

Role of abdominal imaging in children

© Ⓟ [1] دکتر سید مهدی ال حسین

[1] دانشیار گروه رادیولوژی دانشگاه علوم پزشکی تهران

خلاصه مقاله :بیماریهای اطفال که نیاز به تصویربرداری جهت تشخیص ، پیگیری و یا پایش درمان دارند بر اساس گروه سنی بسیار متنوع می‌باشند. ابتدای دوره نوزادی و در ادامه پاتولوژی قبل از تولد ،میتوان از انسداد لوله گوارش ،هیدرونفروز ،فتق های گوناگون ،ضایعات تکاملی و تومورال در احشای مختلف به صورت عمدتا یافته اتفاقی نام برد. و در هفته های بعد از بیماری اکتسابی مثل تنگی هیپرتروفیک پیلور و ضایعات مادرزادی مثل مال روتاسیون روده و در شیرخوارگی انواژیناسیون و سنین بالاتر آپاندیسیت و سنگ ادراری و تروما و بررسی شکم حاد و یا علل بزرگی شکم و عفونت ادراری ،جستجوی علت تب و .... اشاره نمود . شرح حال و ذکر یافته های بالینی و آزمایشگاهی جهت تشخیص رادیولوژی ضرورت دارد . موارد جالبی از این بیماری ها و یافته های تصویر برداری و چالش های آن ارائه می‌شود .

سخنرانی: نوزادان

The Golden Hour

Abbas Habibelahi [1] © ℗, Mazjubeh Taheri [2], Nasrin Rashidi Jazani [3], Lida Ahmadi [4], Foruzan Akrami [5]

[1] □□, □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□□. □□□□□□□□□ □□□□□□ □□□□. □□□□□□
[2] □□, □□□□□□□□□□□□□. □□□□□□□□□ □□□□□□ □□□□. □□□□□□
[3] □□□□□□□□□ □□ □□□□□□□□□□. □□□□□□□□□ □□□□□□ □□□□. □□□□□□
[4] □□ □□ □□□□□□□□□ □□□□□□□□□□□. □□□□□□□□□ □□□□□□ □□□□. □□□□□□
[5] □□□ □□ □□□□□□□□ □□□□□□. □□□□□□□□□ □□□□□□ □□□□. □□□□□□

Abstract: The “Golden Hour” concept derives from the adult trauma literature, and generally describes the period after a traumatic injury during which prompt medical attention is needed to prevent death. Recently, this concept has been applied to premature neonates and the care they receive immediately after birth. The first 60 minutes after birth is a critical time for a woman and her newborn. It has been called the “Golden Hour”. This is a time of transition for a newborn, moving from the internal to the external uterine environment. The first hour of life requires the rapid adaptation of multiple newborn organ systems and includes pulmonary, circulatory, metabolic, and hemodynamic changes. Infant mortality remains highest on the first day of life. First 4 hours is the period of greatest risk differences in outcomes in similar centers cannot be explained by the characteristics of infants alone. Differences in care may be responsible for suboptimal outcomes. The concept of “Golden hour” includes evidence-based intervention that are done in the first sixty minutes of postnatal life for the better long-term outcome of the preterm newborn especially extreme premature, extreme low birth weight and very low birth weight. Concept of “Golden 60 minutes” leads to reduction in neonatal complications like Hypothermia, Hypoglycemia, Intraventricular Hemorrhage, Chronic Lung Disease and Retinopathy of Prematurity. The three key components of the Golden Hour consist of maternal–neonatal skin-to-skin contact, delayed cord clamping, and breastfeeding, all of which serve to improve mother–newborn bonding and neonatal adaptation. All initial neonatal assessments should be performed with the newborn remaining on the mother’s abdomen, maintaining skin-to-skin contact and facilitating delayed cord clamping Non urgent tasks of care, such as weighing and bathing the newborn, should be postponed for at least an hour, thereby providing the woman and her newborn with 60 minutes of uninterrupted time for bonding, during which breastfeeding can be initiated. the WHO recommends clamping the cord 1 to 3 minutes after birth, the amount of time that is generally required for the cord to cease pulsating, whereas the American College of Nurse-Midwives suggests waiting at least 5 minutes for term newborns who are placed skin to skin. In case of term newborn with no contraindications of feeding, breast feeding should be started within half hour of birth. NRP and BFHI guidelines recommend stable newborn babies to be kept in SSC contact with mother immediately after birth and breast feeding should be done within the first half-hour following birth.

سخنرانی: نوزادان

The outcome of esophageal perforation in neonates and it's risk factors :a10yesr study

MaryamGhavamiAdel [1] ©, Vafa GhorbanSbagh [2] ℗, Mohammad Albazal [3], Parvaneh Sadeghjmoghadam [3]

[1] □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□□□

[2] □□□□□□□□□ □□□□□□ □□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□□ □□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□
Science Tehran Iran

Abstract: abstract Purpose Esophageal perforation is a rare complication in infants that can be difcult to diagnose. The mortality rate due to esophageal perforation is high. This condition is more common in low birth weight premature infants. This study examines esophageal perforation in relation to various demographic and clinical variables. Methods This study has a cross-sectional design. All pre-term neonates with esophageal perforation at Valiasr Hospital in Tehran, Iran, were included in the study over the span of ten years, from 2011 to 2021. Factors, such as gestational age, sex, weight, type of delivery, and interventions performed that could contribute to the condition, including intubation and Orogastric (OG) tube insertion, were investigated in the participants. Results Among the 9924 infants studied over the 10-year period, ۱۵ □□□□□ (۰.۱۵٪) □□□ esophageal perforation. All these infants underwent non-operative management with acceptable results. Conclusion Learning about the risk factors for iatrogenic esophageal perforation in neonates can help prevent this unwanted event in most cases. Also, the majority of these cases can be managed non-operatively provided that early diagnosis is made.

سخنرانی: نوزادان

The Role of Caffeine in the Germinal Matrix-Intraventricular Hemorrhage of Preterm Newborns

Peymaneh Alizadeh Taheri پیمانه علیزاده طاهریّ [1] © ℗

[1] [illegible]

Abstract: Background. Germinal matrix-intraventricular hemorrhage (GM-IVH) is the most common (30%) intracerebral hemorrhage in preterm newborns (Alves-Martinez et al., 2022). Caffeine is regularly used to treat apnea in preterm newborns. Previous studies have shown its anti-inflammatory and neuroprotective properties Aims. Surveying the recently identified efficacy of caffeine in the GM-IVH of preterm newborns. Study Design. We did our research in the literature, PubMed, and Google Scholar and used the keywords including efficacy, caffeine, germinal matrix-intraventricular hemorrhage, and preterm newborns. Then we studied the articles and gathered the data about the efficacy of caffeine in the GM-IVH of preterm newborns. Results. In this research, we found that the number of studies addressing the effects of caffeine in GM-IVH on preterm newborns is still limited, hampering the understanding of the treatment. Caffeine is regularly used to treat apnea in preterm newborns (Di Martino et al., 2020). Previous studies have shown its anti-inflammatory and neuroprotective properties (Yang et al., 2022). Caffeine has a similar structure to adenosine. It acts as an antagonist of adenosine and binds to its receptors (A1, A2, A3, and A4). A2 receptors are highly expressed in the brain and are involved in the inflammatory cascade, leading to microglial activation and the generation of reactive oxygen species and inflammatory mediators ultimately contributing to neuronal death (Kolahdouzan and Hamadeh, 2017). Conclusions. Caffeine is regularly used to treat apnea in preterm newborns. Previous studies have shown its anti-inflammatory and neuroprotective properties. A recent study provided new insights into the neuroprotective role of caffeine. This study showed that caffeine treatment reduced neuronal loss and inflammation; it had a positive effect on proliferation and neurogenesis and improved cognitive function in a murine model of the disease. Future studies in a human model of the disease are recommended Keywords: Efficacy, Caffeine, Germinal Matrix-Intraventricular Hemorrhage, Preterm Newborns.

سخنرانی: نوزادان

The value of urinary NGAL compared to serum creatinine level in predicting acute kidney injury among neonates

© [2] نسترن خسروی ,℗ [1] مهدی مشایخی

[۱] فوق نوزادان درمانی بیمارستان بهرامی
[۲] فوق نوزادان هیات علمی بیمارستان علی اصغر

Abstract: Introduction: The diagnosis of acute kidney injury is based on calculating glomerular filtration rate rely on serum creatinine, however this method seems to be unreliable due to potential effects of underlying confounding parameters. Thus, recent efforts have been focused on new diagnostic specific markers with high sensitivity and accuracy for early prediction of acute kidney injury. Recentresults identified NGAL as a widespread and sensitive response to established AKI in humans. However, the role of this marker to early predict acute kidney injury in children remains uncertain. The present study aimed to assess and compare the level of urinary NGAL in neonates with acute kidney injury and those without kidney injury admitted to neonatal intensive care unit This cross-sectional study was performed on 75 consecutive neonates who were hospitalized because of acute kidney injury. Among neonates admitted to hospital due to causes unrelated to kidney disease (with normal serum creatinine level) were randomly selected as the control (n=81). In both groups and on admission, the urine levels of creatinine and NGAL were measured. The level of creatinine was assessed by enzymatic method and the level of NGAL was measured using ELISA method. The level of urine creatinine was measured at two time points. The mean level of NGAL was 825.81±175.08 ng/ml in case group and 292.20±322.03 ng/ml in control group with a significant difference. NGAL had a sensitivity of 100%, s specificity of 55.6%, a positive predictive value of 67.6%, a negative predictive value of 100%, and an accuracy of 76.9% to predict acute kidney injury. Assessing the area under the ROC curve showed that the measurement of NGAL could effectively discriminate acute kidney injury from normal condition (AUC=0.899). The best cutoff value for NGAL to predict acute kidney disease among neonates was estimated to be 427 ng/ml yielding a sensitivity of 100% and a specificity of 67.9%. The Pearson’s correlation test showed a strong linear association between the level of NGAL and the changed level of creatinine (r=0.395, p0.001). The measurement of NGAL has a high sensitivity and proper specificity compared to creatinine level in predicting acute kidney injury among neonates. Keywords: NGAL Acute kidney injury AKI Creatinine Neonates

سخنرانی: نوزادان

Total Parenteral Nutrition in neonates (TPN)

℗ © [1] رویا طاهری تفتی

[1] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□□, □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□

Abstract: Total Parenteral Nutrition in neonates (TPN) Dr Roya Taheritafti, Assistant professor of neonatology, Tehran University of Medical Sciences, Shariati Hospital, Tehran, Iran Parenteral nutrition (PN) was initially employed in neonates almost half a century ago. Since then, it has established itself as a crucial and life-saving resource for premature infants who cannot tolerate adequate enteral feeding to fulfill their nutritional requirements. In the case of most premature infants and many term infants with congenital or acquired gastrointestinal abnormalities, such as short bowel syndrome, PN should be considered as a temporary solution to offer nutritional assistance until complete enteral nutrition becomes possible. Its primary objective is to prevent excessive catabolism by supplying energy and protein, while its secondary aim is to address the entirety of the infant's nutritional needs and facilitate normal growth rates. Balancing macronutrients in parenteral nutrition involves supplying energy through carbohydrates (in the form of glucose), lipids, and protein (in the form of amino acids). All of these elements are essential for promoting growth. In order to enhance bone mineralization, particularly in very low birth weight (VLBW) infants, and prevent hypophosphatemia, it is advisable to provide parenteral nutrition (PN) for preterm infants with relatively elevated concentrations of calcium and phosphate, along with an optimal calcium-to-phosphate ratio. Various trace minerals are regularly incorporated into PN for preterm infants. Some of these may not be particularly significant if PN is used as a short-term interim solution until full enteral nutrition can be established. However, their importance grows as PN is extended over a longer period. Premature infants require higher quantities of certain vitamins compared to term infants due to increased needs for growth and/or greater losses. Both fat-soluble and water-soluble vitamins are crucial for the health of preterm infants and should be included in total parenteral nutrition (TPN). L-carnitine supplements are typically introduced only during extended courses of PN.

سخنرانی: عفونی

A Review to diagnosis and treatment of visceral leishmaniasis

© ℗ [1] محمدعلی شاه بابای آشتیانی

[1] فوق تخصص بیماریهای عفونی کودکان، هیات علمی دانشگاه علوم پزشکی البرز

Abstract: Epidemiology: Visceral Leishmaniasis or kala-azar considers one of the most severe problems of public health with a prevalence of 50,000 to 90,000 new cases annually Worldwide in 98 countries. 90% of new cases reported to WHO occurred in 10 countries (Brazil, China, Ethiopia, India, Kenya, Somalia, Sudan and Yemen). L. donovani (Asia and Africa), L. infantum (southern Europe and North Africa) and L. chagasi (Brazil and elsewhere in the new world) are main genus causes of VL. L. tropica in Middle East and L. amazonensis in Latin America Also been found to cause VL. Clinical manifestations: The incubation period is 6 weeks to 6 months (10 days -۱۰ □□□□□), □□imary skin nodule is rarely seen. Fever with double daily spikes (40° to ۴۰.۶□□) □□□ □□□□ □□□□□□□□□□□□□ □□ □□□□□□□□□□□□□ □□□ □□□□□□ □□□ □□ □□□□□□□□□□, □□□□□ □□□□□ several months may occur. Laboratory Findings: anemia (Hb: 5-8 mg/dl), thrombocytopenia, leukopenia with neutropenia and relative lymphocytosis and almost total absence of eosinophils, elevated levels of hepatic transaminase, hyperglobulinemia (5 g/dl) and hypoalbuminemia (3 g/dl) are unspecific findings. But specific tests include Protozoar detection in spleen aspirate, peripheral blood or bone marrow culture in NNN or Schneider insect medium, biopsy & staining and PCR (highly sensitive and specific). There are different techniques for antibody detection such as IFA, ELISA and DAT with deferent sensitivity and specificity. Antigen detection tests such as Urine Latex agglutination test and rk39 antigen dipstick are also new methods. Treatments: Untreated VL is fatal in 75-8۵٪ (□□□□□□□□□□) □□□ ۹۰٪ □□ □□□□□ □□□□□□□□. □□□□□ □□□ □□□□□□□□□□ monotherapy and multidrug anti VL regimens. Monotherapy includes pentavalent antimonials (sodium stibogluconate and meglumine antimoniate), amphotericin B Deoxycholate, liposomal amphotericin B, paromomycin, miltefosine and pentamidine isethionate. Multidrug regimens have been established to reduce the treatment time and cost, decrease the emergence of parasite resistance (because of different mechanisms of action) and increase the efficacy rate (even in the cases of co-infection). One of the best approaches is using a very active drug with a short half-life in combination with a slow acting drug having a longer half-life (to clear the remaining parasites). WHO recommended regimens for VL (ranked by preference) are LAmB: 3–5 mg/kg/daily infusion for 3–۶ □□□□, □□ □□ □ □□□□□ □□□□ □□ ۱۸□۲۱ □□/□□, □□□□□□□□□□□ □□□□□□□□□□□: □□۵ ۲۰ □□/□□/□□□ IM/IV for 28 days and d-AmB: 0.75–۱.۰ □□/□□/□□□ □□ □□□□□□□□, □□□□□ □□ □□□ □□□ ۲۰□۳۰ □□□□□, for a total dose of 2–3 g.

سخنرانی: عفونی

A case of COVID-19 with splenic abscess

Mohammad Reza Abdolsalehi1 [1] © Ⓟ

هیات علمی [۱]

Abstract: Coronavirus disease (COVID- 19) is affecting millions of people around the world. It is mainly associated with respiratory problems, but extra pulmonary involvement has been described as well (1). During the COVID-۱۹ □□□□□□□□, □everal children developed a severe inflammatory disease, named Multisystem Inflammatory Syndrome (MIS-C). Acute MISC can have life-threatening consequences and requires intensive medical care. It is not known how long-term the results of acute MISC are. Liver damage, gastrointestinal, endocrine and cardiovascular disorders have been detected [2]. The aim of this article is to consider complications of MIS-C in patients with abdominal pain, due to the fact that despite abdominal pain is also a symptom of MIS-C, it should not distract us from rare complications such as splenic abscess, which as a differential diagnosis can be fatal if left untreated. Herein, we report a COVID-۱۹ □□□□□□□ □□th no signs of respiratory involvement presented with acute abdomen, and splenic abscess which was seen on the CT-scan later. Key Words: Abdominal pain, COVID19, Multisystem Inflammatory Syndrome (MIS-C), Pulmonary 2- CASE PRESENTATION A four-year-old boy was admitted to our hospital, with severe and worsening abdominal pain that started two weeks ago. Additionally, he had diarrhea and vomiting a day prior to admission. No respiratory symptoms were identified during the initial encounter. On arrival at the hospital, he appeared ill, with pains awakening him at night. His vital signs were as follows: blood pressure of 100/60 mmHg, heart rate of 100/min, temperature of 37 Celsius degrees and respiratory rate of 18/min. On examination, abdomen was soft, but he had periumbilical tenderness and mild splenomegaly. Past medical history and drug history were negative. Initial lab test showed: a white blood cell (34×103 /µl with lymphocyte count 90%), c-reactive protein (CRP) 25 mg/l, hemoglobin(HB) 11.7 g/dl, platelets 556×103 /µl, erythrocyte sedimentation rate (ESR) 46 mm/hr., creatinine 0.6 mg/dl, lipase 11 u/l, amylase 12 u/l, Lactate dehydrogenase (LDH) 1124 u/l, Creatine kinase-MB (CK- MB)86 IU/l, ferritin 236 ng/ml, D-dimer 4878 ng/ml, and normal liver function test (LFT). Wright and the widal test were also negative. The clinical picture persisted for a week despite conservative management. His pharyngeal PCR (Polymerase chain reaction) test was positive for COVID-۱۹. □□□ □□ □□gh levels of inflammatory factors and positive PCR and transient skin rashes with the diagnosis of MIS-C, corticosteroid and intravenous immunoglobulin (IVIG) were administered and echocardiography was requested. Ectasia of the right coronary artery (RCA mid: 4) was seen in echocardiography.

سخنرانی: عفونی

chichen pox

© ℗ [1] مریم رستمیان

[1] استادیار بیماری های عفونی کودکان دانشگاه علوم پزشکی سمنان

Abstract: Dr Maryam ROSTAMYAN Asistant Professor Of Infectous Disease Chichen Pox Varicella zoster is spread by the airborne route and requires contact with an infected individual for transmission to occur.vzv is a highly contagious and characterized by fever and a generalized pruritic rash lasting approximately 5 days.prodromal phase in children is unusual.most children with varicella have 250 to 500 superficial skin lesions.thrombocytopenia and neutropenia may transiently occur.the most frequent complications of varicella in normal hosts are bacterial superinfectiouns and CNS complications.the differential diagnosis of varicella includes generalized HSV infection ,enterovirus infections,rickettsialpox,impetigo,allergic reactions(including stevens-johnson syndrome and poison ivy),and insect bites.traditionally ,nonspecific measures ,such as frequent bathing to discourage bacterial skin infection,antihistamines given orally ,calamine lotion applied locally,oatmeal bath to decrease itching,and cutting fingernails short to discourage scratching,have been used to treat varicella.fever is controlled best with acetaminophen rather than aspirin,which may predispose to Rey syndrome .the issue of whether treatment with ibuprofen is associated with group A streptococcal superinfection in varicella has not been resolved,and,therefore ,avoidance of its use for symptomatic treatment of varicella seems to be the best approch.patient with sever or potentially sever VZV infections should be treated with intravenous acyclovir 30 mg /kg per day for adults and adolescent and 1500 mg/m2 per day for children ,both given in three divided doses.intravenous acyclovir is infused for at least 1 hour,with maintenance fluids given both before and during the infusion.oral dosages used are 80 mg/kg per day(in four divided doses)for children for 5 days.live attenuated varicella vaccine is highly effective in healthy children and adults.

سخنرانی: عفونی

Review on the latest situation of the polio eradication initiative in the world

© ℗ [1] سید محسن زهرایی

[1] مرکز مدیریت بیماریهای واگیر، وزارت بهداشت درمان و آموزش پزشکی

Abstract: Review on the latest situation of the polio eradication initiative in the world Dr. Seyed Mohsen Zahraei Professor of Infectious Disease Center for Communicable Disease Control Ministry of Health and Medical Education 2023 is a critical year for the Global Polio Eradication Initiative (GPEI). It is the target year to interrupt all remaining wild poliovirus type 1 (WPV1) and circulating vaccine-derived poliovirus type 2 (cVDPV2) transmission chains, per the GPEI Polio Eradication Strategy 2022-۲۰۲۶. □ □□□□□ous independent review has been undertaken by the third quarter of 2023, to assess whether the programme is on track to meeting Goal 1 and Goal 2 of the Strategy: permanently interrupt all poliovirus transmission in endemic countries; and, stop transmission of cVDPV2 and prevent outbreaks in non-endemic countries. Despite the detection last year – the first operational year of the Polio Eradication Strategy – of several high-profile polio emergences, including in places such as New York and London, 2022 saw perhaps some of the most significant progress in the programme's history, and has set up the global polio effort for a unique opportunity to achieve success in 2023. As the first quarter of 2023 draws to a close, the GPEI's analysis is that the programme remains on track to interrupt all remaining wild poliovirus transmission in 2023 – both endemically in Pakistan and Afghanistan, and in the outbreak setting of south-east Africa. Not-withstanding the challenging operational contexts in eastern Afghanistan and the southern area of Khyber Pakhtunkhwa, intensified country efforts have resulted in a historically-low number of biologically-distinct virus lineages remaining in circulation and an ever-shrinking number of infected districts. The situation with interrupting cVDPV2 transmission is more mixed. Compared to other most consequential geographies, increased efforts in Nigeria have yielded positive results through 2022 and beyond. New cases continued to decline in the second half of 2022. As a result, the virus is currently confined primarily to specific regions in the north-west. In Somalia, where we have witnessed unbroken transmission since 2016, the numbers of inaccessible districts have been reduced to zero and inaccessible children to 80,000 by the end of the first quarter of 2023.

سخنرانی: عفونی

roseolla

© ℗ [1] محمود خدابنده

[1] [illegible], Tehran, Iran

خلاصه مقاله :تب و راش در بیماری روزئولا بیماریهای تب و راش بر اساس زمان شناسایی آن برای بار اول نامگذاری شد. به عنوان مثال نامگذاری ابتدا به صورت زیر صورت گرفت :بیماری یکم سرخک، بیماری دوم مخملک ، بیماری سوم سرخجه، بیماری چهارم دوک، بیماری پنجم اریتم انفکتیوزوم، بیماری ششم روزئولا روزئولا نام قدیمش در طب ایران باستان بیماری تب گل سرخ بود ،اسامی دیگرش در طب نوین بیماری ششم، اگزانتم سوبیتوم (Exanthem subitem) است .عامل آن HHV نوع ۶ و نوع ۷ می باشد و تظاهرات آن به صورت بروز دانه های قرمز روی پوست کودک بعد از تب است .از مشخصه این بیماری می توان به موارد زیر اشاره کرد: شروع ناگهانی تب بالا در حد ۳۹,۷ همراه با کج خلقی که معمولا طی ۷۲ ساعت فروکش کرده و با رفع تب راش بروز میکند. راش به رنگ صورتی کم رنگ و بدون خارش است و اغلب در تنه با گسترش به اندام دیده می شود. راش طی ۱ الی ۳ روز محو می شود و ممکن است با بروز اوتیت همراه باشد.دلنفادنوپاتی گردنی و ساب اکسی پیتال گاها دیده می شود .نقاط ناگایاما که در محل اتصال یوولو پالاتوگلوسال از مشخصه آن است .نوع ۶ ویروس اوج ابتلا در ۶ تا ۹ ماهگی می باشد و نوع ۷ ویروس در ۳ تا ۶ سالگی (متوسط ۲۶ ماهگی) دیده می شود.ارجحیت فصلی در ابتلا ویروس دیده نمی شود.حدود ۱۰ تا ۱۵ درصد کودکان مبتلا به بیماری روزئولا دچار تب شدید دچار تشنج های ناشی از تب می شوند. از سایر تظاهرات بیماری می توان به موارد زیر اشاره کرد: تحریک پذیری، اوتیت، رینوره، احتقان بینی، گوارشی، سرفه انتقال ویروس از طریق بزاق و قطرات تنفسی می باشد. از یافته های مهم آزمایشگاهی می توان به موارد زیر اشاره کرد: لکوپنی، نوتروپنی، ترومبوسیتوپنی، افزایش آنزیم های کبدی تشنج شایعترین عارضه بیماری است. درمان بیماری به صورت حمایتی و استفاده از تب بر ها و هیدراته کردن بیمار است .

سخنرانی: عفونی

SARS-CoV-2 fecal shedding pattern in pediatric patients with acute COVID-۱۹ □□ □□□□□– ۱۹–□□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□□□□ □□□□□□□□□

© [1] ستاره ممیشی ,℗ [1] محمدرضا عبدالصالحی

هیات علمی [۱]

Abstract: As a library, NLM provides access to scientific literature. Inclusion in an NLM database does not imply endorsement of, or agreement with, the contents by NLM or the National Institutes of Health. Learn more: PMC Disclaimer | PMC Copyright Notice Clin Exp Pediatr. 2023 Aug; ۶۶(۸): ۳۶۶□۳۶۸. □□□□□□□□□□ □□□□□□□ ۲۰۲۳ □□□ ۱۴. □□□: ۱۰.۳۳۴۵/□□□.۲۰۲۳.۰۰۲۹۷ □□□□□: PMC10397995PMID: 37321581 SARS-CoV-2 fecal shedding pattern in pediatric patients with acute COVID-19 or COVID-19-associated multisystem inflammatory syndrome Setareh Mamishi, MD, ۱ , ۲ □□□□□□□□ □□□□□□□, □□, ۱ □□□□□□□□ □□□□□□□□, □□□, ۳ □□□□□ □□□□□□□□□□□, □□□, ۲ , ۴ □□□□□□□□□ Reza Abdolsalehi, MD, 1 Reihaneh Hosseinpour Sadeghi, MSc, 2 Mohammad Shahbabaie, MD, ۱ □□□□□ □□□□□□□□□, □□, ۱ □□□ □□□□□ □□□□□□□□□, □□□ ۲ , ۴ , ۵ □□□□□□□ □□□□□□□□□□□□ □□□□□□□□ □□□□□ Copyright and License information PMC Disclaimer Associated Data Supplementary Materials To the editor The pandemic of coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), broke out all over the world. Gastrointestinal symptoms, particularly vomiting, are more common in children with COVID-19 compared to adults [1]. Studies showed that a higher proportion of fecal SARS-CoV-2 RNA can be observed in patients with gastrointestinal manifestations [2]. Moreover, viral shedding through feces could continue even after clearance from the respiratory tract, which is observed to be more prevalent in children than in adults, highlighting the importance of fecal-oral transmission in pediatric cases [3]. We evaluated the SARS-CoV-2 fecal shedding pattern in 42 children with acute COVID-19 or multisystem inflammatory syndrome in children (MIS-C) related to SARS-CoV-2 infection, who were admitted to Children's Medical Center, the hub of excellence in pediatrics in Iran, from September 2020 to April 2021. All included cases were diagnosed with SARSCoV-2 infection by real-time reverse transcription polymerase chain reaction (rRT-PCR) of nasopharynx specimens or MIS-C based on the Centers for Disease Control and Prevention criteria [4]. This research was approved by the Ethics Committee of Tehran University of Medical Sciences, Tehran, Iran (IR.TUMS. CHMC.REC.1399.180). Signed informed consent was obtained from all patients' parents or guardians. Rectal swabs were collected from all included pediatric cases on admission day or during the treatment period (initial test) and after discharge (follow-up test). The presence of SARS-CoV-2 RNA was detected by the rRT-PCR method, as previously described [1]. At least one of the following criteria was required for a severe acute COVID-19

diagnosis: SpO2 93%, PaO2 60 mmHg, PaCO2 50 mmHg, a respiratory rate of 70/min (in a case ≤1 year) and 50/min (in

سخنرانی: عفونی

Some notes on Human Papilloma Virus (HPV) vaccine

© ℗ [1] شیرین سیاح فر

[1] شیرین سیاح فر ،دانشیار،گروه کودکان، دانشکده پزشکی، دانشگاه علوم پزشکی ایران ، ،تهران، ایران

خلاصه مقاله :در حال حاضر سه واکسن بر علیه HPV توسط FDA تایید شده است که عبارتند از واکسن دو ظرفیتیCervarix ، چهار ظرفیتیGardasil ونه ظرفیتی .Gardasil 9واکسنهایHPV نزدیک به ۹۷٪ ایمنی زایی دارند و در سنین ۹ تا ۱۵ سالگی ایمنی زایی بیشتر از ۱۶ تا ۲۶ سالگی است. بیشترین efficacy واکسن وقتی است که واکسن قبل از هرگونه تماس با انواع این ویروس تجویز شده باشد وباعث کاهش قابل توجه شیوع عفونت با type های ویروس موجود درواکسن و نیز کاهش anogenital wartsو cervical precancers ناشی از typeهای ویروس موجود در واکسن است. بر اساس نظر انجمن اطفال امریکا این واکسن باید در سن بین ۹ تا ۱۲ سالگی به تمام کودکان تزریق شود و اگر تا سن ۲۶ سالگی تزریق نشده باید باز هم تجویز شود. از سن ۲۷ تا ۴۵ سالگی بر اساس شرایط فرد ممکن است تجویز صورت گیرد. تجویز واکسن اگر در سن قبل از ۱۵ سالگی شروع شده باشد دو دوز واکسن به فاصله بین ۶ تا ۱۲ ماه کافی است. در صورتی که واکسن بعد از ۱۵ سالگی شروع شده باشد در تاریخ های صفر، یک و شش ماه و در سه دوز باید تزریق شود. در صورتی که واکسن ۹ ظرفیتی در دسترس قرار گیرد و فرد با واکسن ۲ یا ۴ ظرفیتی واکسینه شده باشد نیازی به تجویز دوز اضافه با واکسن ۹ ظرفیتی نیست. در صورتی که فرد قبلا با این ویروس تماس دلشته یا در حال حاضر مبتلا به عفونت با این ویروس است یا دچارهریک از موارد anogenital warts یا ضایعات سرویکال و حتی نتایج غیرطبیعی Pap test میباشد نه تنها منعی برای تجویز واکسن نیست بلکه توصیه میشود برای پیشگیری از انواع دیگر ویروس موجود در واکسن باز هم واکسینه شود. این واکسن با هریک از واکسنهای زنده و غیر زنده دیگر قابل تجویز است. از انجا که این واکسن غیرزنده است در بیماران نقص ایمنی قابل تجویز است ولی در هر سنی که تجویز میشود باید در ۳ دوز تزریق شود. عوارض این واکسن ،کم اهمیت و شامل عوارض موضعی مثل درد، تورم وقرمزی محل تزریق و عوارض سیستمیک مثل تب، سردرد و احساس خستگی است. از انجا که در زمان واکسیناسیون مواردی از faint گزارش شده است حداقل ۱۵ دقیقه بعد از تزریق فرد تحت مراقبت قرار گیرد و در حالت نشسته یا خوابیده باشد تا در صورتsyncope اسیب نبیند. این واکسن در زمان حاملگی نباید تجویز شود چون اطلاعات کافی هنوز در دسترس نیست ولی انجام تست حاملگی هم قبل از تجویز واکسن لازم نیست .

سخنرانی: عفونی

Some notes on Human Papilloma Virus (HPV) vaccine

Shirin Sayyahfar [1] © ℗

[1] Department of Pediatrics, Children Medical Center, Pediatrics Center of Excellence, Children's Medical Center Hospital, Tehran University of Medical Sciences, Tehran, Iran.

Abstract: Currently, three vaccines against HPV have been approved by the FDA, which are the bivalent (Cervarix), the quadrivalent (Gardasil) and the 9-valent (Gardasil9) vaccines. HPV vaccines are almost 97% immunogenic, and the immunogenicity is higher in the ages of 9 to 15 years, in comparison to 16 to 26 years. The greatest efficacy of the vaccine is when the vaccine is prescribed before any contact with the types of this virus. It causes a significant reduction in the prevalence of infection with the types of viruses included in the vaccine, as well as the reduction of anogenital warts and cervical precancers caused by these types of the viruse. According to the American Academy of Pediatrics, this vaccine should be administered to all children between the ages of 9 and 12 tears, and if not administered until the age of 26, it should be administered during this period. prescription of the vaccine for the age of 27 to 45 years, is individualized. If the vaccine is administered before the age of 15, two doses of the vaccine at an interval of 6 to 12 months are sufficient. If the vaccination is started after 15 years of age, it should be injected in three doses at ۰, ۱ □□□ ۶ □□□□□□. □□ □□□ ۹-valent vaccine is available and the person has been vaccinated with 2- or 4-valent vaccine, there is no need to prescribe an additional dose with the 9-valent vaccine. If a person has previously been in contact with this virus or is currently infected with this virus or has anogenital warts or cervical lesions and even abnormal Pap test results, the vaccination is not contraindicated and even recommended to prevent infection with other types of the virus included in the vaccine. This vaccine can be prescribed with any other live and non-live vaccines. Since this vaccine is not a live vaccine, it can be prescribed in immunocompromised patients, but it should be administered in 3 doses at any age. The side effects of this vaccine are minor and include local side effects such as pain, swelling and redness at the injection site and systemic side effects such as fever, headache and fatigue. Since some cases of faint have been reported following vaccination, the person should be monitored for at least 15 minutes after the injection and should be sitting or lying down so as not to suffer from syncope. This vaccine should not be prescribed during pregnancy

سخنرانی: عفونی

The Prevalence of Colonization with Carbapenem-resistant Enterobacteriaceae, E. coli, Klebsiella and Enterobacter, and Related Risk Factors in Children

غزال شریعت پناهی [1]

[1] Tehran University of Medical Sciences, Tehran, Iran

Abstract: Background: Carbapenems are broad-spectrum antibiotics used to treat the family of gram-negative Enterobacteriaceae, especially those that are resistant to first-line antibiotics. Because these drugs are usually prescribed as the last line of treatment, resistance to these antibiotics carries irreparable risks to treatment systems, and screening high-risk individuals in medical centers and using infection control measures are critical strategies for eliminating them. Objectives: We investigated the prevalence of colonization of different strains of Enterobacteriaceae, Klebsiella, Enterobacter, and Escherichia coli and their risk factors in hospitalized children. In this descriptive cross-sectional study, stool samples were taken from patients during the first 48 hours of hospitalization in a tertiary children's hospital and were cultured on Makcanki culture medium or EMB. Cultured Enterobacteriaceae samples were transferred to Müller-Hinton agar medium, and their antibiotic susceptibility was evaluated with meropenem and imipenem discs by disc diffusion method. In the next step, five common carbapenemase genes, including (VIM, IMP, OXA-۴۸, □□□-۱, □□□ □□□-۱) □□□□ □□□□□ned by PCR method and reported accordingly Two hundred and ninety-five stool samples were examined, of which 242 (82%) samples were cultured positively with Enterobacteriaceae. The prevalence of carbapenem resistance was reported to be 37% among 295 samples using the phenotypic method. Resistance rates were high in patients with a history of antibiotic use, with frequent hospitalizations (more than two episodes in the last six months), and in patients with an underlying disease) malignancy, GI diseases, immunodeficiency, neurologic diseases such as cerebral palsy and epilepsy, endocrine diseases. Most of the genes found were OXA-۴۸, □□□□□□□□ □y IMP and VIM. NDM-۱ □□□ □□□□□ □n 3 samples, and SPM was not found in any of the samples. In 13% of resistant samples, more than one carbapenemase gene was found. The results of this study showed that the frequency of carbapenem resistance in stools colonized with Enterobacteriaceae is high in our patients. On the other hand, the presence of carbapenemase genes in these bacteria, which are located on the plasmids that can be rapidly spread in the hospital environment, is an alarm for the hospital infection control committee to take preventive measures in order to prevent the spread of these bacteria in the hospital. keywirds: Enterobacteriaceae, Carbapenem, Screening, ColonizationEnterobacteriaceae, Carbapenem, Screening, Colonization

سخنرانی: هماتولوژی وانکولوژی

Hemophilia: Causes, types, symptoms, and treatment

aziz Eghbali [1] © Ⓟ

[1] [illegible]

Abstract: Hemophilia: Causes, types, symptoms, and treatment Aziz eghbali MD Pediatric Hematologist &oncologist Iran University of Medical Sciences Haemophilia, is a mostly inherited genetic disorder that impairs the body's ability to make blood clots, There are two main types of haemophilia: haemophilia A, which occurs due to low amounts of clotting factor VIII, and haemophilia B, which occurs due to low levels of clotting factor IX. People with more severe haemophilia experience more severe and more frequent bleeds, while people with mild haemophilia usually experience more minor symptoms except after surgery or serious trauma. In cases of moderate haemophilia symptoms are variable which manifest along a spectrum between severe and mild forms. Treatment and prevention of bleeding episodes is done primarily by replacing the missing blood clotting factors . Clotting factors are usually not needed in mild haemophilia In moderate haemophilia clotting factors are typically only needed when bleeding occurs or to prevent bleeding with certain events. In severe haemophilia preventive use is often recommended two or three times a week and may continue for life. Rapid treatment of bleeding episodes decreases damage to the body. Factor replacement can be either isolated from human blood serum, recombinant, or a combination of the two. Some people develop antibodies (inhibitors) against the replacement factors given to them, Desmopressin (DDAVP) may be used in those with mild haemophilia A Tranexamic acid may be given along with clotting factors to prevent breakdown of clots .

سخنرانی: هماتولوژی وانکولوژی

Fertility Preservation in Pediatric Patients with Cancer

آزاده کیومرثی [1] © Ⓟ

[1] □□□□□□ □□□□□□□□, □□, □□□□□□□□□ □□□□□□□□□□□□ □□□□□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□□ □□□ □□□□
Cell Transplantation, Children's Medical Center Hospital, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

Abstract: Advances in oncology treatments have led to a significant increase in survival rates for children diagnosed with malignancy and more than 80% of these cancers are now considered to be curable.[1] However, most of the implemented therapeutic strategies are potentially gonadotoxic. In females, alkylating agents accelerate the primordial follicles' activation and atresia, leading to premature ovarian insufficiency (POI).[2] In males, exposure to chemotherapy and radiotherapy leads to germ cell loss and impaired spermatogenesis.[3] Accordingly, considerable proportion of cancer survivors that reach adulthood, may experience infertility and consequently, failing to achieve parenthood not only impairs their well-being, but it also causes significant psychosocial stress for them and their families. For post-pubertal males, sperm banking, before gonadotoxic exposures, has long been considered the standard of care. For post-pubertal females, oocyte and embryo cryopreservation are available.[4] For prepubertal girls, ovarian tissue cryopreservation is the only possible option and the only option to preserve reproductive germ cells in prepubertal male patients is immature testicular tissue cryopreservation, which is still an experimental procedure.[5] Although international recommendations could help health-care providers to face fertility preservation issues in young patients with cancer, harmonized national guidelines are needed to be developed according to the availabilities and financial resources.
References: [1] Mertens AC, Yong J, Dietz AC, Kreiter E, Yasui Y, Bleyer A, et al. Conditional survival in pediatric malignancies: analysis of data from the childhood cancer survivor study and the surveillance, epidemiology, and end results program. Cancer (2015) 121(7):1108–17. doi: ۱۰.۱۰۰۲/□□□□.۲۹۱۷۰ [۲] □□□ □□□□ □, □□□□□□ □□, □□□□□□ □□, □□□□□□ □□, □□□ □□□ □□□□□□-□□□□□□□□

MM, van den Berg MH, et al. Recommendations for premature ovarian insufficiency surveillance for female survivors of childhood, adolescent, and young adult cancer: a report from the international late effects of childhood cancer guideline harmonization group in collaboration with the PanCareSurFup consortium. J Clin Oncol (2016) 34(28):3440–50. doi: ۱۰.۱۲۰۰/□□□.۲۰۱۵.۶۴.۳۲۸۸ [۳] □□□□ □, □□□□□□ □□. □□□□□□□□□ □□□□□□□-□□□□□□□□□ □□□□□□□□: □□□□□□□□,

management, and prevention. CA Cancer J Clin (2021) 71(5):437–54. doi: 10.3322/caac.21689 [4] Frederick NN, Klosky JL, Meacham LR, Quinn GP, Kelvin JF, Cherven B, Freyer DR, Dvorak CC, Brackett J, Ahmed-Winston S, Bryson E. Infrastructure of fertility preservation services for pediatric cancer patients: A report from the Children's Oncology Group. JCO Oncology Practice. ۲۰۲۲ □□□□۱۸(۳):□۳۲۵-۳۳. [۵] □□□□□□ □, □□□□□□□□ □□, □□□□□ □□, □□ □□: □□□□□□□□□□□ □□ □□□□□□□□□□

sperm production in irradiated pubertal rhesus monkeys by spermatogonial stem cell transplantation. Andrology 8:1428-1441, 2020

سخنرانی: هماتولوژی وانکولوژی

Future of Cell and Gene Therapies for Pediatric Diseases

Amir Ali Hamidieh [1] © ℗

[1] Pediatric Hematology Oncology Department, Children's Medical Center Hospital, Tehran University of Medical Sciences, 63 Qarib St., Keshavarz Blvd., Tehran, 14155-6559, 1419733161, Iran.

Abstract: Cell and gene therapies are rapidly evolving fields with the potential to revolutionize the treatment of pediatric diseases. These therapies offer the promise of curing or significantly improving the lives of children with a wide range of conditions, including cancer, rare genetic diseases, and immune disorders. Gene therapies, in general, involve delivering a working copy of a gene to a patient's cells to correct a genetic defect. This can be done using a variety of methods, including viral vectors, nanoparticles, and CRISPR-based gene editing tools. Other genetic manipulations, including silencing the transcription or translation of a gene of interest (by using small interfering RNAs, for example), also fall within the domain of gene therapies. Gene therapies have already been successfully used to treat several pediatric diseases, including spinal muscular atrophy, Duchenne's muscular dystrophy, sickle cell disease, β-thalassemia, and leukemia. Messenger-RNA (mRNA)-based technologies are another intriguing tool in this realm, which can effectively introduce a gene of interest into cells. mRNA vaccines are under active investigation for the treatment of a wide range of human cancers, as well as neurologic (multiple sclerosis) and infectious (HIV) disorders. However, there is still much work to be done to develop safe and effective gene therapies for humans. For instance, the application of viral vectors is limited by their low capacity and immunogenicity, and again, the delivery of CRISPR-based genome editors is challenging due to the lack of an optimal delivery system. Another promising area of research is in the development of cell therapies for pediatric diseases. Traditionally, cell therapy approaches comprised of transplanting healthy cells into a patient to replace or repair damaged cells. One of the most successful examples of cell therapy for pediatric diseases is allogeneic hematopoietic stem cell transplantation (HSCT). HSCT involves transplanting stem cells from healthy donors into patients. HSCT has been used to successfully treat a wide range of pediatric blood disorders, including leukemia, lymphoma, sickle cell disease, Fanconi's anemia, and several types of storage diseases and immunodeficiencies. Advances in molecular techniques and genetic manipulation of cells have resulted in the development of chimeric antigen receptor (CAR) immune cells and engineered iPSCs and MSCs. Apart from exerting superior anti-tumor activities than traditional cell therapies against cancers, this modality has shown intriguing efficacy against autoimmune (e.g., multiple sclerosis and type I diabetes) and infectious disorders as well. Adoptive and engineered MSC and iPSC therapies have been successful against a wide range of degenerative and inflammatory disorders. Nevertheless, numerous ongoing trials

سخنرانی: هماتولوژی وانکولوژی

Hematopoietic stem cell transplantation

Maryam Behfar [1] © ℗

۱. □□□□□□□□□□ □□□□ □□□ □□□□ □□□□□□□ □□□□□□□□ □□□□□□, □□□□, □□□□ □ □□□□□□ □□□□□□□□ □□□□□□□□□, □□□□□□ □□□□□□□□□□ □□ Medical Sciences, Tehran, Iran. Children's Medical Center, Pediatrics Center of Excellence, Tehran, Iran

Abstract: Throughout the past decade, bone marrow transplantation, also known as hematopoietic stem cell transplantation (HSCT), opened many avenues as a novel modality for a multitude of childhood diseases. HSCT is defined as the infusion of autologous or allogeneic stem cells (derived from either the bone marrow, peripheral blood or cord blood) subsequent to a conditioning regimen, consisting of high-dose chemotherapy with or without radiation therapy. In order for healthy hematopoietic and immune reconstitution to ensue, it is vital that high-dose chemotherapy is administered in order to create marrow space, prevent rejection, and eradicate malignant cells in certain afflictions. The application of HSCT include treating a vast array of diseases including hematologic malignancies, immune deficiencies, hemoglobinopathies, bone marrow failures, and congenital metabolism disorders. Thomas et al. set precedent for allogeneic HSCT in 1957, as inaugural pioneers in the field, yet the first successful HSCT was reported in later in 1969, in a child with severe combined immunodeficiency. The optimal donor is an HLA identical sibling. In the absence of an HLA identical sibling, matched other-related or unrelated donors should be considered as an alternative donor options. Haploidentical donors are often the patients last resort due to possible complications. Graft versus Host Disease (GvHD) is the inflammatory response engendered by the graft's immune cells against the recipient's tissue and is divided into Acute and Chronic GvHD based on clinical manifestations and time of onset. Despite the 50-year history of HSCT, to this day GvHD plays an integral role in affecting the overall survival of patients directly or indirectly. The outcomes of HSCT can be improved by choosing the appropriate conditioning regimen and GvHD prophylaxis.

سخنرانی: هماتولوژی وانکولوژی

Hemolytic Anemia & Glucose-6-Phosphate Dehydrogenase Deficiency

الهام شاهقلی [1] © Ⓟ

[1] دانشیار گروه کودکان دانشگاه علوم پزشکی تهران دپارتمان خون و آنکولوژی اطفال بیمارستان کودکان بهرامی

Abstract: Glucose-۶-phosphate dehydrogenase deficiency is the most common red blood cell (RBC) enzyme disorder. This disorder is inherited as an X-linked recessive defect. The global prevalence of G6PD deficiency is about 4.9% correlated with ethnicity in population and endemic malaria areas, including Africa, Mediterranean ,Europe, South-East ,Asia, and Latin America. G6PD deficiency exhibits several clinical manifestations as jaundice, hemolytic anemia, splenomegaly, and hemoglobinuria. The decrease as well as the absence of the enzyme increase RBC vulnerability to oxidative stress caused by exposure to certain medications or intake of fava beans. Among the most common clinical manifestations of this condition, acute hemolysis, chronic hemolysis, neonatal hyperbilirubinemia, and an asymptomatic form are observed. Favism is a hemolytic disease due to the ingestion of fava beans in individuals with glucose-6-phosphate dehydrogenase (G6PD) deficiency. There is wide inter- and intra-individual variability in the development of hemolytic crisis, and several factors influence it: quantity, quality, ripeness of fava beans, and age of onset. Moreover, the others cause of hemolytic in G6PD as induced by the drug of malaria and infection- induced hemolytic. G6PD deficiency can be detected via several methods, the most common being a quantitative laboratory assay for G6PD enzyme activity. A G6PD enzyme activity level below 5 units per gram of hemoglobin constitutes deficiency. In addition, genetic testing can be performed to confirm the diagnosis.The usual treatment for hemolytic anemia in G6PD-deficient patients is supportive care plus removal and avoidance of further triggers. In severe hemolysis, blood transfusions may be required; hemodialysis may be needed if acute kidney injury occurs. Generally, the prognosis for G6PD-deficient patients is quite good. Most patients live relatively normal lives as long as they avoid triggers.

سخنرانی: هماتولوژی وانکولوژی

Iron deficiency anemia

عالیه صفری [1] © Ⓟ

[1] فوق تخصص هماتولوژی اطفال

Abstract: Iron deficiency anemia affects 1.2 billions individuals worldwide, and iron deficiency in the absence of anemia is even more frequent. Total-body (absolute) iron deficiency is caused by physiologically increased iron requirements in children, adolescents, young and pregnant women, by reduced iron intake, or by pathological defective absorption or chronic blood loss. Adaptation to iron deficiency at the tissue level is controlled by iron regulatory proteins to increase iron uptake and retention; at the systemic level, suppression of the iron hormone hepcidin increases iron release to plasma by absorptive enterocytes and recycling macrophages. The diagnosis of absolute iron deficiency is easy unless the condition is masked by inflammatory conditions. All cases of iron deficiency should be assessed for treatment and underlying cause. Special attention is needed in areas endemic for malaria and other infections to avoid worsening of infection by iron treatment. Ongoing efforts aim at optimizing iron salts–based therapy by protocols of administration based on the physiology of hepcidin control and reducing the common adverse effects of oral iron. IV iron, especially last-generation compounds administered at high doses in single infusions, is becoming an effective alternative in an increasing number of conditions because of a more rapid and persistent hematological response and acceptable safety profile. Risks/benefits of the different treatments should be weighed in a personalized therapeutic approach to iron deficiency.

سخنرانی: هماتولوژی وانکولوژی

The Evaluation of Demographic, Clinical and Laboratory of Patients with Leukemia referred to the Children's Medical Center Hospital in 2017-2019

Farzad Kompani [1] © Ⓟ

[1] □□□□□□□□ □□ □□□□□□□□□□ □□□ □□□□□□□□,□□□□□□□□□ □□□□□□□ □□□□□□, □□□□□□□□□□ □□□□□□ □□ □□□□□□□□□□. □□□□□□
University of Medical Sciences,Tehran,Iran

Abstract: Background: The cancer is second cause of death in children in developed countries. One of the most common childhood malignancies is leukemia and about one third of childhood malignancies the aged under 15 years. The aim of this study to determine demographic, clinical features and laboratory status of patients with leukemia referred to the Children's Medical Center Hospital in 2017-۲۰۱۹. □□□□□□□□: This cross-sectional study was conducted on all children that referred to hematology and oncology department of Children's Medical Center Hospital in 2017-۲۰۱۹ □□□□ □□□□□□□□□□ □□ □□□□□ □□□□□□□□□. □□□□□□□□□□□□ □□□□□□□□□□□□□□□□□, □□□□□□□□ □□□□ □□□□ clinical features and laboratory results of patients were collected by questionnaire. For statistical analysis, used SPSS software version 22. Results: Finally 100 children with acute leukemia were included in the study. 87 children were acute lymphocytic leukemia (ALL) and 13 children were acute myeloid leukemia (AML). The average age was 5.8 years. The most common clinical symptoms were in the two group's fever (66%) and pallor (62%), which were the most commonly found in ALL group. However, in the AML group, the most common symptoms were petechial and purpura (58.3%), fever, fatigue and anorexia (50%). 89.7 percent of ALL patients had pre B cell immunophenotypes. The most commonly encountered gene in ALL transcription was leukemia of (12; 21). The most common gene involved in AML leukemia was transcription of bcr2 t (15; 17), BRC3 t (15; 17) and T1 t (8; 21) (15.4%). The highest frequency (46.1%) was for M3-related AML patients. Conclusions: Considering the fact that the Children's Medical Center Hospital is a major reference center for childhood leukemia in the country and the referral of patients from all over Iran, the results of this study can be helpful in early diagnosis and warning signs of leukemia. Key words: Acute Leukemia, Demographic, Clinical features

سخنرانی: هماتولوژی وانکولوژی

von willebrand disease

mohammad kajiyazdi [1] © ℗

[1] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□ □□□□ □□□□□□□□□, □□□□□□□□ □□□□□□□□□ □□□□□□□□□, □□□□□□□ □□□□□□□□□□□□ □□ Medical Sciences, Tehran, Iran.

Abstract: von willebrand disease VWD is the most common bleeding disorder, found in up to 1% of the U.S. population. This means that 3.2 million people in the United States have the disease. Although VWD occurs among men and women equally, women are more likely to notice the symptoms because of heavy or abnormal bleeding during their menstrual periods and after childbirth. There are 3 major types of VWD: Type 1, Type 2, and Type 3. Types of VWD Type 1 This is the most common and mildest form of VWD, in which a person has lower-than-normal levels of VWF. Type 2 With this type of VWD, although the body makes normal amounts of the VWF, the factor does not work the way it should. Type 2 is further broken down into four subtypes—2A, 2B, 2M, and 2N—depending on the specific problem with the person's VWF. Because the treatment is different for each type, it's important that a person know which subtype he or she has. Type 3 This is the most severe form of VWD, in which a person has very little or no VWF and low levels of factor VIII. This is the rarest type of VWD. Only 3% of people with VWD have Type 3. Signs and Symptoms The major signs of VWD are: Frequent or Hard-to-Stop Nosebleeds Easy Bruising. Heavy Menstrual Bleeding. Diagnosis To find out if a person has VWD, the doctor will ask questions about personal and family histories of bleeding. Coagulation tests will provide information about the amount of clotting proteins present in the blood and if the clotting proteins are working properly, Treatments The type of treatment prescribed for VWD depends on the type and severity of the disease. For minor bleeds, treatment might not be needed.

سخنرانی: جراحی

Hydrocele in children

Hojatollah Raji [1] © ℗

[1] استادیار دانشگاه

Abstract: Hydrocele is the type of scrotal swelling that occurs when fluid collects in the thin sheath that surrounds the testicle. A hydrocele can form before birth. Typically, the testicles descend from the developing baby's stomach area into the scrotum. A hydrocele is a type of swelling in the scrotum, the pouch of skin that holds the testicles. This swelling happens when fluid collects in the thin sac that surrounds a testicle. Hydroceles are common in newborns. They often go away without treatment by age 1. Older children and adults can get a hydrocele due to an injury within the scrotum or other health problems. A hydrocele often isn't painful or harmful. It might not need any treatment. But it's important to see a health care provider if the scrotum looks swollen.

سخنرانی: جراحی

Inguinal Hernia in Children

© Ⓟ [1] مریم قوامی عادل

[1] [illegible]

Abstract: A hernia is the protrusion of a portion of an organ or tissue through an abnormal opening in the wall that normally contains it. Inguinal hernia is one of the most common pediatric surgical presentations. The incidence of inguinal hernias is. 8 to 50 per 1000 live births in term infants, increasing to nearly 20% in extremely low birth weight (1000 g) infants and it is six times more common in boys. Over 99% of inguinal hernias in children are indirect and a direct hernia is extremely rare in Children. Patients usually present once a parent has noticed a lump or swelling in the groin. Hernias can be classified as reducible or irreducible. The risk of an incarcerated inguinal hernia in children is estimated to be 4%, with the highest risk (8%) noted in infants. If the hernia is irreducible, it is important to distinct between strangulated and non-strangulated hernias. Hydrocoeles, undescended testis, chordal cyst, inguinal lymphadenopathy, Idiopathic scrotal edema, abscess in the inguinal region and less commonly varicoceles and testicular tumors are the differential diagnoses. Management- Inguinal hernias in both term and preterm infants are commonly repaired shortly after diagnosis to avoid incarceration of the hernia. Infants aged 1 year may have an increased risk of strangulation up to two-fold, with the highest risk in the first few months of life. In preterm infants there is a tendency to delay the operation. Possible motivations for delaying repair in preterm neonates include technical challenges, higher rate of recurrence, comorbid conditions associated with prematurity and anesthesia-related concerns including risk of postoperative apnea. Surgical management can be done open or laparoscopic. Long-term outcomes are not known for laparoscopic surgery as it has been used for a relatively short period of time when compared with open surgery. Multiple epidemiologic studies have not demonstrated any developmental problems in children exposed to a single, short anesthetic or sedation. The general anesthesia and risk of postanesthetic apnea was strongly associated with gestational age, postconceptional age, and anemia. Inguinal hernia repair is associated with operative complications, including hernia recurrence, vas deferens injury, and testicular atrophy, the rates of which vary from 1% to 8%. Long-term complications include chronic pain and infertility in adulthood. The routine exploration of the contralateral side has been reduced. Various diagnostic modalities, such as the physical examination, herniography, or ultrasonographic examination are not particularly sensitive or specific, thus making these efforts unreliable for contralateral exploration.

سخنرانی: جراحی

Shunt malfunction in patients with hydrocephalus

Zohreh Habibi [1] © ℗, Keyvan Tayebi Meybodi [1]

[1] □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□

Abstract: Hydrocephalus is a major problem in pediatric neurosurgery, which can be treated via CSF diversion or endoscopic intervention. Ventriculoperitoneal shunting is still the mainstay treatment of hydrocephalus, followed by ventriculoatrial and ventriculopleural. Even though, CSF shunts would be complicated in different ways. Herein, we reviewed different aspects regarding shunt failure. Unfortunately, only 30% to 37% of shunts will remain revision free in the first 10 years after placement. Forty percent of all shunts fail within the first year of placement. Immediate complications after implantation relate to intracranial hemorrhage, valve occlusion, and trauma from distal catheter placement. In situations where an immediate postoperative shunt placement failure is suspected, requisite imaging can confirm disconnections, and a shunt reservoir tap can definitively demonstrate the patency of the system. The risk factors associated with reduced shunt survival include: age less than 6 months, a cardiac comorbidity, and use of an endoscope for ventricular catheter placement. Shunt failures fall into two major categories: (1) functional failure because of too much or too little flow of CSF, and (2) mechanical failure of the device. Shunt occlusion can occur at the proximal catheter, valve, or distal system. The choice of frontal or occipital entry site and selection of valve design do not appear to affect shunt survival. Shunts may also disconnect, fracture, or migrate. Shunt fracture is typically seen in older, calcified catheters and does not require a history of significant trauma. Early shunt migrations are avoided by securing the ventricular catheter and valve to the pericranium or skull as possible, avoiding unnecessary subgaleal dissection, and closing the abdominal wall layers securely around the distal catheter. Late migration of the shunt catheters, including the ventricular catheter into the brain parenchyma and the distal catheter out of the abdomen or other terminus, may be seen as a result of relative growth of the child, which can be minimized when the shunt is inserted by accounting for the child's anticipated growth. Shunt failure can present many clinical forms and often is patient-specific in presentation. The parents should be alarmed about the possibility of shunt failure and should be trained about the potential presentations. Physicians should be aware from different aspects of shunt failure, and use clinical diagnostic suspicious to detect any new symptoms related to shunt failure. keywords:Hydrocephalus, Ventriculoperitoneal shunt, Shunt failure

سخنرانی: ریه

Antibiotic use Evaluation in Hospitalized Pediatric Patients with Respiratory Tract Infections: A Retrospective Chart Review Study

℗ © [1] مریم حسن زاد

[1] مرکز تحقیقات بیماریهای تنفسی اطفال، پژوهشکده سل و بیماری های ریوی، دانشگاه علوم پزشکی شهید بهشتی، تهران، ایران

Abstract: Introduction: Respiratory tract infections (RTIs) are a common cause of antibiotic usage in hospitalized pediatric patients. Inappropriate use of antibiotics may lead to the emergence of multidrug-resistant microorganisms and increased treatment costs. Objective: This study was designed to assess antibiotic usage in hospitalized pediatric patients with RTIs. Methods: Medical charts of the patients admitted to the pediatric ward (PW) and pediatric intensive care unit (PICU) of a tertiary respiratory center were reviewed. Patients' demographic and clinical data, including gender, age, weight, history of allergy, length of hospital stay, clinical diagnosis, and prescribed antibiotics (indication, dose, and frequency of administration) were collected. The appropriateness of antibiotic usage was evaluated in each patient according to international guidelines. Results: Two hundred seventy-nine hospitalized patients were included in the study. The most common reason for hospitalization was pneumonia (38%), followed by cystic fibrosis (20.1%) and bronchitis (5%). The most commonly used antimicrobial agents were ceftriaxone, azithromycin, and clindamycin which guideline adherence for their usage was 85.3%, 23.3%, and 47%; respectively. Inappropriate dose selection was the main reason for non-adherence to the guidelines. The adherence rate to RTIs' guidelines (considering all parameters for each patient) was 27.6%. Multivariate logistic regression analysis demonstrated CF and prescription of azithromycin are predictors of guideline non-adherence. Conclusion: We found relatively low adherence to international guidelines in our center that could be related to restricted definitions of optimal antibiotic therapy. Despite most patients received logical antimicrobial therapy, actions should be taken into account to reach optimal antibiotic usage.

سخنرانی: ریه

bronchiolitis

© Ⓟ [1] اعظم غلامی شهربابک

[1] نویسنده مسیول

Abstract: bronchiolitis is a viral infection, that leading to respiratory distress in infant.

سخنرانی: ریه

Complications and consequences of obstructive sleep apnea

© Ⓟ روح اله شیرزادی [1]

[1] دانشگاه علوم پزشکی تهران مرکز طبی کودکان

Abstract: Sleep apnea is a potentially serious sleep disorder in which breathing repeatedly stops and starts. If you snore loudly and feel tired even after a full night's sleep, you might have sleep apnea. The main types of sleep apnea are: Obstructive sleep apnea (OSA), which is the more common form that occurs when throat muscles relax and block the flow of air into the lungs Central sleep apnea (CSA), which occurs when the brain doesn't send proper signals to the muscles that control breathing Treatment-emergent central sleep apnea, also known as complex sleep apnea, which happens when someone has OSA — diagnosed with a sleep study — that converts to CSA when receiving therapy for OSA If you think you might have sleep apnea, see your health care provider. Treatment can ease your symptoms and might help prevent heart problems and other complications. Obstructive sleep apnea (OSA) has many consequences. There is an independent association between OSA and hypertension. The Sleep Heart Health Study reported that hypertension prevalence increased as sleep disordered breathing severity increased. The Nurses' Health Study noted an age-adjusted relative risk of cardiovascular events of 1.46 for occasional snorers and 2.02 for regular snorers, and a risk of stroke of 1.60 for occasional snorers and 1.88 for regular snorers. Sleep apnea is also associated with pulmonary hypertension, neurocognitive effects, depressed quality of life, motor vehicle accidents, awakening headache, childhood growth interruption, pregnancy-induced hypertension, fetal growth retardation, and disruption of the patients' bed-partners' sleep quality. Further research will examine the possibility of causality, pathophysiologic mechanisms, and outcomes of therapeutic interventions for OSA on the many consequences of OSA.

سخنرانی: ریه

Imaging findings in common pediatric lung and chest diseases

ندا پاک [1] © Ⓟ

[1] [illegible]

Abstract: The chest radiograph is one of the most common radiographic examinations in pediatric patient which could be performed for assessing different situations including respiratory distress, bronchiolitis, pneumonia, cardiac disease, pneumothorax, foreign bodies, trauma, confirming the location of line placement and…. except radiologists, pediatricians also should be familiar with radiologic findings in diseases affecting lungs specially in emergent situations. There is a varying radiographic appearance of the normal growing child, from neonates to adolescents. Pediatric radiography often utilizes differing techniques of acquisition, and frequently, differing pathologies are encountered that are not commonly seen in adults. For example, the developmental appearance of the normal thymus in young infants can mimic a parenchymal lung infection or mediastinal mass. More advanced modalities including ultrasound, and CT scan (spiral or HRCT) may be necessary to confirm or more evaluate the pathology on CXR, ultrasound play an important role in evaluation of pleural fluid, whether to find loculation or septation within fluid to recommend empyema. Spiral chest CT scan are used for evaluation of metastasis, complicated pneumonia and lung, chest wall or mediastinal masses which must be performed with IV contrast media administration in four later cases. HRCT is used for evaluation of parenchymal lung disease and bronchiectasis and not to be used for evaluation of masses or pneumonia.

سخنرانی: ریه

Impact of COVID-19 pandemic on the etiology and characteristics of community-acquired pneumonia among children

© ℗ [1] معصومه قاسمپور علمداری

[1] استادیار دانشگاه علوم پزشکی تهران

Abstract: Community-acquired pneumonia (CAP) is the leading cause of morbidity among childhood respiratory diseases. The World Health Organization (WHO) estimates that nearly one-fifth of childhood deaths are caused by pneumonia, which claims more than 2 million lives annually . Among all infectious diseases, the mortality rate of pneumonia is 14.1%, especially in developing countries . Following the introduction of the pneumococcal conjugate vaccine and the Haemophilus influenzae type b vaccine, respiratory viruses and atypical bacteria have become the most frequent etiologic agents in recent years. The outbreak of coronavirus disease 2019 (COVID-۱۹) □□□□□□□□□□□□ □ □□□□□□□□□□□□ □□□□□□ □□□□□□ □□□□□□ □□□ □□□□□. □□ □□□□□□□ □□□ □□□□□-۱۹ pandemic, governments around the world implemented a series of non-pharmaceutical interventions (NPIs), such as mandated facial masks, encouraged social distancing, remote working, online teaching, stay-at-home orders and travel restrictions. Studies have shown that the preventive measures useful in containing COVID-۱۹ □□□□ □□□□□d to be effective in preventing the transmission of other respiratory viruses.according to several studies Before the onset of COVID-19, the detected pathogenic proportions were as follows: mycoplasma pneumonia (MP)(59.56%)bacteria (50.42%) viruses (29.57%) fungi (3.43%). During the post-COVID-۱۹ period, the pathogenic proportions were bacteria (56.53%) viruses (53.60%) MP (23.47%) fungi (3.73%). MP and bacteria were the main pathogens before the onset of the pandemic, and bacteria and viruses were the main pathogens after the onset of the pandemic. The proportions of MP decreased significantly.Grampositive bacteria were the main bacteria. The top three bacteria before and after the pandemic were Streptococcus pneumo- niae, Haemophilus influenzae and Staphylococcus aureus. In addition, the rates of Pseudomonas aeruginosa and Acineto- bacter baumannii also increased after the outbreak. There were no significant changes in RSV proportions, and RSV still ranked first. The adenovirus (ADV), influenza virus (IV), and parainfluenza virus (PIV) proportions all decreased after the pre-COVID-۱۹ □□□□□□, □□pecially IV infection, which nearly became zero. The number of children hospitalized with CAP during the post-COVID-۱۹ □□□□□□ □□□ 84.14% lower than the number hospitalized during the pre-COVID-۱۹ □□□□□□, □□□□□□□□□□ □□□□□ □□□□□□-age children.The decline after the outbreak was attributed to the strict prevention and control measures , such as hand hygiene practices, wearing surgical masks when in crowded places, maintaining a social distance of more than one meter, measuring body temperature and discouraging students with respiratory symptoms from going to school. All of the above factors protected children from infection, especially school- age children.

سخنرانی: ریه

Management of obstructive and central sleep apnea in children

Seyed Hossein Mirlohi [1] © Ⓟ

[1] [illegible]

Abstract: Obstructive sleep apnea (OSA) is characterized by episodes of complete or partial upper airway obstruction during sleep, often resulting in gas exchange abnormalities and arousals, which disrupt sleep Untreated pediatric OSA is associated with behavioral and learning problems; in more severe cases, it can be associated with impaired growth (including failure to thrive) and cardiovascular complications(systemic hypertension, right and left ventricular dysfunction, and cor pulmonale) Early diagnosis and treatment may decrease morbidity Treatment decisions are individualized and depend upon findings from a comprehensive evaluation, including nighttime sleep disruption, daytime dysfunction, physical examination findings, and sleep study findings The decision to initiate treatment and choice of treatment depend upon the child's age, clinical symptoms (eg, nighttime sleep problems or daytime dysfunction), presence of comorbidities (especially underlying genetic, craniofacial, neuromuscular disorders), risk factors (eg, obesity, crowded oropharynx), and results of PSG if performed Adenotonsillectomy: Adenotonsillectomy is generally indicated for otherwise healthy children who have adenotonsillar hypertrophy and severe OSA (eg, apnea hypopnea index [AHI] 10, in the setting of relevant clinical symptoms). For patients with moderate OSA (eg, AHI 5 to 10), either adenotonsillectomy or watchful waiting for up to six months are reasonable approaches The decision usually depends upon the degree of symptoms and the patient's and family's preferences Risk factors for complicated OSA – Risk factors in children that predict increased risk for perioperative complications following adenotonsillectomy include severe OSA on preoperative PSG or the presence of complicating factors such as obesity (especially if severe), very young age (36 months), abnormal upper airway tone, congenital syndromes, or craniofacial anomalies. Positive airway pressure — It involves administering airway pressure through a mask, which prevents upper airway obstruction and reduces both sleep disruption and the work of breathing Positive airway pressure is a long-term therapy that requires a motivated family. Adherence to therapy is challenging but can be optimized with proper mask fitting, positive pressure titration, and behavioral support Indications and contraindications – Positive airway pressure is indicated for children with OSA (apnea hypopnea index [AHI] 1 and clinically relevant symptoms) and minimal adenotonsillar tissue. It also may be useful for children with a strong preference for a nonsurgical approach or for persistent OSA despite adenotonsillectomy. other options :Rapid maxillary expansion (RME) Mandibular Corticosteroids or antiinflammatory therapy:Children with mild or moderate OSA and nasal obstruction due to adenoidal hypertrophy, especially those with seasonal allergies, may be candidates for treatment with intranasal corticosteroids or leukotriene modifier therapy(two- to four-week trial)

سخنرانی: ریه

New Insights to Pediatric Empyema

© Ⓟ صدیقه یوسف زادگان [1]

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□□ □□□□□□□□□, □□□□□□ □□□□□□ □□□□□□□□ □□□□□□□□□, □□□□□□ □□ □□□□□□□□□, □□□□
University of Medical Sciences, Tehran, Iran

Abstract: Chest empyema in children is an increasing disease. Treatment options for pediatric thoracic empyema (PTE) are limited due to a lack of adequate evidence in pediatric populations, and the current management of this disease is based on guidelines that are based on medical priorities in each region and there are no standards. Based on recent studies, it appears that while CT shows the majority of parenchymal abnormalities, its use has not resulted in better management than using only ultrasound and chest radiography. Consequently, the prevailing opinion of most pediatric pulmonologists is that in the pediatric population, ultrasound should be used routinely and CT reserved for use only in special circumstances. In several studies on long-term outcomes in childhood empyema, considerable variability in initial management, incomplete follow-up, and cases of simple parapneumonic effusion have been reported. Examining the short-term and long-term outcomes of childhood empyema in different geographic regions based on the use of antibiotics with or without draining pleural fluid helps to understand whether children suffer from long-term complications or lung dysfunction as a result of any specific treatment protocol.

سخنرانی: ریه

Polysomnography in children

mohammadreza modaresi [1] © Ⓟ

[1] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□□ □□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□

Abstract: The most common indication for performing polysomnography in children is Obstructive Sleep Apnea Syndrome (OSA). Given that it is not possible to distinguish primary snoring from obstructive sleep apnea in children by using history and clinical examination alone, Thorax Association America and the American Academy of Pediatrics recommend polysomnography as the diagnostic test of choice for children with suspected obstructive sleep apnea.

سخنرانی: ریه

Sleep Disorders in Children

Majid Keivanfar [1] © ℗

[1] Assistant Professor of Pediatrics, Pediatric Pulmonologist, Department of Pediatrics, Faculty of Medicine. Emam Hossein children's Hospital. Research Institute for Primordial Prevention of Non-Communicable Disease Child Growth and Development Research Center. Isfahan University of Medical Sciences, Isfahan, Iran. Tel: +98 913 311 6127 Email: keivanfar@med.mui.ac.ir

Abstract: Sleep Disorders in Children Epidemiologic studies indicate that up to 50% of children experience a sleep problem,2-۴ [illegible] ۴% have a formal sleep disorder diagnosis. The clinician should ask whether the child: • Has difficulties at bedtime or settling to sleep • Wakes during the night • Has breathing problems while asleep • Shows unusual behaviors, experiences, or movements at night • Has difficulty waking up in the morning • Is unusually sleepy or 'overtired' during the day Sleep is an opportunity for the body to conserve energy, restore its normal processes, promote physical growth, and support mental development.The most recognized consequence of inadequate sleep is daytime sleepiness. However, sleepiness in children commonly manifests as irritability, behavioral problems, learning difficulties, motor vehicle crashes in teenagers, and poor academic performance. Sleep changes considerably during the first few years of life and parallels physical maturation and development.Newborns require the greatest total sleep time and have a fragmented sleep-wake pattern. Starting at five months of age, infants have the ability to sleep for longer periods. At six months of age, children are able to go without nighttime feedings, but significant variation exists. Pediatric insomnia is the most commonly reported sleep problem encountered by pediatric health care providers with a prevalence reported to range from ۱۰٪ [illegible] ۵۰٪, [illegible] disorders. The International Classification of Sleep Disorders-Third Edition (ICSD-۳)۱۴ [illegible] chronic insomnia as: persistent difficulty with sleep initiation, duration, consolidation, or quality that occurs despite adequate opportunity and circumstances for sleep and results in some form of daytime impairment. Behavioral insomnia of childhood is characterized by a learned inability to fall and/or stay asleep; The condition is divided into the sleep-onset association type and the limit-setting type. The sleep-onset association type is characterized by the child's inability or unwillingness to fall asleep or return to sleep in the absence of specific conditions, such as a parent rocking the child to sleep. Increasing evidence has emerged highlighting the adverse consequences of insomnia in infants, children, and adolescents. Sleep disruption in infancy affects neurobehavioral development; Night awakenings (1 per night) in infancy are associated with inattentiveness and hyperactivity-impulsivity at the age of 5 years.

سخنرانی: PICU واورژانسها

Acute asthma exacerbation managements in PICU

© Ⓟ زینب نجفی [1]

[1] مراقبت ویژه کودکان مرکز طبی کودکان استادیار

Abstract: Acute asthma exacerbations in children present with acute or sub-acute onset of wheeze and respiratory distress, the symptoms and signs of which vary depending on the developmental and maturational age of the child. In severe cases wheezes disappear and ventilation and oxygenation is interrupted. Triggers include viral or bacterial infection, inhaled allergens, environmental irritants, emotion, medications, and poor adherence with preventive therapy. The majority of children will respond to initial bronchodilator therapy; oral corticosteroids should be initiated early in those who do not respond to regular bronchodilator therapy. Patients with severe exacerbations require oxygen, nebulised/intravenous bronchodilators, and intravenous corticosteroids and may require magnesium sulfate infusion, intravenous bronchodilators, and intramuscular adrenaline (if anaphylaxis is present). Severe and life-threatening exacerbations may require heliox, non-invasive ventilation or intubation, and the intensive care team should be involved as early as possible. Intubation indications include hypoxia,altered mental status and persistent severe hypercarbia. Intubation considerations include use of ketamine due to bronchodilator effects and a cuffed tracheal tube suitable for age. Ventilator set up is based on high tidal volumes and low ventilation rates. Extubation is performed as soon as ventilation is recovered by proper clinical and paraclinical issues. In children not responding to standard treatment for asthma, other differential diagnoses should be considered. On discharge from hospital, a clear asthma management plan and asthma education are essential to optimise asthma control and prevent future exacerbations.

سخنرانی: PICU واورژانسها

Approach to dysrhythmia in children based on pediatric advanced life support

© ℗ [1] فرزانه بیرامی

[1] نویسنده مسئول و ارائه دهنده

Abstract: Pediatric Advanced Life Support (PALS) is a course to provide health care for children and infants in hospital and out-of-hospital care. This course teaches health care providers how to assess injured and ill children and to recognize and treat distress / failure , shock, cardiac arrest, and arrhythmia. Providers should follow AHA pediatric bradycardia and tachycardia algorithms. As always, provide airway, breathing and circulatory support and start CPR if needed. The management of tachycardia and bradycardia depends on whether the child is stable or unstable (cardiopulmonary compromise signs: signs of shock, hypotension, altered mental status). This lecture is an opportunity to review how to approach a child with dysrhythmia.

سخنرانی: PICU واورژانسها

Approach to the child with blunt trauma

© Ⓟ زینب پورهادی [1]

هیئت علمی دانشگاه تهران مرکز طبی کودکان [1]

Abstract: The initial approach to the management of the stable child who has sustained traumatic injury is reviewed here. Initial trauma management in the unstable child is discussed separately. For this review, the stable pediatric trauma patient refers to an injured child who initially has normal or near normal vital signs, normal vital functions (airway, breathing, circulation, mental status), and no readily apparent critical injury. It is imperative for the trauma provider to use normative values for children as opposed to adults when assessing vital signs. Normal vital signs change with age in children. In general, heart and respiratory rates are higher than in adults , and blood pressure is lower. The 5th percentile systolic blood pressure for age can be approximated by the following formula for children 1 to 10 years of age: Systolic pressure (5th percentile) = 70 mmHg + 2 X (age in years) Many seriously injured children, who ultimately require hospitalization and/or surgical intervention, initially appear stable. It is incumbent on the emergency provider to thoroughly evaluate initially stable appearing traumatized children and to identify those at high risk for serious injury based on mechanism and physical findings. Injury classification — Traumatic injuries can range from minor to life-threatening. Several methods for measuring severity of injury exist. In order to appropriately triage the management of the trauma patient, one useful method to categorize injuries uses the following parameters .Injury extent – Multiple trauma is defined by apparent injury to two or more body areas. Localized trauma involves only one anatomic region (eg, head and neck, chest and back, abdomen, extremities) of the body. Sometimes the extent of injury may be obvious; at other times this may not be readily apparent, and the clinical picture may evolve over time. Injury type – The expected injuries differ based on whether they occur as a result of blunt trauma (eg, fall, motor vehicle collision [MVC]) or penetrating trauma (eg, gunshot, stabbing, or shrapnel from explosion). Injury severity – The mechanism of injury and physical examination findings are useful in the determination of severity. Assessment of severity will dictate the initial management and disposition of the injured child . High-risk trauma mechanisms predict patients who are more likely to be unstable or become unstable and, along with vital signs and physical findings, are often used to guide prehospital transport decisions and to initiate evaluation by a trauma team in hospital trauma centers.

سخنرانی: PICU واورژانسها

Cause and treatment in failure of acidosis improvement

آناهیتا مجمع [1] © Ⓟ

[1] استادیار دانشگاه علوم پزشکی تهران

Abstract: When in DKA acidosis not improving? In DKA treatment acidosis must be resolved in ۲۴-۴۸ □□□□□.□□ □t not occur Several items existence: 1.IV fluid calculations: Dehydration Recalculate IV fluid, May need replace high urinary output or other source of fluid loss if cause negative fluid balance but avoid liberally bullous fluid. 2.Insulin delivery system & dose: Inadequacy of insulin Infusion prompt evaluation of the adequacy of insulin infusion. then check infusion lines, the calculation and dose of insulin and consider giving more insulin. (even prepare new I.V.fluid containing insulin) 3. Presence of non-anion gap hyperchloremicacidosis: The use of large amounts of 0.9% Saline has been associated with the development of a hyperchloremic metabolic acidosis after the clinical status has improved and ketosis has resolved thus First check keton ; this can be left to resolve on its own and does not require any treatment 4. Consider sepsis: Sepsis Use empiric antibiotic therapy 5.Renal failure Consider strict fluid balance and CVP monitoring and/or dialysis 6. salicylate or other prescription or recreational drugs 7. The patient is depending on respiratory compensation to maintain their pH. If they should fatigue and lose the ability to hyperventilate, their pH would drop. It is important to reverse the acidosis before the patient may fatigue or develop respiratory failure (e.g., due to aspiration or pulmonary edema). if there is concern that the patient may develop diaphragmatic fatigue from Kussmaul respiration, high-flow nasal cannula (HFNC) is a reasonable consideration. The goal here is to use the flow rate to help blow off CO2 (by reducing the anatomic dead space and improving ventilation efficiency).

سخنرانی: PICU واورژانسها

Different imaging modalities used to image pediatric disease

Fatemeh Zamani [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□, □□□□□□□□'□ □□□□□□□ □□□□□□, □□□□, □□□□□□, □□□□

Abstract: Imaging plays a crucial role in the clinical assessment of pediatric patients. The choice of imaging modality depends on the specific clinical problem. With the advancement of new radiological technologies, the available options for physicians have become more diverse and intricate. Rapid progress in imaging technology has enabled the noninvasive assessment of various pediatric diseases. Ultrasound and magnetic resonance imaging (MRI) are two imaging methods that do not use ionizing radiation, making them the preferred options for pediatric imaging. Computed tomography (CT) is the most commonly used imaging technique in children, due to its wide availability and fast image acquisition. Some new exciting imaging applications are worth discussing. These include MR urography, voiding ultrasonography with the use of ultrasound contrast agents, CT dose reduction techniques, MR enterography for inflammatory bowel disease, and MR cine airway imaging. Medical conditions are diagnosed through various imaging modalities that work independently or in combination. These modalities follow prescribed protocols and also aid in managing complications that may occur during or after treatment, such as infections, bleeding, or organ dysfunction. The use of a specific imaging modality may be based on situational circumstances. However, in many situations, we cannot use prescribed approach protocols; these situations depend on the contributions of a variety of factors based on a combination of the clinical scenario and limitations of the imaging modalities. Therefore, an improved understanding of the potential influence of the imaging decision pathways in pediatric disease can come from a comparison among the individual diagnostic imaging modalities and consultation of physicians and pediatric radiologists.

سخنرانی: PICU واورژانسها

DKA Managment at PICU

© ℗ رکسانا پازوکی [1]

[1] مرکز طبی کودکان

Abstract: Type 1 Diabetes Mellitus (T1DM) is one of the most common chronic disease in children. Patients with new onset of T1DM frequently present with Diabetic ketoacidosis (DKA). Diagnosis of DKA is based on the triad of hyperglycemia (blood glucose200), metabolic acidosis (venus PH7.3 or serum bicarbonate18 mmol/L) and ketosis (ketonemia or ketonuria). According to the degree of acidosis, DKA categorized to mild, moderate and severe. Children with any types of DKA require hospitalization. Patients with severe DKA (PH7.1 or serum bicarbonate5 mmol/L) or those who are at increased risk for cerebral injury should be treated at PICU. Goals of therapy are to correct dehydration, acidosis and ketosis, maintain near normal blood glucose, monitor for complications and treat percipitating event. In this lecture, we share with you new guidlines about DKA managment, emergency assessment and fluid and electrolyte replacement.

سخنرانی: PICU واورژانسها

Effective non-invasive ventilation in children

© ℗ [1] فرزانه بیرامی

[1] نویسنده و ارائه دهنده

Abstract: Non-invasive ventilation (NIV) refers to venilatory support without the use of an invasive artificial airway (tracheal tube or tracheostomy tube). The use of non-invasive ventilation has increased significantly in recent years and has now become an effective method in the management of acute and chronic respiratory failure both in the home environment and in intensive care. NIV has three primary physiological benefits: reducing the patient's work of breathing, maintaining patency throughout the respiratory tract, which can facilitate expiratory flow and reduce obstructed airflow and recruiting alveoli, leading to increased functional residual capacity (FRC) and reduced ventilation-perfusion (V-Q) mismatch. For which patient is NIV suitable and what factors cause its failure in some patients? What is the appropriate NIV setting? In this lecture , we have the opportunity to answer these and similar questions about the use of NIV

سخنرانی: PI CUواورژانسها

Legal tips for issuing a death certificate

Dr foroozan faress [1] © ℗دفروزان فارس

[1] □□□□□□□□□□ □□□□.□□□□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□, □□□□□□ □□ □□□□□□□□□, □□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, Iran

خلاصه مقاله :پسر ۸ ساله توسط اقا و خانمی که خود را والدین بیمار معرفی میکنند با شکایت تب و سرفه و تنگی نفس به اورژانس اورده شده و اندیکاسیون بستری درpicu با توجه به وضعیت تنفسی گذاشته میشود .بیمار بستری و تحت درمان قرار میگیرد .متاسفانه معالجات موثر واقع نشده و بیمار فوت میکند .پزشک معالج جواز فوت را صادر میکند .بعد از مدتی به مراجع قضایی احضار و بابت صدور جواز دفن به نام فرد دیگری که زنده است مورد سوال قرار میگیرد(استفاده از دفترچه بیمه کودک همسایه و صدور جواز به نام او که زنده بوده ولی یارانه به علت اعلام فوت به وی تعلق نگرفته و پدر او از خانواده بیمار شاکی میباشد) .اقایی که خود را پدر بیمار معرفی میکند و از مرکز درمانی بابت عدم اطلاع به وی و گرفتن رضایت صدور جواز از دایی بیمار شاکی میباشد .لازم است در صدور جواز به هویت فرد متوفی و قیم قانونی وی توجه نمود .احتمال اشتباه در تشخیص علت فوت ممکن است ولی اشتباه در تشخیص هویت متوفی به ویژه در اطفال که اوراق هویت فاقد عکس میباشد غیر قابل قبول میباشد.

Management of Elevated Intracranial Pressure (ICP) in Pediatric traumatic brain injury

Seyedeh Masumeh Hashemi [1] © ℗, Azita Behzad [1], Seyedeh Narjes Ahmadizade [1]

[1] □□□□□□□□□□ □□□□□□□□□□ □□□□□ □□□□□□□□□□□, □□□□□□ □□□□□□□□□ □□□□□□□□□, □□□□□□□ □□□□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□,
Tehran,IR Iran.

Abstract: Traumatic brain injury (TBI) is the leading cause of pediatric trauma death and disability. Delay in treatment of elevated ICP is associated with poor outcome. Emergency treatment is indicated in children with signs of brain herniation or in symptomatic patients if the invasively measured ICP is ≥20 mmHg for longer than five minutes. Stabilization of Airway, Breathing, and Circulation according to the PALS are essential for successful treatment. Elevation of the head from 15 to 30 degrees while maintaining a midline position, avoidance of fever, pain control and neurosurgeon consultation should be considered. Rapid sequence intubation by experience physician is indicated in children with refractory hypoxia, hypoventilation, GCS of ≤8 or GCS 12 and rapidly declining, loss of airway protective reflexes and acute herniation requiring controlled hyperventilation. PaCO2 should be maintained between 35 and 40 mmHg. Aggressive hyperventilation with PaCO2 30 is indicated only if there are clinical signs of acute herniation. High positive inspiratory pressure and high positive end expiratory pressure should be avoided. Hypovolemia should be treated with isotonic fluids. The administration of hypotonic fluids should be avoided. Appropriate mean arterial pressure for age should be maintained by using IV fluids and pharmacologic vasopressors (eg, norepinephrine or phenylephrine) and bradycardia may be required external pacing or administration of atropine. Hypertension reflects the body's compensatory mechanism to maintain cerebral perfusion pressure thus, antihypertensive treatment is contraindicated. For patients with brain herniation, before imaging, initial hyperosmolar therapy should be started (IV mannitol or IV hypertonic saline). Hemoglobin is maintained 7 g/dL and hypoglycemia should be treated. Anticonvulsants should be given to patients who are at high risk for developing seizures. The endotracheal tube tapped to the face and lidocaine administered before endotracheal tube suctioning to blunt the gag and cough responses. In the refractory intracranial hypertension, CSF drainage, barbiturate coma and surgical decompression are considered. Corticosteroids are not useful in the management of elevated ICP caused by hemorrhage or head trauma. Vasodilators, ketamine, hypotonic solutions and prolonged propofol infusion are contraindicate.

سخنرانی: PICU واورژانسها

Pleural Effusion Management in Children

Azita Behzad [1] © ℗, Seyedeh Masume Hashemi [1], Seyedeh Narjes Ahmadizadeh [1]

[1] □□□□□□□□□□ □□□□□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□ □□□□□□□□□
Hospiral, Tehran, Iran

Abstract: Pleural Effusion (PE) is defined as accumulation of fluid in pleural space because of imbalance between fluid production and absorption. Fluid sample is differentiated into Transuda and Exuda by biomarkers like cell count, total protein, lactate dehydrogenase, glucose and PH. The most common cause of PE in children is bacterial pneumonia. Para Pneumonic Effusion (PPE) is defined as exudative pleural effusion assosiated with pneumonia and develops in 2 to 12% of children with pneumonia, if septation presented within the effusion, it is defined as loculated PPE and Empyema means presence of bacterial organism in Gram stain and/or grossly purulent fluid in the pleural cavity. Both medical and surgical interventions have a role in the management of PPE in children. Selection of treatment depends on many factors like respiratory status, size and loculation of the fluid collection. PPE has different stages and so need different management strategies appropriate with stages. Small pleural effusion defined as less than 10mm on a lateral decubitus radiograph or opacifying less than one fourth of the hemithorax, and Moderate or Large PE is fluid occupying 10mm or more on lateral decubitus or opacifying more than one fourth of the hemithorax. Children with effusions of small size who are well-appearing and has no respiratory distress can be managed as outpatient with oral broad-spectrum antibiotics and close observation with chest X ray, if they are ill-appearing, in respiratory distress, under 6 month of age or have evidence of bacteremia/sepsis, should hospitalized and receive intravenus antiobiotics. Patient with moderate or large effusion, and/or respiratory distress who have simple effusion (not loculated) on ultrasonography should insert chest tube and receive IV antibiotics, if symptoms persistant or progress and ultrasound show reaccumulation or loculation of fluid, Either Intrapleural fibrinolytic therapy or surgical treatment is acceptable. Overally prognosis is good and majority of children with PPE or Empyema make a complete recovery.

سخنرانی: PICU واورژانسها

Recognizing and treatment of shock

© ℗ [1] زینب پورهادی

[1] هیئت علمی دانشگاه تهران مرکز طبی کودکان

Abstract: Shock is a physiologic state characterized by a significant, systemic reduction in tissue perfusion that results in decreased tissue oxygen delivery and diminished removal of harmful byproducts of metabolism (eg, lactate). According to the Pediatric Advanced Life Support (PALS) course, shock is further classified into the following stages .Compensated shock – During compensated shock, the body's homeostatic mechanisms rapidly compensate for diminished perfusion, and systolic blood pressure is maintained within the normal range. Heart rate is initially increased. Signs of peripheral vasoconstriction (eg, cool skin, decreased peripheral pulses, and oliguria) can be noted as perfusion becomes further compromised. Hypotensive shock – For patients with hypotensive shock, compensatory mechanisms are overwhelmed. The heart rate is markedly elevated, and hypotension develops. Signs and symptoms of organ dysfunction (eg, altered mental status as the result of poor brain perfusion) appear. Systolic blood pressure falls, although children who have lost as much as 30 to 35 percent of circulating blood volume can typically maintain normal systolic blood pressures. Once hypotension develops, the child's condition often deteriorates rapidly to cardiovascular collapse and cardiac arrest.Irreversible shock – During this stage, progressive end-organ dysfunction leads to irreversible organ damage and death. Tachycardia may be replaced by bradycardia, and blood pressure becomes very low. The process is often irreversible, despite resuscitative efforts. In addition to these stages of shock, four broad mechanisms of shock are recognized: hypovolemic, distributive, cardiogenic, and obstructive. Each type is characterized by a primary physiologic derangement. Hypovolemic – Decreased preload caused by volume loss including hemorrhage, gastrointestinal losses, insensible losses (eg, burns), or third spacing.Distributive – Decreased vascular resistance due to vasodilation caused by conditions such as sepsis, anaphylaxis, or acute injury to the spinal cord or brain .Cardiogenic – Decreased cardiac contractility caused by conditions such as primary myocardial injury, arrhythmias, cardiomyopathy, myocarditis, congenital heart disease with heart failure, sepsis, or poisoning.Obstructive – Increased vascular resistance caused by conditions such as congenital heart disease with ductal-dependent lesions (eg, hypoplastic left heart) or acquired obstructive conditions (eg, pneumothorax, cardiac tamponade, or massive pulmonary embolism) However, a patient may have more than one type of shock (such as an infant with cardiogenic shock from supraventricular tachycardia who is also hypovolemic because he has been unable to drink, or a child with underlying cardiomyopathy who is septic.The management of shock in children requires rapid patient assessment to quickly determine the presence and presumptive type of shock .

سخنرانی: PICU واورژانسها

Refeeding Syndrome Prevention Package in pediatric parenteral nutrition

© Ⓟ [1] تکتم فقیهی

[1] دانشگاه علوم پزشکی تهران

Abstract: There are several aspects that should be considered when ordering parenteral nutrition (PN) in children. One of the major issues at the beginning of PN ordering is to identify patients at risk of refeeding syndrome. Because of the complications of refeeding syndrome, prevention is of paramount importance. Recently ASPEN has released a consensus recommendation providing subjective criteria for identifying children at risk of this complication. In this lecture practical information will be provided for the clinician to identify patients at risk of refeeding syndrome. Then a to the point prevention package strategy for calculating PN for refeeding syndrome will be provided to guide clinicians when encountering high risk children.

سخنرانی: PI CUواورژانسها

Thorasic trauma in children

℗ © [1] بهداد قریب

دانشگاه علوم پزشکی تهران. مرکز طبی کودکان [۱]

خلاصه مقاله :آسیب توراکس در کودکان نیازمند توجه ویژه است .اگر چه فقط ده درصد تروماهای کودکان به قفسه سینه وارد میشود ولی با آسیب شدید میتواند همراه باشد. آسیب به ارگانهای دیگر,پنوموتوراکس و آسیبهای پارانشیم ریه و قلب میتواند منجر به مرگ و میر شود. آسیب های نادر تر در این موارد عبارتند از جراحات درخت برونکیال, دیافراگم و مری. شکستگی دنده,دیسترس تنفسی, پنوموتوراکس و هموتوراکس و اختلال همودینامیک از مشکلاتی است که باید در نظر باشند آسیب توراکس در کودکان نیازمند توجه ویژه است .اگر چه فقط ده درصد تروماهای کودکان به قفسه سینه وارد میشود ولی با آسیب شدید میتواند همراه باشد. آسیب به ارگانهای دیگر,پنوموتوراکس و آسیبهای پارانشیم ریه و قلب میتواند منجر به مرگ و میر شود. آسیب های نادر تر در این موارد عبارتند از جراحات درخت برونکیال, دیافراگم و مری. شکستگی دنده,دیسترس تنفسی, پنوموتوراکس و هموتوراکس و اختلال همودینامیک از مشکلاتی است که باید در نظر باشند آسیب توراکس در کودکان نیازمند توجه ویژه است .اگر چه فقط ده درصد تروماهای کودکان به قفسه سینه وارد میشود ولی با آسیب شدید میتواند همراه باشد. آسیب به ارگانهای دیگر,پنوموتوراکس و آسیبهای پارانشیم ریه و قلب میتواند منجر به مرگ و میر شود. آسیب های نادر تر در این موارد عبارتند از جراحات درخت برونکیال, دیافراگم و مری. شکستگی دنده,دیسترس تنفسی, پنوموتوراکس و هموتوراکس و اختلال همودینامیک از مشکلاتی است که باید در نظر باشند آسیب توراکس در کودکان نیازمند توجه ویژه است .اگر چه فقط ده درصد تروماهای کودکان به قفسه سینه وارد میشود ولی با آسیب شدید میتواند همراه باشد. آسیب به ارگانهای دیگر,پنوموتوراکس و آسیبهای پارانشیم ریه و قلب میتواند منجر به مرگ و میر شود. آسیب های نادر تر در این موارد عبارتند از جراحات درخت برونکیال, دیافراگم و مری. شکستگی دنده,دیسترس تنفسی, پنوموتوراکس و هموتوراکس و اختلال همودینامیک از مشکلاتی است که باید در نظر باشند ترومای توراکس, ترومای قلب و ریه

سخنرانی: PICUواورژانسها

traumatic brain and cervical injuries in children

© Ⓟ المیرا حاجی اسمعیل معمار [1]

[1] □□□□□□□□□□ □□□□□□□□□□ □□□ □□□□□□□□□□□□□□/□□□□□□□□□□ □□□□□□□ □□ □□□□□□□□□□□□/ □□□□□□□□□ □□□□□□□□ □□□□□□□/ □□□□□□□
university of medical science/ tehran/ iran

Abstract: The management of children with major trauma is challenging. In infants and children ۵□□ □□□, □□□□□□□□□□ □□□□ □□□□□□□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□ □□□□□□□□□ □□□□ □□□□□ □□□□□□□ □□ occur in the upper cervical spine between the occiput and C3. The most aspect of the care of spinal cord injuries in children is injury prevention. TBIs is an important pediatric public health problem and most TBIs in children are from closed-head injuries. The hallmark of severe TBI is coma (GCS score 3-۸). □□ □□□□ □□matose child with severe TBI, the second key clinical manifestation is the development of intracranial hypertension. Cranial CT should be obtained immediately after resuscitation and cardiopulmonary stabilization. Mortality rates for children with severe TBI who reach the pediatric ICU range between 10% and 30%.

Ventriculoperitoneal Shunt Infections: Manifestations and Treatments

Keyvan Tayebi Meybodi [1] ℗, Zohreh Habibi [1] ©

[1] [illegible]

Abstract: Cerebrospinal fluid (CSF) shunt placement is the most common treatment for hydrocephalus. In this presentation, the manifestations and therapeutic options of ventriculoperitoneal shunt infections are discussed. Infections are common complications of CSF shunt placement, with the shunt infection rate ranging from 2% to 12%. These differences are related, in part, to differences in study design, definition of shunt infection, and duration of surveillance for shunt infection. Most shunt infections occur within the first 3 months of initial shunt placement or shunt revision. Age, previous revisions, hydrocephalus etiology, gastrostomy tubes, and multiple surgical factors are considered to be as the risk factors of shunt infection. Sources of shunt infection include colonization at the time of surgery, wound breakdown over the hardware, hematogenous spread, or retrograde extension from abdomen. Hardware colonization from the patient's skin at the time of surgery is the likely cause of most infections. Postoperative wound breakdown and CSF leak pose a high threat for CSF infection, given the direct pathway skin organisms have to the shunt hardware. The presenting clinical picture of patients with shunt malfunction may be extremely varied depending on the age of the patient, the virulence of the organism, the location of the infection, and the type of organism causing the infection. The most common therapeutic option is removal of all shunt hardware and placement of a temporizing external ventricular drain with antibiotic treatment, followed by new shunt placement. The specific antibiotic used and the length of treatment of shunt infection depends on the pathogen isolated and the timing of CSF clearance of infection. Empiric antimicrobial therapy for CSF shunt infections should include agents that have bactericidal activity against the most common pathogens isolated (S. epidermidis and S. aureus) and that possess the ability to penetrate into the CNS. CSF shunts are the most common treatment strategy for hydrocephalus but incur a 4% to 8% risk of shunt infection. Staphylococcus species and gram-negative bacilli are the most common pathogens, usually presenting within 30 days of shunt surgery but occasionally up to 1 year after insertion. Treatment of shunt infection generally includes complete shunt removal, intravenous antibiotics for 7 to 21 days, and subsequent shunt reimplantation. In terms of prevention, a standardized protocol for shunt surgery has demonstrated a decreased incidence of shunt infection. It is shown that the routine use of antibiotic-impregnated shunt catheters led to a cost-effective decrease in shunt infection. keywords: ventriculoperitoneal shunt, infection

سخنرانی: نفرولوژی

Acute Post-Streptococcal Glomerulonephritis in Children

© Ⓟ [1] مستانه مقتدری- زینب پورذهبی- سوده شمس الدینی

[1] , [illegible]

Abstract: Abstract Post-streptococcal glomerulonephritis is one of the most common causes of acute nephritis in children worldwide. Moreover, it has a high prevalence in developing countries. Acute post-streptococcal glomerulonephritis (APSGN) is an immune- complex (ICs) mediated glomerular disease triggered by group A β-hemolytic streptococcus (GAS) or Streptococcus pyogenes infections. PSGN is characterized by the proliferation of cellular elements called nephritogenic M type as a result of an immunologic mechanism following an infection of the skin (impetigo) or throat (pharyngitis) caused by nephritogenic strains of group A beta-hemolytic streptococci, a gram-positive bacterium. The manifestations of PSGN are gross hematuria, decrease of urine volume, preorbital edema, headache due to hypertension, lethargy even seizure that can be explained by nephritic syndrome manifestation. PSGN is diagnosed by laboratory tests like ASO titer, C3, Bun, creatinine and urinalysis. In PSGN patient's urinalysis reveal hematuria and proteinuria and high SG. The imaging studies in PSGN could be used to assess the possible complications of PSGN such as pulmonary congestion and chronic kidney disease. The management of PSGN is conservative and the goal is to preserve the renal function or to reverse renal damage. If PSGN is not treated, the patient may develop chronic kidney disease. The main way to prevent PSGN is to treat group A streptococcal (GAS) infections by giving good coverage of antibiotic therapy to a patient who has primary GAS infections to prevent the development of the complication.

سخنرانی: نفرولوژی

Approach to suspected TTP,HUS, or other thrombotic microangiopathy

℗ © [1] آرش عباسی

[1] دانشیار-هیات علمی دانشگاه علوم پزشکی تهران

Abstract: Microangiopathic hemolytic anemia (MAHA) is a descriptive term for non-immune hemolytic anemia from intravascular red blood cell fragmentation that produces schistocytes on the peripheral blood smear . Thrombotic microangiopathy (TMA) describes a pathologic lesion of arterioles and capillaries that produces microvascular thrombosis. Not all MAHA is caused by a TMA, but nearly all TMAs cause MAHA and thrombocytopenia Primary TMAs include thrombotic thrombocytopenic purpura (TTP; hereditary or immune, due to severe ADAMTS13 deficiency), Shiga toxin-mediated hemolytic uremic syndrome (ST-HUS), complement-mediated TMA (hereditary or acquired), drug-induced TMA (DITMA; immune or toxic), metabolism-mediated TMA (hereditary disorder of vitamin B12 metabolism), and coagulation-mediated TMA (hereditary deficiency of a coagulation regulator) The initial evaluation is focused on confirming MAHA and thrombocytopenia and excluding systemic disorders that manifest these findings . Some systemic disorders (severe hypertension, preeclampsia/HELLP) are obvious. Systemic cancer may require other testing for diagnosis. Infections should be obvious but may mimicdisorders such as catastrophic antiphospholipid syndrome (CAPS) and conditions such as autoimmune heparin-induced thrombocytopenia may also be considered. The decision to use therapeutic plasma exchange (TPE) while evaluating for these disorders depends on the confidence that the diagnosis is not TTP. Therapy for STEC-HUS is supportive and includes the following : Patients with HUS can become profoundly and rapidly anemic and require red blood cell transfusions. Platelet transfusion is recommended only if there is active bleeding For each patient, the fluid status is assessed and management is directed toward returning the patient to a euvolemic state. In particular, management should be directed to rapidly correct any evidence of volume depletion. Fluids are then administered as insensible losses plus urine output until kidney function returns to normal. Frequent monitoring of fluid balance, weight, and vital signs is required to detect early signs of fluid overload. If this occurs, prompt fluid restriction is begun. Initial assessment and monitoring are required to detect hyperkalemia, hyperphosphatemia, and metabolic acidosis. Management of these disorders is the same as in patients with other causes of AKI. The initial management of complement-mediated HUS is supportive and similar to the approach used for STEC-HUS. In this lecture, we try to describe the diagnostic and treatment approach of TMA patients.

سخنرانی: نفرولوژی

Clinical Manifestations & Diagnosis of Nephrolithiasis

دکتر زهرا نوع پرست [1] ©, دکتر سیدیوسف مجتهدی [2]

[1] Tehran university of Medical Science, Tehran, Iran
[2] Science, Tehran, Iran

Abstract: Nephrolithiasis is increasingly recognized in children. Urinary lithiasis in children is related to genetic, climatic, dietary, and socioeconomic factors. Adolescents are 10 times more likely to have a symptomatic calculus compared with children. the most common symptom is pain. Children are frequently evaluated for other conditions before the diagnosis of nephrolithiasis is made. Childhood nephrolithiasis usually presents with symptoms that most commonly include abdominal or flank pain, with/without gross hematuria. However, 15 to 20 percent of children are asymptomatic and are diagnosed because of stone detection when abdominal imaging is performed for other purposes. The initial evaluation of a child with suspected nephrolithiasis includes the following: History focusing on underlying risk factors for stone formation (eg, family history, renal and urinary tract structural abnormalities, metabolic disorders, or recurrent urinary tract infection). Physical examination that includes measurement of blood pressure and growth parameters, and abdominal examination for signs of urinary obstruction or another cause of abdominal pain. A complete systemic and metabolic assessment should be done in every child being evaluated for stone disease. Laboratory examinations include blood, spot urine or 24-hour urine analyses. Levels of blood electrolytes, blood urea nitrogen, calcium, creatinine, phosphor, alkaline phosphatase, uric acid, total protein, bicarbonate, albumin, and PTH (when hypercalcemia is suspected) are assessed. The diagnosis of nephrolithiasis is made by the detection of a renal stone by imaging studies or analysis of a passed stone. the first-line imaging method in pediatric stone disease is ultrasonography. It detects radiolucent stones and urinary obstruction. ♣ CT does provide the greatest sensitivity of the available imaging modalities, but consideration of radiation exposure is important. If CT is needed, it is important that radiation doses be adjusted to the size and weight of the child to reduce radiation exposure. CT is helpful if strong clinical suspicion for a stone but no stone is seen on ultrasound.

سخنرانی: نفرولوژی

Epidemiology, Mechanisms Of Stone Formation And Risk Factors Of Urolithiasis in Children.

Sayed Yousef Mojtahedi [1] © ℗, Zahra Noparast [1]

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□□ □□□□□□□□□□ □□□□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□

Abstract: Background: nowadays urolithiais are diagnosed more in children. the exact prevalence of urinary system stones is not reported yet, but it is obvious that the stones seem more common than in the past. The worldwide prevalence of the disease has been reported to be 1-۱۵٪. □□□□ □□ in the "belt stone" with a prevalence rate of about 2-۳٪. □□□□□□□□□n: Some mechanisms lead to stone formation. Nucleation, supersaturations, and infections are important. On the other hand, some urine substances prevent stone formation called Inhibitors. Uropontin, nephrocalcin, and Tamm-Horsfall protein, also termed uromodulin, are the most significant, Citrate, pyrophosphate, and Magnesium have an inhibitor effect. There are different types of renal stones based on composition. Calcium oxalate – 45 to 65 percent, Calcium phosphate – 14 to 30 percent, Struvite – 13 percent, Cystine – 5 percent, Uric acid – 4 percent Mixed or miscellaneous – 4 percent. The most common stones are calcium-based stones. a urinary metabolic abnormality, urinary tract infection, a structural kidney or urinary tract abnormality, Family history of stones, Decreased water intake or long periods of dehydration, Repeated urinary tract infection, Diet high in sodium and/or protein, Obesity, Decreased activity level, Defects in the urinary tract, Use of certain medications are conditions that increase the probability of urolithiasis in children. Conclusion: For the management of urolithiasis in children, it is crucial to know about the metabolic conditions of the child and the family history of urolithiasis. keywords: Urolithiasis, children, renal stone, inhibitor, stone formation References: 1. Christian Fisang et al.Urolithiasis—an Interdisciplinary Diagnostic, Therapeutic and Secondary Preventive Challenge. Dtsch Arztebl Int 2015; 112: 83–۹۱
۲. □□□□□□□ □□□□□□ □, □□□□□□ □. □□□□□□□□ □□□ □□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□ □□□□□ □□ Children. Caspian J Pediatr March 2016; 2(1): 86-۹۵. ۳. □□□□ □B, Feinstein L, Pierce C, et al. Pediatric Urinary Stone Disease in the United States: The Urologic Diseases in America Project. Urology 2019; 129:180.

سخنرانی: نفرولوژی

Nephrotic syndrome in children

Behnaz Bazargani [1] © ℗

[1] □□□□□□□□□□ □□□□□□□□ □□□□□□□ □□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□, □□□□□□□□□ □□□□□□□□ □□□□□□□
Hospital, Tehran University of Medical Sciences, Tehran, Iran

Abstract: Nephrotic syndrome is the most common glomerular disease in children, caused by renal diseases that increase the permeability across the glomerular filtration barrier. Nephrotic syndrome is defined by nephrotic-range proteinuria (≥40 mg/m2/hour or greater than 50 mg/kg per day), hypoalbuminemia (less than 3 g/dL),edema, hyperlipidemia. Children with nephrotic syndrome are classifed into: Primary nephrotic syndrome, Secondary nephrotic syndrome, Congenital and infantile nephrotic syndrome. Idiopathic nephrotic syndrome is the most common form of childhood nephrotic syndrome, generally presents with edema and often occurs after an inciting event, such as an upper respiratory infection or an insect bite. In children, the most common histologic form of idiopathic NS is minimal change disease (MCD). Evaluation of NS at first presentation should include: (i) urinalysis and urine microscopy, (ii) quantified protein/creatinine ratio on a spot sample or on 24 h collection, and (iii) serum electrolytes, albumin, renal function, CBC and cholesterol, serum complement levels (C3 and C4), antinuclear antigen (ANA) . Infectious causes, such as hepatitis B and C, HIV should be considered if clinically warranted. Renal biopsy is considered for children ≥12 years of age. Edema is treated by salt restriction . patients with severe edema and normal or increased intravascular volume are treated with diuretics alone. patients with any degree of edema (including anasarca, or generalized and massive edema) and evidence of intravascular hypovolemia ara treated with IV albumin and furosemide. The first-line therapy for nephrotic syndrome is oral corticosteroids . Oral prednisolone is started at 60 mg/m2/day to a maximum of 60 mg/day for 4–۶ □□□□□. □□□□ □□□□ should then be followed by alternate-day dosing with 40 mg/m2/day, continued for 2–5 months with further tapering of the dose.

سخنرانی: نفرولوژی

Renal causes of hypertension in children

Behnaz Bazargani [1] © ℗

[1] [illegible] Medical Sciences, Tehran, Iran

Abstract: Renal parenchymal disease and renovascular disease are among the most common secondary causes of hypertension(HTN) in children. Renal parenchymal disease and renal structural abnormalities account for 34% to 79% of patients with secondary HTN. Common causes are acute glomerulonephritis, interstitial nephritis, renal scarring, obstructive nephropathy, polycystic kidney disease, …). In most cases, a normal ultrasound, serum creatinine, and urinalysis are sufficient to rule out renal parenchymal abnormalities. A dimercaptosuccinic acid (DMSA) scan may detect small renal scars not present on ultrasound, with abnormalities detected in 5–١٠٪ of children with a history of HTN but no history of urinary tract infection (UTI). renovascular disease is an uncommon but important cause of HTN in children. It often presents with very severely high blood pressure and symptoms of target organ damage. The cause is unknown in most cases, but fibromuscular dysplasia and Takayasu arteritis are the most common causes. A minority of cases are related to syndromes, mainly Neurofibromatosis type 1 and Williams syndrome. Laboratory findings may indicate secondary hyperaldosteronism, especially in cases caused by unilateral renal artery stenosis, and may typically include hypokalemia with metabolic alkalosis. Urinalysis may reveal acidic urine. Plasma renin activity and aldosterone levels are typically high. Doppler ultrasound and CT angiography are used in the initial investigation, but digital subtraction angiography is the gold standard investigation. Treatment of renovascular HTN includes both medical and invasive therapy.

سخنرانی: نفرولوژی

The importance of DMSA scan compared to US in detecting renal parenchymal involvement in children with first episode of febrile UTI

نعمت اله عطائی [1]

[1] مرکز تحقیقات بیماری های مزمن کلیه در کودکان - مرکز طبی کودکان عضو شورای پژوهشی

Abstract: Urinary tract infections (UTIs) are a common cause of acute illness in infants and children. Most children undergo one or more imaging studies following their first UTI aiming to identify abnormalities, which increases the risk of recurrent UTI or kidney damage. In 2011, imaging studies in selected international guidelines for the diagnosis and management of the initial UTI in febrile infants and children 2 to 24 months were revised. Some of suggestions in the latest revision were as follows: 1- Except ultrasound, there is no need to use other imaging modalities, ۲- If the ultrasound is normal, there is no need to do cystography, 3- Renal cortical scintigraphy should be avoided in the acute phase of the first febrile UTI, 4-The follow-up of the patients was conditional on the recurrence of febrile UTI. Many of these recommendations are based on expert opinion alone because there are few studies. Significant controversy surrounded this recommendation, and many Authors disagreed with the AAP guidelines. According to the research done and for the following reasons, ultrasound cannot be a suitable and comprehensive imaging modality in evaluating a child with the first episode of febrile UTI. In a prospective study in 52 children over 5 years of age with a first episode of febrile UTI, the findings were in favor of a high frequency of kidney parenchymal involvement. This study showed that if the treatment strategy is based exclusively on ultrasound findings, about 61% of abnormal renal units will be missed. In ۲۰۱۴, [illegible] guidelines of the Royal College of Physicians (RCP) with the results of patients treated with NICE guidelines (one of the selected international guidelines introduced in 2011) .The findings showed that renal involvement was missed and scarring occurred in one or both kidneys in 8% of children treated according to NICE guidelines. A strategy based exclusively on ultrasound findings would miss a significant number of abnormal renal units. Conventional renal US has very low sensitivity (11%- 4۰٪) [illegible]. Therefore, it should not be used as the primary imaging technique for the diagnosis of APN. It is recommended to continue to use the DMSA scan as the first, most sensitive and most reliable imaging method to identify renal parenchymal involvement in this group of children in order to prevent or decrease the process of missing patients until the results of prospective research.

سخنرانی: نفرولوژی

Treatment and prophylaxis of urinary tract infections in children

Mostafa Sharifian MD [1] © ℗

[1] □□□□□□□□ □□ □□□□□□□□□, □□□□□□□□ □□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□ □□□□ □□□□□□□□ □□□□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ Sciences, Tehran, Iran

Abstract: Background: Urinary tract infection (UTI) is one of the most common infections in children affecting about 10% of girls and 3%of girls. Recurrent UTIs may cause renal scar, hypertension and kidney failure; so prompt treatment and follow up and prevention from reinfection is of utmost importance. Differentiation between cystitis and pyelonephritis is somewhat difficult at the onset of the disease however if infection is limited to bladder; we can use antiseptics such as Nitrofurantoin or Nalidixic acid and as well as amoxicillin but for pyelonephritis we should use antibiotics with tissue concentration enough to prevent renal scar. The most suitable antibiotics for treating pyelonephritis is considered third generation cephalosporins, if the child is ill and cannot eat oral antibiotics we should hospitalize and prescribes IV fluid and antibiotics. Because of widespread use of antibiotics for respiratory infections in the community most of the pathogenic are resistant to commonly used antibiotics; so antibiotic of choice is based on local experience of sensitivity and resistant pattern. Comparing the sensitivity pattern of bacteria in our study in year 1998 at Great Ormond Street (GOS) hospital in London with our study at Mofid Children Hospital we see more resistant pattern of bacteria causing UTI. This is especially important for Pseudomona aeruginosa which is totally resistant to oral antibiotics such as ampicillin, amoxicillin and cotrimoxazole and we know that we cannot use Nitrofurantoin which most of the bacteria are sensitive to it. We especially should be careful of not prescribing Nalidixic acid to infant under one year of age which can cause pseudotumor cerebri. It is important to prescribe prophylactic antibiotic at the time of doing VCUG we should use antibiotics from the night before doing VCUG until three days after for boys and five days for girls. Using UTI prophylaxis in patients with VUR is controversial for last several years; some recommend prophylaxis for higher grade of reflux to prevent infection and renal scar and some recommend regular follow up and treatment of UTI if it happens. The main concern of this group is high resistant pattern of bacteria to the most types of antibiotics, so we should individualize patients based on condition of the family background. Conclusion: It is recommended to use prophylactic antibiotics such as Cotrimoxazole or Nitrofurantoin if it is tolerated.

سخنرانی: گوارش

Clinical Manifestations of Celiac Disease in Children

Katayoun Khatami [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□□□□□□□□□ □□□ □□□□□□□□□□□, □□□□□□□□□ □□□□□□□□□□□□□□□□□, □□□□□□□□□□□ □□□
Nutrition Research Center, Research Institute for Children's Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Abstract: Celiac disease is an autoimmune disorder caused by sensitivity to dietary gluten and related proteins in genetically susceptible individuals. In the past, infants and young children with celiac disease had malabsorption and failure to thrive at the time of presentation but now a day celiac disease may present with milder gastrointestinal or non-gastrointestinal manifestations. In infants, symptoms include vomiting, anorexia, abdominal pain and distension, chronic diarrhea, and failure to thrive. In severe cases celiac crisis may be seen. The same gastrointestinal symptoms are noted in older children. Celiac disease may cause either diarrhea or constipation. In case of diarrhea, the stools are often loose, greasy, bulky and bad-smelling. Flatulence and abdominal distension are common. Because of malabsorption, severe anemia, neurologic disorders, weight loss, growth failure, and osteopenia may be seen. Non-gastrointestinal manifestations of celiac disease in children are developmental delay, hypotonia, peripheral polyneuropathy, learning disorder, short stature, delayed puberty, headache, cerebellar ataxia, epilepsy, iron deficiency, delayed menarche in girls, dermatitis herpetiformis, dental enamel defects, osteomalacia, arthritis and cardiomyopathy.

سخنرانی: گوارش

Diagnosing GERD in Infants and Children

Mandana Rafeey [1] © ℗

[1] □□□□□ □ □□□□□□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□, □□□□□□, □□□□

Abstract: Detailed information regarding indications and pitfalls of radiologic contrast studies, nuclear reflux scintigraphy, ultrasound, pH-metry and intraluminal impedance, endoscopy, manometry, gastric emptying tests, can be found in review papers and guidelines. In adults, diagnosis of GERD is based primarily on clinical history. However, even in adults, the sensitivity and specificity of history is questioned. However, in children younger than 8 years of age, or even younger than 12 years of age, history is considered poorly reliable. Questionnaires were developed to improve the reliability of history. Orenstein developed the Infant Gastroesophageal Reflux Questionnaire (IGERQ), which results in an objective, validated, and repeatable quantification of symptoms suggestive for GERD. Barium contrast radiography, nuclear scintiscanning, and ultrasound are techniques that evaluate postprandial reflux and provide also some information on gastric emptying. There is broad consensus that barium studies are not recommended as first-line investigation for diagnosis of GERD, but radiologic examination is of importance for diagnosis of anatomic abnormalities such as malrotation, duodenal web, and stenosis, and may suggest functional abnormalities such as achalasia. Nuclear scintigraphy may show pulmonary aspiration. Scintigraphy also evaluates gastric emptying. The results of ultrasound are investigator dependent, and a relation between reflux seen on ultrasound and symptoms has not been established. Endoscopy allows direct visual examination of the esophageal mucosa. Macroscopic lesions associated with GERD include esophagitis, erosions, exudate, ulcers, structures, and hiatal hernia. Redness of the distal esophagus in young infants is a normal observation because of the increased number of small blood vessels in the cardiac region. Endoscopy may also show a “sliding hernia,” the stomach . Manometry does not demonstrate reflux, but it is of interest to analyze pathophysiologic mechanisms indicated in the diagnosis of specific conditions such as achalasia. Ambulatory 24-hour esophageal manometry, in combination with pH-metry and/or impedance recording, is nowadays technically feasible. As a consequence, the detection of reflux with MII is not pH dependent, but in combination with pH-metry MII allows detection of acid (pH 4.0), nonacid, or weakly acidic (pH 4.0-۷.۰) □□□ □□□□line reflux (pH 7.0). MII in combination with pH-metry definitively measures more reflux episodes than pH-metry alone. Esophageal pH-metry is the best method for measuring acid in the esophagus, but not all reflux that causes symptoms is acidic and not all acid reflux causes symptoms. In conclusion, all GER-investigation techniques measure different aspects of reflux. There is no “always-best” investigation technique for diagnosing GER(D) because the clinical situation of each individual patients differs.

سخنرانی: گوارش

Gastroesophageal reflux (GER)

© ℗ کامبیز افتخاری [1]

[1] دانشیار، فوق تخصص گوارش کودکان، بیمارستان کودکان بهرامی، دانشگاه علوم پزشکی تهران

Abstract: The passage of gastric contents into the esophagus (gastroesophageal reflux [GER]) is a normal physiologic process that occurs in healthy infants, children, and adults. Most episodes are brief and do not cause symptoms, esophageal injury, or other complications. The frequency of physiological reflux decreases with age. Gastroesophageal reflux disease (GERD) is present when reflux episodes are associated with complications or troublesome symptoms. GERD is the most common esophageal disorder in children of all ages. The lower esophageal sphincter (LES), like a functional valve at the gastroesophageal junction, forms an anti-reflux barrier. Transient lower esophageal sphincter relaxation (TLESR) is the most important pathophysiologic mechanism causing GER at any age, from prematurity into adulthood. TLESR is a neural reflex, triggered mainly by distention of the proximal stomach and organized in the brainstem. Gastric distention is the main stimulus for TLESRs. Other factors such as increased movement, straining, obesity, large-volume or hyperosmolar meals, gastroparesis, a large sliding hiatal hernia, and increased respiratory effort (coughing, wheezing) can have the same effect. GER is influenced by genetic, environmental, anatomic, hormonal and neurogenic factors. Three major lines of defense to minimize esophageal damage secondary to reflux: 1. The anatomic “ant-reflux barrier,” consisting of the LES and the diaphragmatic pinchcock and angle of His. 2. Esophageal peristalsis and clearance, limits the duration of contact. Gravity and esophageal peristalsis remove volume from the lumen, salivary and esophageal secretions neutralize acid. 3. Esophageal mucosal resistance, when (acid) contact time is prolonged. The duration of reflux episodes is increased by lack of swallowing. Infants have a short intra-abdominal esophagus, ingest more than adults, and feeding frequency is higher in infants, resulting in more TLESRs. Factors determining the esophageal manifestations of reflux include the duration of esophageal exposure, the causticity of the refluxate, and the susceptibility of the esophagus to damage. Hiatal hernia increases the number of reflux episodes and delays esophageal clearance. Patients may have normal primary peristalsis but abnormal secondary peristalsis. Thus, nonacid reflux, as occurs in the postprandial period, may be inefficiently cleared and cause prolonged esophageal distension, thus producing symptoms of discomfort. keywords:Gastroesophageal reflux, Transient lower esophageal sphincter relaxation, Infants, Hiatal hernia

سخنرانی: گوارش

IBD

℗ © [1] دکتر فرزانه معتمد

[1] دانشگاه علوم پزشکی تهران

Abstract: IBD or inflammatory bowel dieses concludes ulcerative colitis {UC} and Crohn's {CD} disease. 25 to 30% of patients with CD and 20% of patients with UC, present before the age of 20 years. Children can develop unique complications in clouding growth failure and delayed puberty. The pathogenesis of IBD is inappropriate immune response to regular antigen or appropriate response to an unusual antigen. The basis of genetic predisposition. the incidence of IBD worldwide is increasing. The clinical manifestation of IBD includes diarrhea, bloody stool, abdominal pain and tenderness, extraintestinal manifestation such as arthritis, uveitis, sclerosing cholangitis pair and fistula, fever, anemia fatigue, edema, erythema, pyoderma, gangrenoum, ... laboratory features are anemia, elevated ESR and CRP, hyperalbuminemia, elevated WBC and RBC and calprotectin in stool, positive and ASCA in serum. unfortunately, these is no specific diagnostic criteria for IBD. Imaging is useful in diagnosis, such as UGI/SBFT, CT scan and MRE. MRE has up to 90% resistivity for evaluation of terminal ileum in children. Histological feature includes cryptitis, crypt abscess, distortion of crypt, granuloma in CD treatment includes 5ASA, steroids, immunosuppression and anti TFN, anti-integrins and etc. prognosis: cancer especially in UC and Crohn's and recurrent relapses, retractive and fistula in CD chronic activity and long term need to drug or common. keywords:IBD, UC, Crohn's disease

سخنرانی: گوارش

management of GERD in infants and children

© Ⓟ [1] حسین علی مددی

[1] گروه کودکان دانشگاه علوم پزشکی تهران

Abstract: Gastroesophageal reflux disease is one of the most common gastrointestinal disorders in infants and children. Unfortunately, wrong treatments are very common in gastroesophageal reflux disease in infants and children, and wrong treatments can lead to complications for the patient and waste of economic resources of the society. Here we will have a brief overview of the principles of correct treatment of gastroesophageal reflux disease in children and infants based on the latest guidelines for the diagnosis and treatment of gastroesophageal reflux in infants and children, 2018 edition. Steps to treat gastroesophageal reflux disease in infants: step 1: - Avoid overfeeding -Continue breastfeeding AR formula in infants who are fomula-fed Step 2: This step continues for two weeks, and in case of no clinical response, the second step includes trial removal of cow's milk protein from the infant's diet for 2 to 4 weeks. Gastroesophageal reflux disease in infants may be due to cow's milk protein allergy. In infants who are breastfed , cow's milk protein is removed from the mother's diet. In infants who are fed with formula,extensively hydrolyzed formula is used. Step 3: Drugs: If there is no response to the previous two steps and there are symptoms of erosive esophagitis in the infant, the use of acid suppressing drugs, especially proton pump inhibitors, is recommended for 4 to 8 weeks. Treatment measures in GERD in children and adolescents: In the first step, non-pharmacologic treatments should be considered. These treatments include weight loss in obese children, avoiding contact with cigarette smoke, not consuming tomatoes, chocolate, mint, pepper, acidic drinks and carbonated drinks, correcting the sleeping position and sleeping on the left side, and head elevation. In case of no clinical response to these measures, acid-suppressing drugs, i.e. proton pump inhibitors, are used in the second step for 4 to 8 weeks. If the infant or child still has symptoms after 4 to 8 weeks of drug treatment or if the symptoms recur after stopping the drug, further investigation and referral to a gastroenterologist is necessary.

سخنرانی: گوارش

Pathogenesis of celiac disease and risk factors

Shohreh Maleknejad MD [1] © ℗

[1] □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□, ۱۷ □□□□□□□□□ □□□□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□, Rasht, Iran

Abstract: Celiac disease (CD) can be defined as a chronic autoimmune-like enteropathy driven by an abnormal immune response to dietary gluten in genetically predisposed individuals. It is a common disease in countries consuming gluten where prevalence has increased over the past 50 years and is currently estimated between 0.5% and 1.5%. The grains that contain the triggering proteins are wheat, barley, and rye. Ingestion of these proteins by a susceptible individual causes immune-mediated mucosal inflammation of the proximal small intestine, with villous atrophy and crypt hyperplasia. The keystone event is the activation of a gluten-specific immune response that is driven by molecular interactions between gluten, the indispensable environmental factor, HLA-DQ2/8, the main predisposing genetic factor and transglutaminase 2, the CD-specific autoantigen. The genetic basis of the disease is shown by the frequent intrafamilial occurrence and the remarkably close association with the human leukocyte antigen (HLA) DR3-DQ2 and/or DR۴-DQ8 gene locus. More than 99 percent of individuals with celiac disease have HLA DR3-DQ2 and/or DR4-DQ8, compared with approximately 40 percent of the general population. The prevalence of celiac disease is substantially increased in first- and second-degree relatives of patients with celiac disease and in individuals with Down syndrome, type 1 diabetes mellitus, selective IgA deficiency, autoimmune thyroid disease, Juvenile chronic arthritis, and probably Turner and Williams syndromes. For these groups, the risk of celiac disease is approximately 3- to 10-fold higher than in the general population. The timing of initial gluten exposure during infancy and association with breastfeeding does not affect the risk for clinical expression of celiac disease. The quantity of gluten in the infant's diet may affect the risk for clinical expression of celiac disease or at least the earlier timing of its onset. Avoidance of cow's milk protein during the weaning period does not appear to reduce the risk for celiac disease autoimmunity or celiac disease.

سخنرانی: گوارش

Signs of Effective Breastfeeding

Mahmoud Ravari [1] © ℗

[1] دانشکده علوم پزشکی ساوه

Abstract: Signs of Effective Breastfeeding Breastfeeding and human milk are the normative standards for infant feeding and nutrition. The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) recommend that all mothers and infants, with rare exceptions, breastfeed exclusively for about 6 months after birth. Furthermore, the AAP supports continued breastfeeding, along with appropriate complementary foods introduced at about 6 months, as long as mutually desired by mother and child for 2 years or beyond. Positioning, Effective latching and Sucking are keys for successful breastfeeding. For successful breastfeeding every breastfeeding dyad and their circumstances must be assessed on an individual basis. In doing so, health care providers use their own professional judgment along with the evidence in assessing the care and support that the family needs. At times, consultation with another breastfeeding expert (Breastfeeding Counselor) or advice from a medical practitioner, (physician, midwife, or nurse- practitioner), will be required. A breastfeeding assessment of the newborn includes assessing the infant's ability to latch and coordinate sucking, swallowing, and breathing. Monitoring infant output, behavior and weight must be conducted regularly as the newborn develops. This assessment will indicate if breast milk transfer is adequate and if developmental milestones are achieved. Early assessment and reassessment of infant feeding, growth and development are essential and provide the opportunity to discuss any breastfeeding concerns and determine appropriate interventions Skilled support from a combination of professional and trained peers or lay people helps breastfeeding mothers and infants as they transition between hospital and community services Key Messages: • Infants with an effective suck and swallow will: Elicit a mother's breast milk ejection reflex, Have adequate breast milk transfer and Help stimulate and/or maintain adequate breast milk production. • Adequate infant hydration and output are indicators of effective breastfeeding. • With effective breastfeeding, a healthy term infant's initial weight loss will stabilize within 3-4 days and then be followed by a steady weight gain. • The World Health Organization (WHO) Growth Charts , reliable tool to assess infant growth.

سخنرانی: گوارش

Symptoms, diagnosis, differential diagnosis of Crohn's disease

Sanaz Mehrabani [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□, □□□-□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□, □□□□□□ □□□□□□□□ □□□□□□□□□, □□□□□ □□□□□□□□□□ □□ Medical Sciences, Babol, Iran

Abstract: Crohn's is a chronic inflammatory disease of the gastrointestinal tract occurs in genetically predisposed individuals, as a result of dysbiosis and activation of the immune system, and can occur throughout the gastrointestinal tract in the form of transmural inflammation. Its clinical symptoms vary according to the anatomical site of involvement and the extensive nature of the disease, and include intestinal and extraintestinal symptoms. The most common digestive symptom is abdominal pain, and at all ages, its classic symptoms include abdominal pain, diarrhea, and weight loss. The most involved extra-intestinal organs include the skin, joints, liver, eyes, and bones, whose manifestations can be manifested as inflammatory and non-inflammatory forms. Involvement of the small intestine, perianal disease, the presence of granuloma in the gastrointestinal biopsy, distinguishing Crohn's disease from ulcerative colitis, and intestinal complications are the phenotype of stricture or perforation, which occurs more often in teenagers and includes the occurrence of fistula, local peritonitis, Abdominal abscess and intestinal obstruction. The diagnosis is based on the clinical symptoms with or without laboratory changes, along with imaging, endoscopy and histopathology. Differential diagnoses of Crohn's disease based on the presence of blood in the stool include: Fissure, hemorrhoids, Meckel's diverticulum, polyps, allergy to cow protein and , enteric infection, intussusception, Henoch-Schonlein purpura and FMM , and based on growth disorder it includes celiac disease and based on abdominal pain it includes functional disease of the digestive system, tuberculosis, lymphoma, gynecological disease, appendicitis, trauma and vasculitis.

سخنرانی: گوارش

TPN associated cholestasis in newborn

© Ⓟ [1] معصومه عسگرشیرازی

[1] دانشیار بیماریهای گوارش کودکان- دانشگاه علوم پزشکی تهران

Abstract: Cholestasis is a symptom rather than a disease and is defined as a decrease in bile flow due to impaired secretion by hepatocytes or to obstruction of bile flow through intra or extra hepatic bile ducts. Parenteral nutrition may be used as primary, adjunctive or supportive therapy. Hepatobiliary complications are associated with TPN and can occur as early as 2 weeks after the initiation of PN. The incidence is higher in LBW premature infants with necrotizing enterocolitis, short bowel syndrome,multiple bouts of sepsis or multiple and prolonged periods of not being fed. The exact etiology is unknown, but the following factors have been implicated: source of intravenous fat, excessive protein and carbohydrate intake, amino acid composition, relative carbohydrate to nitrogen imbalance, carnitine and taurine or serine deficiency, excessive phytosterol intake,essential fatty acids deficiency, bacterial overgrowth, lack of enteral stimulation, alteration in canalicular membrane transport proteins , effects of ambient light and photo oxidation of PN constituents and continuous delivery of PN. The earliest signs are elevated seum ɣ glutamyl transferase and cholylglycine levels. Strategies to prevent PN-associated liver disease consist of : avoiding excessive energy and protein and carbohydrate intake, decreasing soy-based lipid products, cycling of PN and initiating enteral feeds as soon as possible. Infant amino acid formulations provide essential amino acids such as cysteine, histidine and tyrosine. They also contain taurine which is important for brain and retinal development and prevent cholestasis. keywords: TPN- cholestasis- newborn

سخنرانی: گوارش

Treatment and follow-up of celiac disease in children

© Ⓟ [1] دکتر محمدرضا اسماعیلی دوکی

[1] □□□□□□□□□□, □□□-□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□ □□□□□□□□□□□ □□ □□□□□□□□ Sciences, Babol, IR.Iran.

Abstract: Celiac disease occurs with symptoms or complications of mucosal damage in the intestine following the intake of gluten-containing substances. Treatment begins after the diagnosis is confirmed .Eliminating gluten from the diet is the most basic treatment. Education of children and parents about the nature of the disease and the importance of treatment in improving symptoms and preventing long-term complications should be considered in the early stages of treatment. Other important points that can be mentioned in the treatment process include; Diagnosing the disease based on diagnostic criteria before starting treatment, not starting a gluten-free diet based solely on positive serology, not starting a gluten-free diet in asymptomatic and seropositive patients without sufficient intestinal pathological findings (potential celiac disease), adherence to diet until the end of life and family participation in treatment decisions and follow-up. All items containing gluten, which are mainly wheat and barley, should be removed from the diet. Eating rice, corn, potatoes is allowed. If relative lactase deficiency is suspected, lactose elimination may be required at the beginning of treatment for a limited period. When starting treatment, especially in children with constipation, a diet containing fiber can help. The state of micronutrient deficiency and their symptoms (anemia and bone health, etc.) should be evaluated and the necessary treatment should be performed. In the follow-up of these patients, in addition to evaluating the clinical response to the gluten-free diet, serology can also be used. Improvement of clinical symptoms can be seen after two weeks of treatment. Within three to six months after starting the treatment, the decreasing trend of antibody is seen. Sometimes it may remain positive for up to two years. Tissue transglutaminase IgA (tTG -IgA) is usually checked every six months until normalization and then annually. If the clinical symptoms do not improve and the antibody does not decrease, one should think about not following the diet and other differential diagnoses, or the presence of irritable bowel syndrome and lactase deficiency at the same time. In the serial follow-up of these patients, attention should be paid to the occurrence of other autoimmune diseases at the same time, such as thyroiditis, diabetes mellitus and autoimmune hepatitis. Following a gluten-free diet is effective in preventing the occurrence of gastrointestinal malignancies in these patients. Pneumococcal vaccine injection is recommended due to the possibility of hyposplenism in celiac disease patients.

سخنرانی: گوارش

Ulcerative colitis

Farid Imanzadeh [1] © ℗

[1] [illegible], Tehran, Iran

Abstract: Ulcerative colitis Ulcerative colitis (UC) is a disease with a less heterogeneous phenotype than Crohn disease (CD) but it still poses many unique challenges. The incidence of pediatric onset UC, which constitutes roughly 15% to 20% of all UC, ranges at 1 to 4/100,000/ year in most North American and European regions. It is extensive in 60% to 80% of all cases, twice as often as in adult. Clinical Features: Children with UC most commonly present: • Diarrhea. • Rectal bleeding. • Abdominal pain that often describe both tenesmus and urgency. • Acute weight loss is common, but abnormalities of linear growth are unusual

سخنرانی: گوارش

Ulcerative colitis treatment

پریسا رحمانی [1] © Ⓟ

[1] Pediatric Gastroenterologist Pediatric Gastroenterology and Hepatology Research Center, Children's Medical Center, Pediatric Center of Excellence, Tehran University of Medical Sciences, Tehran, Iran

Abstract: Ulcerative colitis treatment Dr.Parisa.Rahmani Pediatric Gastroenterologist Pediatric Gastroenterology and Hepatology Research Center, Children's Medical Center, Pediatric Center of Excellence, Tehran University of Medical Sciences, Tehran, Iran Mild disease:In patients with mild disease extending beyond the rectum (ie, fewer than four bowel movements daily without significant abdominal pain, anemia, or fever, and PUCAI score 10 to 34), we suggest a trial of oral ۵-aminosalicylate (5-ASA; usually mesalamine or sulfasalazine) as first-line therapy Mesalamine – Mesalamine (also known as mesalazine or unconjugated 5-ASA) is typically given at an oral dose of 60 to 80 mg/kg/day, divided twice or three times daily (up to the adult dose of 4.8 g/day) Sulfasalazine - initial dose of 25 mg/kg/day divided twice or three times daily and advanced over one week to the full dose of 60 to 80 mg/kg/day divided twice or three times daily (up to a maximum dose of 4 g daily); Supplemental folic acid (1 mg/day) should be given to all patients taking sulfasalazine Patients with moderate disease: (PUCAI score of 35 to 64) typically have more than four bloody bowel movements per day and intermittent abdominal pain but no tenesmus or fever The most common approach for patients with moderate symptoms is a course of systemic glucocorticoids, especially if systemic symptoms such as fever or anorexia are present. for patients who are reluctant to use glucocorticoids, it is reasonable to offer a trial of 5-ASA, similar to patients with milder disease, using doses at the high end of the range A third option that is used for selected patients at some centers is early use of a biologic agent (typically in hospitalized patients using infliximab or adalimumab), similar to the approach for patients with more severe diseaseModerate disease Steroid-dependent disease::Patients are considered to be steroid-dependent if they have been on high-dose glucocorticoids for more than two to three months or daily glucocorticoids for four to six months, or frequently flare when the glucocorticoid dose is reduced (eg, two or three relapses per year). such patients, we suggest transitioning to a thiopurine or biologic agent to avoid the high morbidity associated with prolonged glucocorticoid therapy Acute severe colitis Evaluation for infectious colitis-Evaluation for toxic megacolon-Blood cultures…should be done.. patients should be given high-dose IV glucocorticoids-Antibiotics-Induction therapy ("rescue")

سخنرانی: غددومتابولیسم

Laboratory diagnostic approaches in metabolic disorders

Ali Talea pediatric endocrinologist [1] © ℗ علی طالع

[1] □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□□-□□□□□□□□□ □□□□□□□□□□□□□□□ □□□□ □□□□□□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□
University of Medical Sciences

Abstract: Inherited metabolic disorders are rare genetic conditions that cause a person's metabolism to not work properly. Metabolism is the essential chemical processes that converts food into energy and removes toxins from your body. Defects in genes passed down from parents can result in abnormal chemical reactions that interfere with metabolism. Special testing called metabolic testing may be ordered to look at the amino acid (basic building block of proteins), fat and glucose metabolism patterns, to help narrow down diagnosis. The diagnosis of inborn errors of metabolism (IEM) takes many forms. Due to the implementation and advances in newborn screening (NBS), the diagnosis of many IEM has become relatively easy utilizing laboratory biomarkers. For the majority of IEM, early diagnosis prevents the onset of severe clinical symptoms, thus reducing morbidity and mortality. However, due to molecular, biochemical, and clinical variability of IEM, not all disorders included in NBS programs will be detected and diagnosed by screening alone. Identification of these patients, usually neonates or young children, is important for appropriate treatment, prognosis, and genetic counseling. Patients suspected of having for the determination of endogenous substances in body fluids are remarkably diversified, ranging from simple chemical tests to complicated chromatographic analysis coupled with information rich detectors. Definite diagnosis of most disorders requires identification of the deficient enzyme or aberrant transport proteins. Analysis may be carried out directly on urine, plasma, or blood cells, or in cultured fibroblasts or lymphocytes requiring cell culture facilities. For many inherited metabolic diseases, recombinant DNA technology has been proven reliable in the detection of affected patients and disease carries .DNA analysis has also elucidated the molecular genetics and pattern of inheritance involved. Keywords: Metabolic inborn disorder; diagnosis; laboratory

سخنرانی: غددومتابولیسم

A girl with 46 XX karyotype without ovary and uterus

reihaneh mohsenipour [1] © Ⓟ

[1] □□□□□□ □□□ □□□□□□□□□□□ □□□□□□□□ □□□□□□,□□□□□□□□'□ □□□□□□□ □□□□□□,□□□□□□ □□□□□□□□□□ □□ □□□□□□□
Sciences,Tehran,Iran

Abstract: A 11 yrs old gir came with ambiguous genitalia.In her history ,she had labial adhesion and mild clitromegaly since neonatal period .In her survey,CAH was ruled out by doing lab tests (Na,K,ACTH,cortisole,17ohp,DHEAS all was normal) In her abdominopelvic sonography no ovary and uterus were seen that was confimed by laparoscopic investigation. In addition a deadend vagina was seen and vas defrans were pulled into inguinal canals. Her karyotype was 46XX that can not justify her clinical sign. Therefore after genetic consult assessment of SRY gene was done that was been positive. Here is a case of 46 XXDSD with SRY gene that operated for gonadectomy (streak gonad) and will receive replacement hormone therapy for grow up as a girl but will be infertile.

سخنرانی: غددومتابولیسم

Acquired hypothyroidism in childhood

Reihaneh Mohsenipour [1] © ℗

[1] [illegible], Tehran, Iran

Abstract: Hypothyroidism is the most common disturbance of thyroid function in children .It is categorized as congenital and acquired. Acquired hypothyroidism is divided into overt and subclinical . Etiology of hypothyroidism is diverse and can divide into : 1-Autoimmune(Down , Turner , Klinefelter , celiac , DM1, APS , IPEX) , 2- Iodine (deficiency , excess) 3- Drugs : methimazole , PTU , phenytoin , phenobarbital , valproate , lithium , interferon alfa 4- Thyroid injury: radiation , radioactive iodine treatment , thyroidectomy , infiltrative disease Clinical manifestations of hypothyroidism include : declining growth velocity , pubertal abnormality , sluggishness , lethargy , cold intolerance , constipation , dry skin , brittle hair , facial puffiness , muscle aches , weight gain ,bradycardia ,pseudohypertrophy of muscle , delayed DTR , pleural or pericardial effusions ,slipped capital femoral epiphysis , disturbance in school performance. In lab data we can observe Elevated TSH and low FreeT4 ,Hyperlipidemia, Normocytic or macrocytic anemia , Hyponatremia . For treatment we use levothyroxine replacement according to child age.

سخنرانی: غددومتابولیسم

Approach to Accelerated Puberty

رضا توکلی زاده [1]

[1] [illegible], Tehran, Irann

Abstract: Accelerated puberty is one of the most common problems in pediatric and adolescent medicine and is probably the most obscure and debated topic, related to pediatric endocrine problems. In this lecture, first, normal puberty is quickly reviewed, then we will talk about the characteristics of accelerated puberty and recognizing its importance, which includes the causative factors, and then, its effects on the child's health. The causative factor may include pathological or idiopathic causes, and the effects of accelerated puberty on the child's health include psychosocial aspects, long-term consequences such as the occurrence of cancers, and finally the effect on the final adult height. At the end, based on the mentioned findings, it will be discussed how necessary and how useful is medical intervention in accelerated puberty.

سخنرانی: غددومتابولیسم

Clinical approach to inborn errors of metabolism

℗ © [1] پرستو رستمی

[1] دانشیار دانشگاه علوم پزشکی تهران، مرکز طبی کودکان

خلاصه مقاله :خطاهای ارثی متابولیسم از بیماری های ناد ژنتیک هستند که در سراسر دنیا ناد هستند ولی بصورت تجمعی و در کشورهایی که ازدواج فامیلی زیاد هست با توجه به توارث اتوزوم مغلوب بودن این بیماری ها، شیوع بیشتری دارند. این اختلالات به صورت تک ژنی هستند و موتاسیون در یک ژن خاصی که کد کننده یک پروتئین با اعمال متفاوت اس، منجر به ایجاد این بیماری ها می شوند. علایم بیماری های متابولیک غیراختصاصی است و در تشخیص افتراقی با سایر بیماری‌ها از جمله سپسیس در دوران نوزادی قرار می گیرد. اکثر بیماران مبتلا در بدو تولد بدون علامت هستند و شروع علائم کلینیکی بر اساس شدت موتاسیون ژن می تواند در دوره ی نوزادی، شیرخوارگی، کودکی یا حتی بزرگسالی باشد. اکثر این بیماری ها مولتی سیستم هستند. در موارد زیر باید به بیماری های متابولیک مشکوک شد: تشنج و انسفالوپاتی غیرقابل توجیه، اختلالات حرکتی و آتاکسی غیرقابل توجیه، ترومبوز و آمبولی های غیرقابل توجیه، کاردیومیوپاتی غیرقابل توجیه، بیماری های کبدی غیرقابل توجیه، سنگ کلیه، استفراغ های دوره ای، اسیدوز ، سابقه بیماری های متابولیک در سایر فرزندان، سابقه سقط یا مرده زایی در مادر، سابقه مشکلات بارداری در مادر مانند کبد چرب ، ترومبوسیتوپنی و ..... بنابراین اولین قدم در تشخیص بیماری های متابولیک ارثی شک به بیماری است و بر اساس آن می توان با بررسی های آزمایشگاهی و زنتیک بیماری را تایید کرد .

سخنرانی: غددومتابولیسم

congenital hypothyroidism

© Ⓟ [1] دکتر آریا ستوده

[1] دانشگاه علوم پزشکی تهران

Abstract: Congenital Hypothyroidism Aria Setoodeh MD Pediatric Endocrinologist Children's Medical Center Thyroid gland is the first endocrine gland to develop (24th day). It originates from base of tongue and descends to front of neck, and thyroglossal duct obliterates in 7-۱۰ □□□□□. Thyroid hormone synthesis is regulated by availability of iodine and TSH that acts on TSH receptors to stimulate proliferation, differentiation and function of thyroid follicular cells. Immediately after birth exposure to cold causes a surge in TSH causing a peak in the first 24 hours, followed by a rise in T4 peaking in the second day. TSH remains elevated for 3-5 days, and T4 declines within 4-۵ □□□□□. □□□□oid hormone is essential for normal CNS maturation, neurogenesis, neural cell migration, dendritic, axonal growth and gliogenesis, also for growth and development of the visual, auditory cortex and basal ganglia. Thyroid hormone dependent brain development extends until 2-۳ □□□□□ □□ □□e, the most critical period is the first 6-۸ □□□□□□ □□□□partum. Most hypothyroid newborns have very few or no symptoms and signs before discharge from nursery and should be detected by screening. Core tests are T4, T3RU or FT4 and TSH. Primary congenital hypothyroidism is diagnosed if in 3-۵ □□□□ □□ □□□e T4 8.5 microgram/dl, and TSH20 mU/L and if in 1-4 weeks of life T46.5 and TSH10. Central hypothyroidism is very rare and almost always it occurs with other pituitary hormone deficiencies. It may be missed in screenings checking TSH at first step. Treatment should be started as soon as possible with levothyroxine with dose of 10-۱۵ □□□□□□□□□□ /□□. □□ □□□ □□□□□□□-□p T4 or FT4 should in the upper half of the reference range and TSH maintained between 0.5-۲ □□/□ □□ □□□ first 3 of years of age. In premature newborns normal TSH in the first days of life does not rule out presence of hypothyroidism. It should be repeated at age of second, 6th, and 10th weeks of life.

سخنرانی: غددومتابولیسم

High endogenous ethanol and methanol in two children with neurologic signs

Maryam razzaghi azar [1] © Ⓟ, Mona Nourbakhsh [2], Mitra Nourbakhsh [2], Mahnaz Sadeghian [2]

[1] □□□□□□□□□□ □□ □□□□□□□□□□□□□□□
[2] □□□□□ □□□□□□□□□□□

Abstract: In 2021 we reported a 12 years old boy who had frequent 3 day-comatose attacks and drunken behavior between those periods. The routine laboratory tests for investigating of body organ disorders and inborn errors of metabolism were all normal. The reason was determined, deficiency of alcohol dehydrogenase caused high methanol. This child was treated with daily zinc administration. Now this boy is 21 years of age, his height is 175 cm and is eating zinc medicine every day. He could study in high school and is the student of law faculty. He is normal now and successful in his study. Another 5.5 years old boy came with severe attention deficit hyperactive disorder two years ago. His laboratory tests for body organ disorders and inborn errors of metabolism were normal, but serum ethanol was high and he has also treated with zinc. He became much better and is going to school now. A small amount of ethanol and methanol are produced by intestinal microbiome from foods specially vegetables and fruits that are absorbed and then eliminated by the function of alcohol dehydrogenase in the liver that 2 isomers of it are for methanol. Deficiency of this enzyme can accumulate these materials in the body and cause neurological signs. Zinc is not only cofactor of this enzyme but also is in its structure. So, these children were successfully treated with zinc administration. Conclusion: The disorders of these two children show us that ethanol and methanol measurements should also be included in the study of inborn errors of metabolism

سخنرانی: غددومتابولیسم

Inherited Errors of Cobalamin Metabolism

© Ⓟ [1] مریم رضوی

[1] دانشگاه علوم پزشکی تهران

Abstract: Cobalamin (vitamin B12) is consisted of a corrinoid structure with a central cobalt atom. Humans are unable to synthesize this vitamin and depend on microbial cobalamin, usually obtained second-hand through consumed animal-derived products. [1] There are only two enzymatic reactions in mammalian cells that require cobalamin as a cofactor. [2] Methylcobalamin is a cofactor for methionine synthase which catalyzes the methylation of homocysteine to form methionine. [3] Adenosylcobalamin is required by methyl malonyl-CoA mutase to convert methylmalonyl-coenzyme A (CoA) to succinyl-CoA. Therefore, blood and urine concentrations of homocysteine (tHcy) and methylmalonic acid (MMA) will increase in cobalamin deficiency. Inborn errors affecting the synthesis of the adenosylcobalamin coenzyme result in isolated methylmalonic aciduria; inborn errors affecting the synthesis of the methylcobalamin coenzyme required by methionine synthase result in isolated homocystinuria. Combined methylmalonic aciduria and homocystinuria are seen in patients with inborn errors affecting cobalamin absorption (intrinsic factor deficiency, Imerslund-Gräsbeck syndrome), and transport (transcobalamin deficiency). Methylmalonic acidemia can result in metabolic acidosis which in severe cases may be fatal. Hyperhomocysteinemia along with hypomethioninemia can result in hematologic (megaloblastic anemia, neutropenia, thrombocytopenia) and neurologic (subacute combined degeneration of the cord, dementia, psychosis) defects. Specific diagnosis of these inborn errors depends on complementation analysis, in which patient cells are fused with fibroblasts from patients with known inborn errors, and then methylmalonylCoA mutase or methionine synthase function is compared in parallel fused and unfused cultures. [4] As cobalamin deficiency is a risk factor for neurodegenerative diseases, early diagnosis, and effective treatment is needed in these patients to prevent irreversible damages. [1] Watanabe F: Vitamin B12 sources and bioavailability. Exp Biol Med 232:1266–۱۲۷۴, ۲۰۰۷ [۲] □□□□□□□□□ □, □□□□□ □. □□□□□□□□□□ □□□□□□□□□□□. □□□□□ Soluble Vitamins: Clinical Research and Future Application. 2012:301-۲۲. [۳] □□□□□nu H, Banerjee R: Cobalamin-dependent remethylation. In Carmel R, Jacobsen DW, editors: Homocysteine in health and disease, Cambridge, 2001, Cambridge University Press, pp 135–۱۴۴.

[4] Watkins D, Rosenblatt DS. Inborn errors of cobalamin absorption and metabolism. InAmerican Journal of Medical Genetics Part C: Seminars in Medical Genetics 2011 Feb 15 (Vol. 157, No. 1, pp. 33-4۴). □□□□□□□□: □□□□□ □□□□□□□□□□□□□ □□□□□□□□□, □□□., □ □□□□□ □□□□□□□□.

سخنرانی: غددومتابولیسم

Insulin therapy in DKA patients

ریحانه محسنی پور [1] © Ⓟ

[1] □□□□□□□ □□□ □□□□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□'□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□,
Tehran, Iran

Abstract: Insulin therapy in DKA patients Reihaneh Mohsenipour Pediatric Endocrinologist ,Associate professor of Tehran University of Medical Sciences Four type of insulin(ultra short acting , short acting , intermediate acting and long acting) are now available that can be used in diabetic patients but in patients in Diabetic Keto Acidosis (DKA) phase only ultra short acting and short acting (mostly)insulins are used. Insulin suppresses hepatic glucose output and ketogenesis and stimulate peripheral glucose uptake. In moderate to severe DKA intra venous (IV) insulin is prescribed in rate 0.05 – 0.1 u/kg/h and in some of mild DKA subcutaneous (SC) insulin are used .No difference was seen in different dose of insulin and way of administration. During starting treatment patients in DKA phase , It is better not to use insulin in first hour of treatment because it increases brain edema risk in these group. Insulin bolus is not necessary because iv insulin is sufficient for reversing ketogenesis process.

سخنرانی: قلب

Cardiovascular consoultaion for pediatric Sport

مجتبی گرجی [1] © Ⓟ

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□□, □□□□□□□□□□ □□□□□□□□ □□□□□□, □□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ Sciences, Tehran, Iran

Abstract: The PPE is the optimal tool available to primary care practitioners for pre- venting heart disease-related deaths on the playing field. However, there is considerable variability in the de- tails of the screening process, and many states have either no or inade- quate examination forms. Standard- izing the history and physical form and creating accreditation criteria for clinicians who perform the examina- tion would be two good steps toward optimizing the PPE. The cost/ benefit ratio of obtaining an ECG orand an ECG in addition to the his- tory and physical examination. In this month's Internet-only pages of PIR, Dr Renato Vitiello cites data suggesting that sudden death from HCM in athletes can be reduced by this approach.

سخنرانی: قلب

Cardiovascular disorders in hypermobility syndrome

Minoo Dadkhah [1] ℗, Reza Shabanian [2] ©

[1] [illegible], [illegible], [illegible], [illegible]
[2] [illegible], [illegible], [illegible], Tehran, Iran

Abstract: Hypermobility or joint laxity can be observed in various syndromes, including Ehlers-Danlos syndrome, Marfan and Marfanoid syndromes, Loeys-Dietz syndrome, Larsen syndrome, and Fragile X syndrome. Patients with hypermobility often experience cardiovascular issues. This includes the involvement of cardiac valves (aortic and mitral valves), the vascular system, and the autonomic nervous system. Hypermobility syndrome can manifest as aortic valve sinus aneurysm, aortic valve insufficiency, mitral valve prolapse and regurgitation, aortic dissection, spontaneous coronary artery dissection, and cervical artery dissection. Dysfunction of the autonomic nervous system, known as dysautonomia, can manifest as symptoms such as tachycardia and blood pressure irregularities in hypermobile patients. One common condition associated with dysautonomia is Postural Orthostatic Tachycardia Syndrome (POTS), characterized by a rapid increase in heart rate upon standing. Additionally, patients with joint laxity often experience various supraventricular arrhythmias and premature ventricular contractions. Neurally mediated syncope is a frequent finding in individuals with joint laxity. keywords:Cardiovascular; Hypermobility

سخنرانی: قلب

Hematological indices in pediatric patients with acyanotic congenital heart disease: a cross-sectional study of 248 patients

Hanieh Mohammadi1, Behzad Mohammadpour Ahranjani2, Ehsan Aghaei Moghadam3, Farzad Kompani4, Mona Mirbeyk5 and Nima Rezaei5,6,7 [1] © ℗

[1] □□□□

Abstract: Background: Congenital heart disease CHD is a significant cause of mortality and morbidity in children worldwide. Patients with congenital heart disease may develop hematological problems, including thrombocytopenia and neutropenia. In addition, several studies indicate the higher frailty of patients with CHDs to infections and malignancies. Nevertheless, the mechanisms of immune system changes in these patients have remained in the shadow of uncertainty. Moreover, very few studies have worked on cytopenia in CHD. This study has assessed the frequency of thrombocytopenia, neutropenia, lymphopenia, and anemia in pediatric patients with acyanotic congenital heart disease ACHD prior to open-heart surgery Methods: This cross-sectional study was handled in the Pediatric Cardiology Clinic, Tehran University of Medical Sciences, during pre-operation visits from 2014 till 2019. Two hundred forty-eight children and adolescents with acyanotic congenital heart disease before open-heart surgery met the criteria to enter the study Results: A total of 191 (76.7%) patients with Ventricular Septal Defects (VSD), 37 (14.85%) patients with Atrial Septal Defects (ASD), and 20 (8.11%) patients with Patent Ductus Arteriosus (PDA) were enrolled in this study. The median age was 23.87 months. Thrombocytopenia and neutropenia were found, respectively, in 3 (1.2) and 23 (9.2%) patients. Hemoglobin level and lymphocyte count were significantly lower in patients with neutropenia than patients with normal neutrophil count (P value = 0.024 and P value = 0.000). Significant positive correlations were found between neutropenia and anemia. There were no correlations between neutrophil count and Platelets. Also, anemia was found in 48 patients (19.3%). The study also found a statistically significant correlation between the co-existence of VSD and neutropenia in the patients (P value = 0.000 Although most were mildly neutropenic, there was a significant correlation between neutropenia and Ventricular Septal Defect compared to PDA and ASD groups. Regarding the importance of neutropenia to affect the prognosis of congenital heart defects in infections, it is important to consider further studies on the status of immune system function in these patients keywords: Acyanotic congenital heart disease, Neutropenia, Anemia, Congenital diseases, Pediatrics

سخنرانی: قلب

Important points in pediatric cardiovascular examination

© Ⓟ [1] کیهان صیادپور زنجانی

[1] [illegible]

Abstract: In spite of large improvement in the interventional and surgical management of pediatric cardiovascular treatments, the use of these modalities needs early diagnosis. The diagnosis of these diseases are mostly done by pediatricians during a comprehensive examination. In this lecture I emphasize on the most important findings that can arise the suspicion of a cardiovascular disease. They include abnormal murmurs, abnormal pulses, changes in blood pressure, and many other findings.

سخنرانی: قلب

Pediatric Myocarditis

Jason L. Williams [1] © ℗

ارائه دهنده: دکتر محسن کریمی، فوق تخصص قلب کودکان [1]

Abstract: Myocarditis is a condition caused by acute or chronic inflammation of the cardiac myocytes, resulting in associated myocardial edema and myocardial injury or necrosis. Myocarditis in children is most often caused by a viral or infectious etiology. In addition, there are now two highly recognized etiologies related to Coronavirus disease of 2019 (COVID-۱۹) infection and the COVID-۱۹ □□□□ □□□□□ne. The clinic presentation of children with myocarditis can range from asymptomatic to critically ill. Diagnosis of myocarditis typically includes laboratory testing, electrocardiography (ECG), chest X-ray, and additional non-invasive imaging studies with echocardiogram typically being the first-line imaging modality. While the reference standard for diagnosing myocarditis was previously endomyocardial biopsy, with the new revised Lake Louise Criteria, cardiac magnetic resonance (CMR) has emerged as an integral non-invasive imaging tool to assist in the diagnosis. CMR remains critical, as it allows for assessment of ventricular function and tissue characterization, with newer techniques, such as myocardial strain, to help guide management both acutely and long term. The treatment of myocarditis varies depending on the severity of presentation and stage of illness. For more stable patients, management typically consists of an oral heart failure regimen, such as diuretic therapy to decrease venous congestion, angiotensin-converting enzyme inhibitor (ACE-I) and angiotensin II receptor blockers for afterload reduction, and beta-blockers. Aldosterone antagonists are also used for ventricular remodeling. For decompensated patients, inotropic support is typically initiated with milrinone, a phosphodiesterase-۳ □□□□□□□□□, □hich improves ventricular contractility, afterload reduction, and improved relaxation or lusitropy. Inotropic agents with vasopressor activity, such as epinephrine, are reserved for hypotension and cardiogenic shock. Immunosuppressive therapy with non-steroidal anti-inflammatory drugs has been shown to be beneficial for patients with concomitant pericarditis and pericardial effusion. A recent retrospective analysis showed that the combination of IVIG and high-dose steroids was beneficial for improving left ventricular systolic function without significant serious adverse events.

سخنرانی: قلب

Premature ventricular contraction in the recovery phase of exercise is associated with a novel mutation of genetic responsible for long QT syndrome

Reza Shabanian [1] © ℗

[1] [illegible], Tehran, Iran

Abstract: Exercise-induced premature ventricular contractions (PVCs) commonly emerge during exercise stress tests and have been linked to a heightened risk of cardiovascular mortality, particularly when they occur during the recovery phase. The underlying factors contributing to PVCs during recovery are complex, with the exact cause still unclear. These PVCs following exercise have been proposed to result from autonomic tone imbalances or myocardial ischemia. A ۱۷-year-old girl experiencing symptoms such as blurred vision, headache, and presyncope underwent an evaluation to rule out arrhythmia as the source of her discomfort. Her father experienced sudden death following extreme exertion. Her electroencephalography yielded normal results. Notably, she displayed high-grade PVCs during the recovery phase of an exercise tolerance test. A 24-hour ECG Holter monitoring indicated a prolonged QT interval. Further investigation through whole exome sequencing uncovered a novel mutation responsible for long QT syndrome (designated as RALGAPA 1). keyword: Sudden death; Premature ventricular contractions; Recovery phase of exercise; Long QT syndrome

سخنرانی: قلب

Prenatal Diagnosis, Management, and Treatment of Fetal Cardiac Disease

Toktam Sheykhian [1] © ℗

۱ □□□□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□□□ □□ □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□ □□ □□□□□□□□ □□□□ Khomeini Hospital Complex Tehran University of Medical Sciences. e-mail address: toktamsheykhian@gmail.com

Abstract: Congenital heart disease (CHD) is the most common type of congenital defect, affecting ۰.۸٪ □□ ۱.۲٪ □□ □□□□ □□□□□□, □□ □□□□□ □□□-□uarter are significant enough to require a cardiac intervention in the first year of age. Historically, a diagnosis of CHD was only possible after birth with the onset of signs or symptoms of cardiac disease. With recent advances in fetal diagnosis and ultrasonography, prenatal detection of CHD has increased. Fetal echocardiography, the conventional tool for fetal cardiac evaluation can provide detailed anatomic and physiologic information, aiding in optimizing prenatal care for the expectant person, medical stabilization during delivery, and perinatal transition, as well as planning for postnatal corrective or palliative cardiac surgical or percutaneous interventions. Improving prenatal diagnosis rates requires education and outreach efforts targeting community practices where most initial screening occurs. In summary, prenatal diagnosis of CHD makes it possible to optimize care for the expectant person, including diagnosis and treatment of the mental health conditions associated with the stress and trauma of a diagnosis of CHD, as well as possible fetal intervention for select lesions. Equally as important, prenatal diagnosis permits coordinated care and delivery at a tertiary care center of excellence, thereby limiting the potential for immediate postnatal decompensation.

سخنرانی: قلب

secondary coarectation

Mojtaba Gorji [1] © ℗ مجتبی گرجی

[1] □□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□□, □□□□□□□□□□ □□□□□□□□ □□□□□□, □□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ Sciences, Tehran, Iran

Abstract: We have a 6-month-old infant who had referred to the Children's Medical Center with chronic respiratory symptoms and a small facial hemangioma. According to the respiratory symptoms, he was further investigated with a CT scan, which showed extensive neck hemangiomas with a compressive effect on the airways. Cardiac consultation was done to start Inderal, and we noticed the smallness of the aortic arch and mild coarctation. 6 months After treatment with Inderal and improvement of respiratory symptoms and echo follow-up, we found that the size of the aortic arch has improved and the patient's coarctation, which was due to external pressure, has been removed. As a result, in coarctations secondary to external causes and not intrinsic disorder of the aorta itself, by treating the underlying disease, coarctation will improve spontaneously and there is no need for surgical repair.

سخنرانی: ایمونولوژی وآلرژی

Acute urticaria

Mansoureh Shariat [1] © ℗

[1] [illegible] Sciences, Tehran, Iran

Abstract: ACUTE URTICARIA INTRODUCTION Urticaria is a common disorder among people with a prevalence of approximately 20 percent in their lifetime. A typical urticarial lesion is an extremely pruritic, erythematous plaque or papule and transient. Urticaria is sometimes accompanied by superficial swelling of the dermis (angioedema). Acute urticaria is defined by symptom duration of less than 6 weeks. DIAGNOSTIC APPROACH Acute urticaria and angioedema are often caused by an allergic IgE–mediated reaction. This form of urticaria is a self-limited process that occurs when an allergen activates mast cells in the skin. Acute urticaria can also result from non–IgE-mediated stimulation of mast cells, caused by radiocontrast media, viral agents, opiates, and nonsteroidal anti-inflammatory drugs (NSAIDs). A possible trigger, such as a drug, food, insect sting, or infection, may be identifiable in patients with new onset urticaria, although no specific cause is found in many cases. Urticaria that is caused by an allergic reaction usually occurs within minutes to two hours of exposure to the culprit allergen. Causes include medications, foods and food additives, insect stings and bites, latex, and blood products. If history does suggest a possible allergy, skin tests or serum tests for allergen-specific immunoglobulin E (IgE) antibodies are appropriate which should be conducted by an allergy specialist. TREATMENT Acute urticaria is a self-limited illness requiring little treatment other than antihistamines and avoidance of any recognized trigger. The first-generation agents include Hydroxyzine and diphenhydramine are sedating but are effective and frequently used for treatment of urticaria. The newer, second-generation H1 antihistamines such as Loratadine, fexofenadine and cetirizine are recommended as first-line therapy. These drugs are minimally sedating, are essentially free of the anticholinergic effects and are preferable because of reduced frequency of drowsiness and longer duration of action. Epinephrine 1: 1,000, 0.01 mL/kg (maximum 0.3 mL) intramuscularly, usually provides rapid relief of acute, severe urticaria/angioedema but is seldom required. A short course of oral corticosteroids should be given only for severe episodes of urticaria and angioedema that are unresponsive to antihistamines.

سخنرانی: ایمونولوژی وآلرژی

Chrinic Urticaria

Arash Kalantari [1] ©, Arash Kalantari [1] ®

[1] □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□,□□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□□

Abstract: Urticaria is characterized by the development of wheals (hives) and /or angioedema.Urticaria is classified based on its duration, as acute or chronic, and the role of definite triggers, as inducible or spontaneous. . Chronic urticaria is defined as the occurrence of angioedema, or both for more than 6 weeks. Chronic urticaria can come with daily or almost daily signs and symptoms or an intermittent/recurrent course. urticaria (CU) is classified as spontaneous (CSU) and inducible (CIndU). CSU comes as CSU with known cause and CSU with unknown cause. CIndU is further subclassified as symptomatic dermographism, cold urticaria, delayed pressure urticaria, solar urticaria, heat urticaria, and vibratory angioedema as well as cholinergic urticaria, contact urticaria, and aquagenic urticaria.Detailed history taking is essential in urticaria; it is the first step in the diagnostic workup of all urticaria patients. The second step is the physical examination of the patient.In all CSU patients, the diagnostic workup includes a thorough history, physical examination (including review of pictures of wheals and/or angioedema), basic tests, and the assessment of disease activity, impact, and control. The basic tests include a differential blood count and CRP and/or ESR, in all patients, and total IgE and IG- anti- TPO.The goal of treatment is to treat the disease until control and a normalization of quality of life.The first recommendationfor treatment of chronic Urticaria is the use of a standard dose of second generation H1- antihistamines .Omalizumab (anti- IgE) has been shown to be very effective and safe in the treatment of CSU. Omalizumab has also been reported to be effective in CIndU including cholinergic urticaria, cold urticaria,solar urticaria, heat urticaria, symptomatic dermographism, and delayed pressure urticaria.Patients with urticaria who do not show sufficient benefit from treatment with omalizumab, should be treated with ciclosporin 3.5– 5 mg/kg per day. Ciclosporin is immunosuppressive and has a moderate, direct effect on mast cell mediator release

سخنرانی: ایمونولوژی وآلرژی

Hemophagocytic lymphohistiocytosis: a single-center series of 34 cases over 10 years

[2] دکتر نیما پروانه ,℗ © [1] دکتر پریسا آشورنیا

استادیار دانشگاه تهران [۱]
دانشیار دانشگاه تهران [۲]

Abstract: Abstract Background: Hemophagocytic lymphohistocytosis (HLH) is a rare fatal childhood disease and diagnosis and treatment is crucial to improve the prognosis in patients. Hence this study was carried out to determine the clinical, laboratory, genetic, and prognosis profile was assessed in primary HLH cases in Markaz-e-tebbi Hospital since 2008 to 2018. Methods: In this case-series, 34 consecutive primary HLH cases in Markaz-e-tebbi Hospital since ۲۰۰۸ □□ ۲۰۱۸ □□□□ □□□□□□□□□. □□□ □□□□□□□□□, □□□□□□□□□□□, □□□□□□□□, □□□ □□□□□□□□□□ □□□□□□□□ □□□ assessed in patients. Results: Totally 34 cases including 33 HLH cases and one patient under prophylaxis. Fever, hepatosplenomegaly, anemia, neutropenia, thrombocytopenia, hypertriglyceridemia, hypofibrinogenemia, high ferritin, coagulopathy, neurological finding, hemophagocytosis, and infection were seen in 97%, 90.9%, 97%, 81.8%, 90.9%, 81.3%, 90.6%, ۸۷.۱٪, ۱۵.۲٪, ۴۳.۸٪, ۳۱.۳٪, □□□ ۱۸.۸٪, □□□□□□□□□□□□□. □□□۲۷□, □□□۱۳□, □□□۱, □□□ □□□۱ □□□□ □□□□ □□ ۵۲.۹٪, ۳۵.۳٪, ۸.۸٪, □□□ ۲.۹٪, □□□□□□□□□□□□. □□□□□ ۳۳ □□□□□, ۶ □□□□□□□□ □□□□ □□□□□□□□. Conclusion: Finally it is concluded that fever and anemia are the most common clinical and laboratory findings in Iranian HLH cases and RAB27A is the most common affected gene. Among each eleven cases, nine are dead. keywords: Keywords: HLH, Symptom, Genetic, Prognosis

سخنرانی: روماتولوژی

Familial Mediterranean Fever

© ℗ [1] فاطمه تحقیقی شربیان

[1] دانشگاه علوم پزشکی تهران- مرکز طبی کودکان

Abstract: Familial Mediterranean Fever, a monogenic autoinflammatory disease secondary to MEFV gene mutations in the chromosome 16p13. It is caused by dysregulation of the inflammasome, a complex intracellular multiprotein structure, commanding the overproduction of interleukin 1. Familial Mediterranean Fever can be associated with other multifactorial autoinflammatory diseases, as vasculitis and Behçet disease. Symptoms frequently start before ۲۰ □□□□□ □□ □□□ □□□ □□□ □□□□□□□□□□□□□□ □□ □ □□□□ □□□□□□ □□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□ earlier. Attacks consist of fever, serositis, arthritis and high levels of inflammatory reactants: C-reactive protein, erythrocyte sedimentation rate, serum amyloid A associated with leucocytosis and neutrophilia. The symptom-free intervals are of different length. The attacks of Familial Mediterranean Fever can have a trigger, as infections, stress, menses, exposure to cold, fat-rich food, drugs. The diagnosis needs a clinical definition of the disease and a genetic confirmation. An accurate differential diagnosis is mandatory to exclude infective agents, autoimmune diseases, etc. In many patients there is no genetic confirmation of the disease; furthermore, some subjects with the relieve of MEFV mutations, show a phenotype not in line with the diagnosis of Familial Mediterranean Fever. For these reasons, diagnostic criteria were developed, The “clinical classification criteria for autoinflammatory periodic fevers” formulated by PRINTO. The goals of the treatment are prevention of attacks recurrence, normalization of inflammatory markers, control of subclinical inflammation in attacks-free intervals and prevention of medium and long-term complications, as amyloidosis. Colchicine is the first step in the treatment; biological drugs are effective in non-responder patients.

سخنرانی: روماتولوژی

Prolonged relapsing fever and coronary artery involvement: Kawasaki disease or Systemic Juvenile Idiopathic Arthritis?

Mehrnaz Olfat [1] ℗, Raheleh Assari [2], Mohamad-Taghi Majnoon [3], Vahid Ziaee [2] ©

[1] □□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□ □□□□□, □□□□□□□□□'□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□, Iran
[2] □□□□□□□□□□ □□□□□□□□□□□□□□ □□□□□□□□□ □□□□□□, □□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, Tehran, Iran ; Department of Pediatrics, Tehran University of Medical Sciences, Tehran, Iran
[3] □□□□□□□□□□□ □□ □□□□□□□□□□□□, □□□□□□□□□'□ □□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□

Abstract: Background: Symptoms and laboratory findings of Kawasaki disease (KD) and systemic-onset juvenile idiopathic arthritis (SoJIA) may overlap in early phases. Coronary artery lesion is a common complication seen in KD. Cases Presentation: In this article, we report 3 cases of SoJIA (2 males and 1 female) with prolonged relapsing fever and coronary artery involvement. All of them were initially presumed KD and were treated with IVIG. All three cases had arthritis and lymphadenopathy, and one of them had a skin rash. Fever and main clinical symptoms return after 3-۸ □□□□□. □□ □he second evaluation, they completed the criteria for SoJIA, and they were treated with methylprednisolone, ibuprofen, and methotrexate. High ferritin level was observed in all three cases (mean=6024 ng/ml). Conclusion: Coronary artery involvement may rarely be seen in the early phases of SoJIA. Continuing or relapsing fever, late-onset arthritis, and increased serum ferritin levels may help distinguish SoJIA from KD. Keywords: Kawasaki disease, systemic onset juvenile idiopathic arthritis, coronary artery, ferritin

سخنرانی: روماتولوژی

What's new in PFAPA

Mahdieh Mousavi Torshizi [1] © ℗

[1] □□□□□□□□□ □□□□□□□□□□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□□ □□□□□□□□□□ □□□□□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□
Science, Teran, Iran

Abstract: What’s New in PFAPA Abstract Periodic fever, aphthous stomatitis, pharyngitis, and adenitis (PFAPA) syndrome is the most common periodic fever condition in children, with most cases appearing by the age of 5. High grade fever, inappropriate response to antipyretic and recurrent attacks are the most important concerns of parents. During the last years, the significant improvement in their genetic and pathogenic knowledge has been accompanied by a remarkable progress in their management. There are 4 different treatment arms: 1. Antipyretic, 2. Abortive (corticosteroids), 3. Prophylaxis (colchicine or cimetidine) and 4. Surgical (tonsillectomy). Discovering of aberrant production of interleukin 1β (IL-١□) □□ □□□□□ □ed to new treatment options such as anti-IL1 agents.

سخنرانی: مسمومیتها وژنتیک

Caustic Ingestions in children

مهسا صوتی خیابانی [1] © Ⓟ

[1] □□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□□ □□ □□□□□□□□□, □□□□□□□□□□□ □□□□□□□□ □□□□□□□,
Tehran University of Medical Sciences

Abstract: Caustic ingestion by children is still a serious medical and social issue. Ingestion of caustic agents leads to injuries in the esophagus, pharynx, larynx, and mouth, which often lead to death or other adverse effects on the gastrointestinal and respiratory tracts. Ingestion of caustic agents are frequently reported in children, especially when children start to walk or crawl. Therefore these accidents were considered as one of the main causes of death in children less than ۵ □□□□□□ □□□□□ □□□□ □□□□□ □□□□□□□□□□□ □□ ۲ □□□□□□ □□ □□□□. □□□□□□ □□□□ □□□□□ □□□□□ ۵۰۰ □□□□□□ substances at home that most of them were kept at the kitchen without considering appropriate storing points. Additionally, most of ingestions are due to consumption of household chemicals, such as detergents and bleaches. On the other hand, the swallowing of these agents could led harmful health consequences and impose an economic burden for measurement, treatment, follow up and caring. Caustic ingestions produce signs and symptoms such as vomiting, drooling, refusal to drink, oral burns, dysphagia, dyspnea, abdominal pain, hematemesis, and stridor. Esophageal stricture is considered a short-term effect, but esophageal perforation, esophageal obstruction and cancer could be some of the long-term effects of ingestion of caustic agents. In patients with caustic ingestion, airway monitoring and control is the first priority. When airway compromise is present, a definitive airway must be established. In patients with a stable airway and no clinical or radiological sign of perforation, medical therapy should be initiated. Arrangements should be made for esophagogastroduodenoscopy (EGD) to grade the degree of injury and establish long-term prognosis, In asymptomatic patients. Pediatric patients who remain asymptomatic who are tolerating a normal diet may be discharged with appropriate follow-up and return precautions. Surgical consultation is indicated for suspected perforation. Because of the risk of late complications—most commonly, esophageal stricture formation—arrangements for follow-up need to be made Although the ingestion of caustic materials is a simple preventable problem, but it has continued in most developing countries. Families, manufacturing, government and health staff have a major role in the control and management of these accidents. Persist and ongoing communication among these teams could reduce the rate of accidents or modify the course of the disease.

سخنرانی: مسمومیتها وژنتیک

Clinical approach to occult childhood poisoning

© [2] حمید اولیایی ,℗ [1] دکتر فریبا فرنقی

[1] علوم‌پزشکی شهید بهشتی
[2] دانشگاه آزاد یزد

Abstract: Clinical Approach to the child with occult Poisoning. Fariba Farnaghi1, Hamid Owliaey2. 1-Associate Professor of Pediatrics, Shahid Beheshti University of Medical Sciences. ۲-Assistant Professor of Forensic Medicine & clinical Toxicology, Yazd Islamic Azad University.

The clinical presentation of occult ingestion should be considered in differential diagnosis of patients who present with acute onset of multiorgan dysfunction, altered mental status, respiratory or cardiac compromise, unexplained metabolic acidosis, seizures specially in "at-risk" age groups (toddler /adolescent) . Also the pediatricians must be aware about; Regional Common pediatric Poisoning (Opioids , acetaminophen ,sedatives,..), compounds that can be lethal to children even with small ingestions(Opioids, TCA , Aluminum Phosphide,..) and clinical Toxidromes . The initial management of the child who is suspected to unknown poisoning begins with initial evaluation and stabilization (ABCDE)followed by a thorough evaluation to attempt to identify the agent and assess the severity of exposure. The possibility of concomitant trauma, infection, hypoglycemia or illness must be in mind. Rapid evaluation of mental status, vital signs, pupils, Pulse oximetry, blood glucose, CO-metery , blood gas , electrolytes, urine toxicology screening, ECG and other. Airway protection: Intubation ,Suction ,Oxygen Therapy ,Atropine (for excessive salivation in Organophosphate poisoning),Naloxone for Bradypnea Hypotension→ Normal saline, Direct acting vasopressors, antidotes eg Na bicarbonate(for TCA) Hypertension in agitated patients: BZDs Ventricular tachycardia/Wide QRS: Na bicarbonate(for TCA) Brady arrhythmias: Atropine Seizures: BZDs Drug-associated agitation: BZDs Coma cocktail: Oxygen, Glucose, Naloxone EPS, dystonia: Diphenhydramine /BZDs Following initial patient stabilization, patient Decontamination (Gastric lavage, SDAC1,WBI2) , Enhanced elimination (MDAC3, urinary alkalization, hemodialysis, lipid emulsion therapy) and other supportive care.For most of important poisoning there is not definite diagnostic test ,as an example Carbon Monoxide poisoning, additionally in this poisoning Pulse oximetry falsely show normal O2 saturation despite of hypoxemia. 1-Single Dose Activated Charcoal 2-Whole Bowel Irrigation 3- Multiple Dose Activated Charcoal

سخنرانی: مسمومیتها وژنتیک

Initial management of Poisoned Pediatric Patient

Sevil Abdolmohamadian [1] © ℗

[1] [illegible]

Abstract: Medical toxicologists and poison information specialists typically use a clinical approach to the poisoned patient that emphasizes treating the patient rather than treating the poison. Too often in the past, patients were initially all but neglected while attention was focused on the ingredients listed on the containers of the product(s) to which, presumably, they were exposed. Although the astute clinician must always be prepared to administer a specific antidote immediately in those instances when nothing else will save a patient, all poisoned or overdosed patients will benefit from an organized, rapid clinical management plan. A major approach to providing more rational individualized early treatment for toxicologic emergencies involves a closer examination of the actual benefits and risks of various gastrointestinal decontamination techniques. Appreciation of the potential for significant adverse effects associated with all types of gastrointestinal decontamination techniques and recognition of the absence of clear evidence-based support of efficacy, have led to a significant reduction in the routine use of syrup of ipecac-induced emesis and orogastric lavage, as well as cathartic-induced intestinal evacuation. Additionally, the value of whole bowel irrigation with polyethylene glycol electrolyte solution [whole bowel irrigation (WBI) with polyethylene glycol electrolyte lavage solution (PEG-ELS)] appears to be much more specific and limited than originally thought. Likewise, some of the limitations and (uncommon) adverse effects of activated charcoal (AC) are now more widely recognized. Similarly, interventions to eliminate absorbed toxins from the body are now much more narrowly defined or, in some cases, abandoned: Multiple dose activated charcoal (MDAC) is useful for only a few xenobiotics. The clinical approach to potentially poisoned patients begins with the recognition and treatment of life-threatening conditions: airway compromise, breathing difficulties, and circulatory problems (the “ABCs”) such as hemodynamic instability and serious dysrhythmias. Once the ABCs are addressed, the patient’s level of consciousness should be assessed, as this helps to determine the techniques to be used for further management of the exposure. Extremes of core body temperature must be addressed early in the evaluation and treatment of a patient with altered mental status.

سخنرانی: محققین جوان

A boy with Senior-Loken syndrome 4 with symptoms of hypopituitarism and renal nephrophytosis; A case report

Alireza Mohebbi [1] ℗, Nahideh Ekhlasi [2] ©

[1] [illegible], Ardabil, Iran
[2] [illegible], Ardabil, Iran

Abstract: Introduction:: Nephronophthisis (NPHP) is an autosomal recessive cystic disease of the kidney that is identified based on its different forms of gene mutations. More than 10 percent of NPHP cases can manifest with extrarenal manifestations, including Senior-Loken syndrome (SLSN), mental retardation, liver fibrosis, skeletal changes, etc., and their renal involvement will eventually lead to severe renal failure (ESRD), requiring a kidney transplant. Method & material:: A 13-year-old boy who was referred to the nephrology clinic of Boali Ardabil Hospital about a year ago to find the cause of high creatinine. In the patient's history and subsequent investigations, there were symptoms of hypopituitarism, mild retinal dystrophy, severe osteopenia, mild liver fibrosis, and NPHP. According to the above, to confirm the diagnosis, a WES genetic test (whole exome sequencing) focusing on NPHP genes was requested, and finally, the diagnosis of SLSN4 (NPHP4) was reported. Currently, the mentioned patient is undergoing medical and symptomatic treatment for renal and extrarenal complications of NPHP. Result:: . Conclusion:: According to the patient's history of polyuria and polydipsia, decreased ability to concentrate urine in the morning sample, lack of edema and hypertension as a sign of kidney failure, and a kidney ultrasound report consistent with the disease, including normal kidney size, kidney cyst, increased renal parenchymal echo, and decreased corticomedullary differentiation, NPHP was presented to the patient, and considering that other extrarenal symptoms of the patient could be justified with this syndrome, a genetic study was performed for the patient, which is an accurate and reliable method of diagnosing NPHP. Finally, SLSN was diagnosed with NPHP4 gene involvement.

سخنرانی: محققین جوان

A review of barriers to family-centered care in neonatal units in Iran

[2] صدف رضایی, ℗ © [1] فرنوش تاجیک

[1] [illegible] University of Medical Sciences, Semnan, Iran.
[2] [illegible].

Abstract: Introduction: Family-centered care (FCC) is an essential approach in neonatal units as it promotes the involvement of families in the care of their infants, leading to improved outcomes and enhanced family well-being. In fact, the philosophy of FCC considers the family as a constant part of the child's life and considers the needs of the family in addition to the needs of the baby. However, several barriers may hinder the implementation of FCC in neonatal units. This narrative review aims to identify and discuss the barriers of FCC in neonatal units of Iran. Methods: The present study is a narrative review designed in 2023. Relevant findings were reviewed in international and national databases, including PubMed, Scopus, Science Direct, Google Scholar, ISI, SID, and Magiran. The search included relevant keywords such as family-centered care, FCC, neonatal, NICU, barriers. The most relevant articles based on inclusion and exclusion criteria, were reviewed. Results: The results of this review showed that the major barriers are: Lack of awareness and education among healthcare professionals, cultural and religious beliefs of some families, lack of infrastructure and resources (like limited space, insufficient facilities, shortage of staff), communication and language barriers, socioeconomic factors of some families, organizational culture and policies within neonatal units, legal and ethical considerations, and some individual factors of caregivers. Also, in neonatal units, caregivers' activities are mainly patient-centered and they focus on the treatment and care of neonates, and other principles of FCC, such as supporting families, are almost missed. So, it may be challenging for some of caregivers to change their work identity from task-centered to family-centered. Conclusion: In Iran, the barriers of FCC in neonatal units are multifaceted and require a comprehensive approach to overcome. By addressing these barriers, healthcare professionals, policymakers, and researchers can try to solve the challenges and promote the implementation of FCC. So, this can lead to improved outcomes for neonates and increased satisfaction for their families, ensuring a more holistic and patient-centered approach to neonatal care. Keywords: FCC, family-centered care, NICU, neonatal, barriers

سخنرانی: محققین جوان

A review of innovative approaches to promote family-centered care in neonatal units

فرنوش تاجیک [1] © Ⓟ, صدف رضائی [2]

[1] □□□□□□□□ □□□□□□□, □□□□□□□□□□□□ □□ □□□□□□□□□□ □□□□ □□□□□□□□□ □□□□□□□□, □□□□□□□ □□ □□□□□□□□ □□□□ □□□□□□□□□□, □□□□□□□
University of Medical Sciences, Semnan, Iran
[2] □□□□ □□□□□□□□ □□ □□□□□□□ □□□□□□□, □□□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□□, □□□□

Abstract: Introduction: Neonatal care has undergone significant transformations over the years and in recent years, there has been a paradigm shift in neonatal care with a focus on family-centered care (FCC). FCC approach has been recognized as a crucial element in the provision of high-quality care in neonatal units. So, traditional neonatal cares has evolved, with an increasing emphasis on incorporating innovative approaches to enhance the family's experience and involvement in their neonate's care. Therefore, the aim of this study is to review the innovative approaches to promote family-centered care in neonatal units. Methods: The present study is a narrative review designed in 2023. Relevant findings were reviewed in international and national databases, including PubMed, Scopus, Science Direct, Google Scholar, ISI, SID, and Magiran. The search included relevant keywords such as family-centered care, FCC, neonatal, NICU, neonatal care. The most relevant articles based on inclusion and exclusion criteria, were reviewed. Results: The results of this review revealed several new approaches to promote FCC in neonatal units including: Parent education programs (ranging from bedside tutorials to virtual platforms), Staff training programs (improving knowledge and skills on FCC principles), Individualized care (NIDCAP method), Technology-based approaches (like telehealth, video conferencing, virtual visitation, mobile applications), Family integrated Programs, Encouraging parental involvement (like kangaroo care), Designing family-friendly environments (improvements in the physical, welcoming and supportive environment), Collaborative care models (encouraging shared decision-making), Support services for families (like emotional support and counseling), Peer support programs, Open and effective Communication (like regular family meetings and responsiveness), Investment in staffing, Team culture and leadership support, Flexible visitation policies and family presence (as much as possible), Transition and Follow-Up Support. Conclusion: This review underscores the evolving landscape of family-centered care in neonatal units. Implementing these approaches can contribute to a more holistic and family-centered approach in neonatal units, improving outcomes for neonates, their families and healthcare organization. However, the successful implementation of FCC requires a comprehensive approach. The implementation of these practices may vary across different hospitals and neonatal units. Keywords: Family centered care, neonatal, NICU, FCC

سخنرانی: محققین جوان

Burkholderia cepacia complex and Stenotrophomonas maltophilia infections in pediatric patients: a 5-year experience at a pediatric referral hospital"

Shima Mahmoudi [1] ©, Mehrsa Hamidi [2] ℗

[1] Biotechnology Centre, Silesian University of Technology, Gliwice, 44-100, Poland
[2] School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

Abstract: INTRODUCTION Burkholderia cepacia and Stenotrophomonas maltophilia rarely cause infection in immunocompetent individuals. The resistance shown by these organisms to most antibiotic classes and their increasing emergence as nosocomial and opportunistic pathogens has contributed significantly to their recent importance. However, the pediatric literature available on these infections is limited. This retrospective cross-sectional study is a 5-year analysis aimed at exploring the frequency, risk factors, treatment, and antibiotic resistance in B.cepacia and S. maltophilia-infected patients. METHODS: The data of a total of 240 patients with culture-positive results including 34 B.cepacia-infected patients and 206 S.maltophilia-infected patients referring to Children's Medical Center, Tehran from October 2016 to October 2021 was assessed using laboratory and medical records. RESULTS The mean age of patients infected with B.cepacia was ۲.۷ [illegible] predominance was seen in both the groups with 25 male patients (73.5%) in the B.cepacia group and 122 male patients (59.2%) in the S.maltophilia group. Most of the B.cepacia infections were detected in the urology ward (n=13, 38.2%) followed by ICU (n=6, 17.6%) whereas the majority of S.maltophilia patients were detected in the ICU (n=94, 45.6%) followed by the emergency ward (n=40, 19.4%). Only 1 patient had cystic fibrosis in the B.cepacia group(2.94%) while 6 patients had cystic fibrosis in the S.maltophilia group(2.91%). A history of previous antibiotic exposure was observed in 13 B.cepacia-infected patients (38.2%) and 72 S.maltophilia-infected patients (35%). Compromised immune status was observed in 2 B.cepacia infected (5.9%) and 39 patients S.maltophilia infected patients (18.9%). Most of the patients in both groups had an underlying disease,76.47%(n=26) in the B.cepacia group and 73.3%(n=151) in the S.maltophilia group. Posterior urethral valve (PUV) was found to be the most common underlying disease in the B.cepacia group (n=13, 38.24%) while congenital heart disease (CHD) was the most common underlying disease in the S.maltophilia group (n=38, 18.4%). The most common antibiotics used to treat B.cepacia infections were ceftizoxime (n=13, 38.2%), ceftazidime (n=9, 26.5%), cefixime(n=9, 26.5%) and vancomycin (n=9, 26.5%)while the most common antibiotics used to treat S.maltophilia infections were cefotaxime (n=68, 33%), vancomycin (n=96, 46.6%), and trimethoprim-sulfamethoxazole (n=52, 25.2%). In the B.cepacia group, resistance was observed against meropenem (n=15, 44.1%), trimethoprim-sulfamethoxazole (n=12, 35.3%) and ceftazidime (n=10, 29.40%). In the S.maltophilia group, resistance was observed against ciprofloxacin (n=19, 9.2 %), trimethoprim-sulfamethoxazole (n=5, 2.4%), and ceftazidime (n=1, ۰.۵ ٪). [illegible] ۵.۹٪ (n=۲) [illegible]

سخنرانی: محققین جوان

Celiac Disease Screening in the Siblings of Pediatric Patients with a Confirmed Diagnosis: A Cross-sectional Study

Arian Karimi Rouzbahani [1] ℗, Zahra Goudarzi [2], Golnaz Mahmoudvand [1], Samaneh Tahmasebi Ghorabi [3], Shokoufeh Ahmadipour [4] ©

۱ ۱. □□□□□□□ □□□□□□□□ □□□□□□□□□, □□□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□, □□□□□□□□□□□□, □□□□ ۲. □□□□□ □□□□□□,
Lorestan University of Medical Sciences, Khorramabad, Iran
۲ ۱.Bachelor of Nursing Student School of Nursing and Midwifery,Tehran University of Medical Sciences, Tehran , Iran
۲.Students' Scientific Research Center, Tehran University of Medical Sciences, Tehran, Iran
۳ □□□□□ □□□□□□, □□□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□, □□□□□□□□□□□□, □□□□
۴ □□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□, □□□□□□□□□□□□, □□□□

Abstract: Background: The close relatives of patients with celiac disease (CD), particularly their siblings, are known to be at a higher risk for CD development. Objectives: Our aim was to determine the prevalence of CD in siblings of confirmed CD patients in Lorestan province, Iran, in 2020. Methods: In this cross-sectional study, anti-tissue transglutaminase (tTG) antibody levels were measured in 140 siblings of children with CD. Duodenal biopsies were taken to confirm the diagnosis in those with positive serological tests. The subjects' demographic and clinical data were recorded into a pre-designed questionnaire, and the collected data were analyzed by SPSS software version 22 at a significance level of 0.05. Results: Twelve out of 140 subjects (8.6%) tested positive for tTG IgA, eight of them (66.7%) were girls, and most of them (75%) were ≤ 15 years old. Half of the newly diagnosed patients were in the Marsh IIIc category. The Marsh grading had no significant relationship with the serum levels of tTG IgA antibodies (P = 0.319). The most common gastrointestinal symptom was bloating (66.7%), and the most common extraintestinal symptoms were anemia (58.3%) and dental and oral diseases (58.3%). Conclusions: We found a high prevalence (8.6%) of CD among the siblings of children with confirmed CD. Since the early diagnosis of CD can lead to better management, particularly in pediatrics, it is recommended screen patients' family members as soon as the diagnosis of CD is confirmed. Keywords: Celiac Disease, Anti-tTG, Screening

سخنرانی: محققین جوان

Effect of recorded mother’s voice on emergence delirium in Pediatric Intensive Care Unit

Zahra Mazhari [1] © Ⓟ, Kosar abde Keykha [1], Arman Mohammadi [2], Fatemeh Rezaei [3]

[1] □.□□ □□ □□□□□□□□□□ □□□□□□□□ □□□□□□□□, □□□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□□ □□ □□□□□□□□ □ □□□□□□□□□□,□□□□□ □□□□□□□□□□□ □□ Medical Science, Tehran,Iran
[2] □□.□ □□ □□□□□□□□ □□□□□□□□, □□□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□□ □□ □□□□□□□□ □ □□□□□□□□□□,□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ Science, Tehran,Iran
[3] □.□□ □□ □□□□□□□□□□ □□□□□□□□ □□□□□□□□, □□□□□□□□ □□□□□□□□□ □□□□□□□□□□, □□□□□□□□ □□ □□□□□□□□ □ □□□□□□□□□□,□□□□□ □□□□□□□□□□□ □□ Medical Science, Tehran,Iran

Abstract: Background: Delirium is a syndrome with an acute onset that is accompanied by fluctuation and is associated with behaviors that indicate impaired consciousness and cognition. Emergence delirium is a common complication in children. Pharmacological and non-pharmacological methods are effective in preventing the Emergence delirium. Mothers usually spend a large amount of time with their children. Therefore, mothers can be assumed to contribute to their children’s emotional status and neurological development. the recorded mother’s voice, as a method with powerful feasibility and wide applicability, is proven to have a preventive effect on Emergence delirium in several studies to date, but due to the small number of previous studies and individual opposite outcomes, its effectiveness still needed to be confirmed. Method: A systemtic and comprehensive search of relevant published studies was performed without time in major databases such as pubmed, Scopus, Google Scholar search engine. The search strategy included keywords related to Delirium, Pediatric, Mother. in this search were used 24 articles in pediatric. Result: Recorded mother’s voice reduced the incidence of emergence delirium when compared with either no voice or stranger’s voice. In addition, it shortened the post-anesthesia care unit stay time when compared with no voice. It also shortened the extubation time and reduced the incidence of postoperative rescue analgesia. Conclusion: The outcomes suggested that maternal voice could significantly reduce the incidence of Emergence delirium, shorten the post-anesthesia care unit stay time and extubation time, and decrease the incidence of postoperative rescue analgesia. The actual presence of parent at the time of induction was significantly less effective than sedative premedication. Also, listening to the recorded mother’s voice was comparable to intravenous dexmedetomidine in decreasing the incidence and subsiding severity of emergence delirium in children after hypospadias repair surgeries. Keywords: delirium. mother, pediatric

سخنرانی: محققین جوان

Epidemiology of sensitivity to cow's milk protein and its relationship with clinical symptoms in infants under one year of age who referred to the gastroenterology clinic of Shahid Rahimi Hospital in Khorramabad during the years 2020 to 2021

Arian Karimi Rouzbahani [1] ℗, Zahra Goudarzi [2], Samaneh Tahmasebi Ghorabi [3], Shokoufeh Ahmadipour [4] ©

[1] ۱. [illegible], Lorestan University of Medical Sciences, Khorramabad, Iran

[2] ۱.Bachelor of Nursing Student,School of Nursing and Midwifery,Tehran University of Medical Sciences, Tehran , Iran

۲.Students' Scientific Research Center, Tehran University of Medical Sciences, Tehran, Iran

[3] [illegible]

[4] [illegible]

Abstract: Objective: Cow's milk allergy is an immunological reaction to the proteins in cow's milk, which is associated with a wide range of digestive, skin and respiratory disorders. Its prevalence is around 1.9 to 7.5%, and its symptoms appear in most cases from the first months of life. Therefore, the present study aims to investigate the epidemiology of sensitivity to cow's protein and its relationship with clinical symptoms in infants under one year of age. Methods: This cross-sectional study of 90 infants under one year of age with cow's milk protein allergy who had referred to the gastroenterology clinic of Rahimi Khorramabad Hospital; It was studied as available samples. The tool was to collect patients' files, from which the variables of demographic information of infants, feeding type and clinical symptoms related to sensitivity to cow's milk protein were extracted. Results: In this study, the average age of infants was 4.77 ± 2.9 months. Most of the infants in the studied community were female (55.6%) and were fed with breast milk (57.8%). Family history of allergy was present in 23.3% of infants. The duration of the onset of clinical symptoms in infants was 62.78 ± 5.14 days, and the most common clinical symptom related to sensitivity to cow's milk protein was the presence of blood in stool (72.2%). In this study, there was no significant relationship between age and gender with clinical manifestations related to sensitivity to cow's milk protein. Conclusion: The results of this study showed that the frequency of allergy to cow's milk protein in the studied population was 18% and the most common clinical symptoms; Gastrointestinal symptoms followed by skin symptoms. Also, the most common digestive symptoms were the presence of blood in the stomach and then diarrhea. Despite the absence of a statistically significant relationship between the investigated components, the negative results can also be a starting point for further investigation.

سخنرانی: محققین جوان

Investigating the effects of the covid-19 pandemic on various aspects of mother and child health: a review study

[1] نگین کیامهر ,Ⓟ [1] امیررضا عسگری ,© [1] ساناز سلیمانی

[1] کمیته تحقیقات دانشجویی دانشکده پزشکی، دانشگاه علوم پزشکی ایران، ایران، تهران

خلاصه مقاله :مقدمه: با شروع پاندمی کووید-۱۹ یکی از گروه‌های بسیار حساس که تحت تاثیر بار سنگین تحمیل‌شده ناشی از این پاندمی بر جنبه های مختلف سلامت از جمله ابعاد جسمانی، روانی، اجتماعی و اقتصادی قرار گرفتند ، مادران (از جمله مادران باردار)و فرزندانشان بودند.در این مطالعه مروری برآنیم به بررسی اثر پاندمی کووید-۱۹ بر هر یک از جنبه های سلامت مادر و فرزند بپردازیم .متود: در این مطالعه مروری سرچ و جمع‌آوری داده‌ها بر اساس پروتکل PRISMA و با کلمات MESH شامل "Mental Health"، "Mother"، "Maternal"، "Baby"، "Child"، "Infant"، "Pregnant"، "Toddlers"، "Physical Health"، "Economics"و "Social Health" و معادل فارسی آن ها در پایگاه‌های فارسی و انگلیسی (Pubmed, Scopus, Google Scholar, Civilica, SID)در بازه زمانی ۲۰۲۰ تا ۲۰۲۳ انجام شد. معیارهای ورود شامل مطالعات سیستماتیک و متاآنالیز ،مطالعات کوهورت،کیس-کنترل، RCTو مطالعات کیفی و معیارهای خروج شامل چکیده های بدون متن اصلی مقاله و مقالات خارج از بازه زمانی میباشد. به طور کلی ۵۰ مقاله استخراج شد که از این تعداد براساس مورد نظرحذف شد وتعداد ۳۵ مقاله وارد مطالعه گردید .یافته ها :جنبه روانی: ترس از مرگ، اضطراب بابت سلامت جنین درمادر باردار، اضطراب از جهت تامین مراقبت های لازم برای فرزند، ترس از تنهایی و عدم دریافت حمایت، ترس از ابتلا مادر یا فرزند یا هر دو به کووید، اضطرای ناشی از نبود اطلاعات کافی درباره مقابله با کووید-۱۹ از جمله مهم ترین تاثیرات بیماری بر سلامت روان مادران بودند . جنبه جسمانی :از جمله حساس ترین گروه های در معرض خطر ابتلا به کووید-۱۹، مادران باردار و اطفال بودند. در مادران بارداری در سه ماهه سوم بارداری بیشترین خطر انتقال بیماری به جنین وجود داشت. بیشترین راه انتقال بین مادر و فرزند در اثر تماس با آئروسلها و یا مخاطات آلوده به ویروس گزارش شد .جنبه اجتماعی: اثرات رعایت فاصله فیزیکی و قرنطینه خانگی تاثیر به سزایی در انزوای مادر و کودک و کاهش ارتباطات موثر داشت. اثرات پاندمی بر این بعد با بعد روانی ارتباط تنگاتنگی دارد .جنبه اقتصادی : پاندمی باعث افزایش ناامنی مالی در مادران جدید شد. این موضوع با توجه به خطر بیشتر سلامت روانی ضعیف‌تر و پیامدهای آن برای شیردهی و سلامت و رشد کودک بسیار نگران‌کننده بود. بیشترین آسیب بر مادرانی وارد شد که از قشر ضعیف‌تر جامعه بودند . نتیجه گیری :پاندمی تمامی ابعاد سلامت مادران (به خصوص مادران باردار) و فرزندان را تحت تاثیر قرار داد. بررسی اثرات بلند مدت پاندمی بر هر یک از این ابعاد(به‌ویژه بعد روانی) و تلاش برای بهبودی هرچه بهینه‌تر آن نیازمند مطالعات دقیق‌تر و گسترده‌تری میباشد .

سخنرانی: محققین جوان

Investigating the importance of screening tests related to genetic diseases in newborns

فاطمه یاری [1] © Ⓟ

[1] دانشجوی پرستاری،مرکز تحقیقات مراقبتهای بالینی و ارتقاءسلامت،واحد کرج،دانشگاه آزاد اسلامی،کرج،ایران

خلاصه مقاله :چکیده زمینه و هدف:بیماری های مرتبط با نوزادان در زمینه های مختلف اعم از ژنتیکی,عفونت های دوران جنینی,و مشکلات در حین زایمان بسیاربا اهمیت است؛ به دلایل مختلف اعم ازهزینه های بهداشتی متعاقب آن و ضربه های روانی که به خانواده ها تحمیل می شود و همچنین آینده یک انسانی که میتوانست بهتر باشد.دراین پژوهش هدف آن است که بتوانیم از دانش و تکنیک های پیشرفته در سیستم بهداشتی برای آینده ای سلامت گام برداریم .روش بررسی:این مقاله یک مطالعه مروری بوده که با بررسی متون و مقالات موجود در این رابطه صورت گرفته است .یافته ها:یکی از مباحث مطرح پزشکی ,غربالگری ژنتیکی است و طبق تعریف سازمان جهانی بهداشت ,کاربرد این تست ها,شناسایی و تشخیص بیماری یا نقص شناخته نشده در افرادی است که علایم بیماری در آنها بروز نکرده است.باید متذکر شد که تست غربالگری بیماری قطعی را نشان نمیدهد بلکه درصد و احتمال ابتلا را نشان میدهد و از این جهت با تست تشخیصی که بودن یا نبودن بیماری را نشان میدهد متفاوت است.به طور مثال در بیماری مانند تالاسمی که ممکن است والد ناقل باشد ؛به احتمال ۲۵٪فرزند بیمارخواهد داشت که درصد کمی هم نیست.درحال حاضر با انواع تست ها و دستگاه های جدید بیماری های مختلف که حتی در سن های بالا مانند هانتیگتون بروز پیدا خواهد کرد را میتوان شناسایی کرد؛مخصوصا برای بیماری های ژنتیکی مثل بیماری های عصبی عضلانی مانند سندرن دوشن یا سیستیک فیبروزیس که به صورت مغلوب به ارث می رسدودر ایران نیز شایع است .بیماری هایی مانند شکاف لب و یا سندرم داون که در بدو تولد به آشکارا نمایان میشود نیز نمونه ای ازاین موارد است .این بیماری ها با تست های غربالگری مشخص خواهند شد .نتیجه گیری: بنابراین با توجه به پیشرفت روز افزون علم ,میتوان از بروز بسیاری از بیماریهای که ممکن است با ازدواج افراد رخ دهد مطلع شد و تا جای ممکن براساس قوانین کشور,مردم را نسبت به احتمالات آگاه کرد و مجوز انواع مداخلات درمانی اعمم سقط ویا لقاح مصنوعی و مواردی ازاین قبیل را, برای جنین هایی سالم تر و جامعه ای سالم تر فراهم آورد.همیشه پیشگیری بهتر از درمان است .واژه کلیدی: غربالگری، نوزاد ، خانواده ، پیشگیری

سخنرانی: محققین جوان

Investigating the relationship between spiritual health and care burden of mothers on the anxiety of children with cancer

[3] بهناز علافچی ,[2] محمد حسین ستاری ,℗ © [1] زهرا نهاوندی

[۱] دانشجوی کارشناسی پرستاری، کمیته تحقیقات دانشجویی دانشکده علوم پزشکی اسدآباد،اسدآباد، ایران
[۲] مربی ، گروه آموزشی پرستاری، دانشکده علوم پزشکی اسداباد، اسداباد، ایران
[۳] دکتری آمار زیستی، مرکز تحقیقات مدلسازی بیماری های غیر واگیر، دانشگاه علوم پزشکی همدان، همدان، ایران

خلاصه مقاله :مقدمه: در سال ۲۰۱۹ حدود ۱۷/۲ میلیون مورد سرطان جدید و ۱۰ میلیون مرگ ناشی از سرطان در سراسر جهان ثبت شد. سرطان دومین علت مرگ ومیر در بین کودکان یک تا چهارده ساله است. در افراد سرطانی، درمان های مرتبط با سرطان و آسیب پذیرتر بودن از نظر جسمی بطور کلی منجر به بار بالای استرس روانی می‌شود و خطر ابتلا به اختلالات روانپزشکی را افزایش می‌دهد. اضطراب پاسخی رایج به عدم قطعیت در تشخیص و پیش آگهی بیماری مزمن و همچنین به جنبه های مختلف درمان است. والدین کودکان سرطانی به علت نیاز کودک به مراقبتهای فراوان و دریافت بخش وسعی از درمان کودک در منزل، مسوِلیت هایی بیش از مسئولیت والدینی دارند؛ که به آن بار مراقبتی می‌گویند. بار مراقبتی در اثر عدم تعادل بین تقاضای مراقبت و حمایت مراقبت دهنده اتفاق می‌افتد. یافته ها نشان می‌دهد که مراقبان بیماران مزمن به معنویت به عنوان یک منبع مهم اعتماد می‌کنند. سلامت معنوی یکی از ابعاد سلامت است که باعث هماهنگی بین سایر ابعاد سلامت می‌شود و از این طریق باعث افزایش توان سازگاری و کارکرد روانی می‌گردد. برخی پژوهش ها نشان دهنده تاثیر سلامت معنوی بر بار مراقبتی است. بنابراین توجه به سلامت معنوی با تحت تاثیر قرار دادن بار مراقبتی می‌تواند بر افزایش کیفیت و سلامت زندگی مراقب و کاهش اضطراب کودکان موثر باشد .
مواد و روش ها: مطالعه حاضر از نوع توصیفی- همبستگی است. دراین مطالعه ۲۰۰ نفر از کودکان سرطانی بستری در بیمارستان بعثت همدان درسال۱۴۰۰ و مادران مراقب آنان به روش نمونه گیری در دسترس وارد مطالعه شدند. ابزار پژوهش شامل پرسشنامه جمعیت شناختی، پرسشنامه سلامت معنوی پولوتزین و الیسون (۱۹۸۲) که در پژوهش فاطمی و همکاران(۲۰۱۱) روایی از طریق روایی محتوا و پایایی ضریب آلفای کرونباخ ۸۲ بود، پرسشنامه اصلاح‌شده مراقبت کودکان سرطانی کیگان ولز (۲۰۰۲) با روایی ۷۰ درصد و پایایی ۸۰ درصد و پرسشنامه اضطراب کودکان اسپنس نسخه کودک (۱۹۹۸)که روایی این مقیاس توسط اسپنس تایید شد و پایایی با ضریب آلفای کرونباخ برای اضطراب کلی۹۲ گزارش گردید .یافته ها: داده ها با استفاده از نرم افزار spss نسخه ۲۴ تجزیه و تحلیل شد.نتایج نشان داد که سلامت معنوی با بار مراقبتی (p-value=0.003)و میزان اضطراب کودکان (p-value0.001) دارای رابطه معنا داری بود. همچنین بین بار مراقبتی و سطح اضطراب رابطه مستقیمی وجود داشت .(value=0.003) نتیجه گیری: معنویت درمانی می‌تواند بر کاهش بار مراقبتی و سطح اضطراب کودکان اثر بگذارد .

سخنرانی: محققین جوان

Preconception antibiotic use and decreased fecundability: confounding by indication?

[2] فرزانه خدابنده ,℗ © [1] مهسا احمدی

[1] عضو کمیته تحقیقات دانشجویی دانشگاه علوم پزشکی خراسان شمالی
[2] هیئت علمی علوم پزشکی خراسان شمالی

خلاصه مقاله :خلاصه مقدمه :این مطالعه هدف از ارزیابی ارتباط بین استفاده از آنتی بیوتیک قبل از بارداری و باروری، احتمال بارداری در هر چرخه ماهیانه بود. مطالعات بین المللی دانمارکی، SnartForaeldre.dk، ۹۴۶۲ شرکت کننده زن از ۲۹ سال و بیشتر را درگیر کرد. استفاده از آنتی بیوتیک توسط دستورالعمل های پر شده است که از ریسک ملی دانمارک دریافت شده است، با استفاده از کد های شیمیایی آناتومیک درمان، و به عنوان معرض در زمان متغیر مدل شده است .وضعیت بارداری در سوالنامه های پیگیری زنان هر ۸ هفته تا ۱۲ ماه یا تا بارداری گزارش شد. نسبت باروری (FR) و دوره اعتماد ۹۵٪ (CI)با استفاده از مدل های رجوع احتمالی نسبتا محاسبه شد، با تنظیم برای سن، سن شریک، آموزش، سیگار کشیدن، مکمل اسید فلیک، شاخص وزن بدن، پارتی، معمول چرخه، زمان رابطه جنسی، و عفونت های انتقال جنسی .در تمام چرخه های مشاهده، درصد از شرکت کنندگان که حداقل ۱ دستورالعمل آنتی بیوتیک را دریافت کردند ۱۱,۹٪ بود. ۸,۶٪ برای پنسیلین ها، ۲,۱٪ برای سلفونامیدها و ۱,۸٪ برای مکولیدها. بر اساس روش های جدول زندگی، ۸۶,۵ درصد از شرکت کنندگان در ۱۲ چرخه پیگیری بارداری را تجربه کردند. استفاده اخیر از آنتی بیوتیک های پیش از زایمان با کاهش باروری مرتبط بوده است (R1 نسبت به هیچ FR1/40.86 :تنظیم شده؛ CI ۹۵٪، ۰,۷۶-۰,۹۹ .(برای شرکت کنندگان که پنسیلین ها، سلفونامیدها و یا مکولید ها را مصرف می کردند، FRهای اصلاح شده ۹۵۰,۹۷) ٪ CI، ۰,۸۳-۱,۱۲(، ۰,۶۸ (95٪ CI, 0.47-0.98) و ۰,۵۹ CI % ۹۵) ، ۰,۳۷-۰,۹۳ (بود .نتیجه گیری :این مطالعه به این نتیجه رسید که استفاده از آنتی بیوتیک ها، به طور خاص سلفونامیدها و مکولیدها، در مقایسه با عدم استفاده، با کاهش باروری مرتبط بود. ترکیب های مشاهده شده ممکن است به صورت قابل توجهی با اختلالات به دلیل نشانه ها توضیح داده شود، زیرا در مطالعه اطلاعاتی در مورد نشانه های آنتی بیوتیک های موردنظر وجود نداشت

سخنرانی: محققین جوان

Relationship between liver enzyme levels and clinical status of patients admitted to the pediatric ward: A cross-sectional study

Arian Karimi Rouzbahani [1] ℗, Zahra Goudarzi [2], Samaneh Tahmasebi Ghorabi [3], Shokoufeh Ahmadipour [4] ©

[1] ۱. [illegible], Lorestan University of Medical Sciences, Khorramabad, Iran
[2] ۱.Bachelor of Nursing Student, School of Nursing and Midwifery,Tehran University of Medical Sciences, Tehran , Iran
۲.Students' Scientific Research Center, Tehran University of Medical Sciences, Tehran, Iran
[3] [illegible]
[4] [illegible]

Abstract: Background & Objective: Most liver diseases are diagnosed accidentally during routine tests. Liver function tests cannot be easily ignored because some of these patients may develop a progressive and life-threatening liver disease in the future. Materials and Methods: This cross-sectional study was conducted among patients over 30 days hospitalized in the pediatric ward and referred to the gastrointestinal clinic of Shahid Rahimi Hospital in Khorramabad during 2019-۲۰۲۰ according to the tests recorded in the hospitalization file of patients with elevated liver enzymes. Based on the history recorded in previous files and also taking the history of hospitalized patients during the research, we will look for the causes of increased liver enzymes. Findings: In this study, ۶۴ [illegible] categories. Causes of liver disease include cirrhosis, sclerosing cholangitis, autoimmune hepatitis, fatty liver, choledochal cyst, hepatitis A, billiary atresia, PF1C, choledochal stone, Gilbert syndrome, portal vein thrombosis, and crigler-najjar. Metabolic causes include tyrosinemia, hyperphosphatasia, GSD, hyperlipidemia syndrome, CF, alagille syndrome, Wilson, alpha 1 antitrypsin deficiency. Infectious causes include covid- 19, herpes gingivostomatitis, Kawasaki and infectious mononucleosis. As well as Seizures, Duchenne, celiac disease, cardiomyopathy, scorpion stings, hypothyroidism, favism, patients who died before the final diagnosis, and patients who did not reach a definitive diagnosis by the end of the study were classified as miscellaneous. Conclusion: The most common cause of elevated liver enzymes was hepatic causes and secondarily metabolic causes. Increased liver enzymes were significantly associated with the disease process, the method of diagnosis. While there was no significant relationship with age and sex of the subjects, visit status, medical history, family history, history of maternal illness during pregnancy, parental relationship. As well as the cause of increased liver enzymes was not significantly associated with ALT, AST, ASMA, CERULOPLASMIN, BILI, PT, INR, LKM, G6PD, TSH, TG, GGT, IGG and AAT. While it was significantly associated with ALP, CPK and LDH levels. Keywords: ALP, ALT, AST, Cholestasis, Child, Enzyme, GDM, Hepatitis, Icter, Khoramabad, Liver, Pationt.

سخنرانی: محققین جوان

Supportive care in a patient with Alstrom syndrome with hyperphenylalaninemia and sleep problems

[2] دکتر شبنم جلیل القدر ,℗ © [1] مرسده قدسی

[۱] , درمرکز طبی کودکان بخش خواب نیروی درمانی
[۲] دانشگاه علوم پرشکی قزوین

خلاصه مقاله :سندرم آلستروم یکی از نادرترین اختلالات ژنتیکی با جهش اتوزومال مغلوب در ژن ALMS1 در جهان است. تظاهرات قابل توجه شامل چاقی، هیپرانسولینمی و دیابت نوع ۲، هیپرگلیسمی، کاردیومیوپاتی، مشکلات قلبی عروقی، ناشنوایی نیستاگموس و کوری ومشکلات کبد است. سندرم آلستروم غیرقابل درمان است و برخی از تظاهرات بیماری کنترل می شود تا از عوارض بعدی در آینده جلوگیری شود .کیس دختر ۷ ساله با که تا ۲ ماهگی رشد مطلوب داشته است.و به دنبال ان دچار هیپر فاژی وافزایش وزن تا صدک ۹۵ درصد میشود.بیمار به طور مکرر با عفونت ریه حالت اظطرابی و افسردگی و بیخوابی شبانه مکرربستری میشود که پاسخ مناسبی به درمان نداشته است . . در نهایت با انجام تست پلی سومنوگرافی منشا اختلالات خواب و مشکلات تنفسی بیمار مشخص شد. در نهایت کودک با استفاده از دستگاه تنفس مصنوعی متحرک به خواب مناسبی دست یافت و شرایط تنفسی و اکسیژن رسانی کودک بهبود یافت. با استفاده از ونتیلاتور و سیستم CPAP می‌توانیم او را بدون اکسیژن و وضعیت پایدار از بستری شدن در بیمارستان رها کنیم. با تست خواب مجدد و بررسی ان و دریافت ونتیلاتور سیار تمامی حالات کنترول و معاینات چشمی پیشرفت بیشتری دراین این مدت نداشته است. .بسیاری از بیماران سندرمیک و متابولیک و افرادی چاقی دارند از هیپوکسی مخفی را تجربه میکنند که علایم ان را کودک نمیتواند بیان کند و عوارض ان در خواب شبانه کودک منتقل میشود و ایجاد بیقراری در طی روز دارد. اهمیت این گزارش موردی در این است که مقالات زیادی در مورد پیگیری مشکلات خواب کودکان و تأثیر آن بر ایجاد هیپوکسی شبانه وجود ندارد. با توجه به اینکه هیپوکسی میتواند در سیر بدتر شدن ان نقش داشته باشد اهمیت مطالعات تست خواب در عدم پیشرفت و کنترول بیماری نقش دارد .

سخنرانی: محققین جوان

Supportive care in a patient with Alstrom syndrome with hyperphenylalaninemia and sleep problems

Mersedeh Ghodsi [1] © Ⓟ, Shabnam Jalilolghadr [2], Fatemeh Saffari [3], Mehdi Alizadeh [3], AliReza Taremiha [3], Marjan Ghodsi [4]

[1] □□□□□ □□□□□□□□ □□□□□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□□□□□ □□□□□□□□ □□□□□□□□□□□□ □□□□,
Qods Hospital, Qazvin University of Medical Sciences, Qazvin, Iran. Iran University of Medical Sciences, Tehran University of medical Sciences.Tehran, Iran
[2] - □□□□□□□□□□ □□ □□□□□□□□□□, □□□□□□ □□□□□□□□□ □□□□□□□□□□□, □□□□□□□□□□□ □□ □□□□□□□□□□□, □□□□□□ □□ □□□□□□□□□, □□□□□□□□□ □□□□□□□ □□□□□□□□□
Center Research Institute for Prevention of Non-communicable Diseases, Qazvin University of Medical Sciences, Qazvin, Iran.
[3] □□□□□□□□□ □□□□□□□ □□□□□□□□□ □□□□□□□ □□□□□□□□□ □□□□□□□□□□ □□□□ □□□□□□□□□□□ □□ □□□□-□□□□□□□□□□□□□□ □□□□□□□□□, □□□□□□□
University of Medical Sciences, Qazvin, Iran
[4] □□□□□□□ □□ □□□□□□□□□. □□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□ □□□□□□□□□

Abstract: ABSTRACT: Alstrom syndrome is one of the rarest genetic disorders with an autosomal recessive mutation in the ALMS1 gene in the world. Significant manifestation include obesity, hyperinsulinemia and type 2 diabetes, hyperglycemia, cardiomyopathy, cardiovascular problems, nystagmus deafness and blindness, and liver stenosis. Alstrom syndrome is incurable besides some manifestations of the disease controlled to prevent further complications in the future. In this article, we annoy a patient with Alstrom complications, who have had cardiovascular and hyperphenylalaninemia since birth. Following the onset of other symptoms of diabetes and ophthalmology and skeletal problems, very high weight, blindness, and hearing impairment at seven age, her recurrence of respiratory problems because of severe complications of obesity, snoring and the respiratory tract problems and sleep disorders occurs. The patient throws a severe disability. Ultimately, by performing a polysomnography test, the source of the patient's sleep disorders and breathing problems were determined. Finally, the child achieved proper sleep using a mobile ventilator, and the child's breathing and oxygenation conditions improved. Using the ventilator and the CPAP system, we could release him from hospitalization with no oxygen and a stable condition.

سخنرانی: محققین جوان

The effect of antibiotic use by women before pregnancy on their fertility: a narrative review

مهسا احمدی [1] ©℗, فرزانه خدابنده [2], راحله عسلی [2], الهه بهرامی وزیر [3]

دانشجویی عضو کمیته تحقیقات [1]
هیئت علمی دانشگاه علوم پزشکی خراسان شمالی [2]
هئیت علمی دانشگاه علوم پزشکی ایلام [3]

خلاصه مقاله :مقدمه: استفاده از آنتی بیوتیک¬ها در سراسر جهان بخصوص در بین زنان سنین باروری بسیار رایج است. مصرف اکثر آنتی بیوتیک¬ها در دوران بارداری بی¬خطر تلقی می¬شود اما در مطالعات اخیر بین مصرف برخی آنتی بیوتیک¬ها و افزایش خطر ناباروری و سقط جنین ارتباط معنی¬دار مشاهده¬شده¬است. از این¬رو، مطالعه مروری حاضر با هدف بررسی تاثیر مصرف آنتی‌بیوتیک‌ها قبل از بارداری و قدرت باروری در زنان انجام¬شد .روش جست¬وجو: در راستای هدف مطالعه مروری حاضر، جستجو در پایگاه¬های اطلاعاتیScopus و ،Pubmed ،Proquest ،Science Direct ،ISC ،Irandoc ، Google Scholar Magiranبا کلید واژه‌های آنتی بیوتیک، باروری، قدرت باروری، بارداری، باروری زنان بدون محدودیت سال انجام¬شد .یافته¬ها: نتایج یک مطالعه در دانمارک نشان¬داد که زنانی که در کارخانه تولید آنتی¬بیوتیک یا داروخانه¬ها کار می¬کردند، مدت زمان باروری آنها افزایش یافته¬بود. نتایج دو مطالعه دیگر نشان¬داد که استفاده طولانی¬مدت از آنتی بیوتیک ممکن است باعث اختلال در میکروبیوم دستگاه تناسلی شده و با افزایش اسیدیته، تحرک اسپرم را مختل¬کند. اثر ضد¬التهابی برخی از آنتی بیوتیک¬ها ممکن است روند التهابی لانه¬گزینی در رحم را مختل¬کند. ارتباط بین استفاده از تری متوپریم یا کلاریترومایسین و افزایش خطر سقط جنین نیز در یک مطالعه گزارش شده¬است. فولات در بلوغ تخمک، لقاح و رشد جنین ضروری است و سولفونامید، از جمله تری متوپریم، به عنوان یک آنتاگونیست فولات عمل می¬کند و به طور معمول برای UTI تجویز می¬شود. بنابراین، ممکن است استفاده از آنتی¬بیوتیک¬های آنتاگونیست فولات با کاهش باروری همراه باشد. در مطالعه¬ای دیگر ارتباط بین استفاده از ماکرولید و کاهش قابلیت باروری در مقایسه با انواع دیگر آنتی-بیوتیک¬ها قوی¬تر بود. اگرچه مکانیسم¬های اثر به طور کامل شناخته¬نشده¬است، این تنوع در ارتباط ممکن است به مکانیسم باکتریواستاتیک ماکرولیدها که رشد سلولی را مهار می¬کنند و مکانیسم باکتری¬کشی پنی سیلین¬ها و سولفونامیدها در باکتری¬ها مرتبط باشد. همچنین نتایج یک مطالعه در سال ۲۰۲۳ ارتباط بین استفاده از آنتی¬بیوتیک و کاهش قابلیت باروری در زنان بالاتر از ۳۰ سال و شاخص توده بدنی بالاتر از ۲۵ را گزارش¬کرده¬بود .نتیجه¬گیری: نتایج حاصل از مطالعات نشان¬داد که استفاده قبل از بارداری از آنتی¬بیوتیک¬ها، به ویژه سولفونامیدها و ماکرولیدها، با کاهش باروری در مقایسه با عدم¬استفاده همراه¬بود. اما از آنجایی که در مطالعات اطلاعاتی در مورد اندیکاسیون¬های مصرف آنتی¬بیوتیک¬های تجویز شده وجود¬نداشت، در¬نتیجه، نمی‌توانیم اثر دارو را از اثر عفونت زیربنایی جدا کنیم زیرا در شرایط خاص، آنتی¬بیوتیک¬ها ممکن است برای باروری زنان مفید باشند، زیرا شرایط مرتبط با ناباروری، مانند واژینوزباکتریایی و بیماری التهابی لگن را درمان می¬کنند .کلیدواژه¬ها: آنتی بیوتیک، باروری زنان، بارداری

سخنرانی: محققین جوان

The effect of low-calorie sweeteners in children with type 1 diabetes: a systematic review

Fahime Ansari Fard [1] © ℗

[1] [illegible], Medical Sciences, Tehran, Iran.

Abstract: Type 1 diabetes affects approximately 1 in 500 children and requires careful management to prevent or delay the development complications. A common nutritional strategy for diabetes management is to replace sugar with low-calorie sweeteners (LCS). this type of sweetener is commonly consumed by children with type 1 diabetes. LCS are with minimal or no carbohydrates or energy. They are known by the Food and Drug Administration as food additives and are generally recognized as safe. LCS approved in the United States include acesulfame K, aspartame, neotame, saccharin, stevia, and sucralose. Since the role of non-nutritive sweeteners in the health of children with type 1 diabetes is unknowned, this study systematically investigated the effect of these sweeteners on the health of these children. Two databases of Pubmed and Web of Science were searched with this strategy: (sucraloseTitle/Abstract] (OR (Neotame [Title/Abstract]) OR (saccharine[Title/Abstract]) OR (stevioside[Title/Abstract]) OR (OR (acesulfame potassium[Title/Abstract]) OR (aspartame[Title/Abstract]) OR("non nutritive sweeteners"[Title/Abstract]) OR) low-calorie sweeteners [Title/Abstract AND(Diabet* [Title/Abstract])) from the beginning to November 2023. After removing the duplicate articles, by reading the title and abstract of the articles, unrelated articles, animal, reviews, case reports and pilot studies were excluded. Then, the full text of the remaining articles was reviewed. Unfortunately, from 50 studies, no clinical trial or cohort study had investigated the effect of this type of LCS in children with type 1 diabetes. Other studies suggest that children with diabetes who eat a well-balanced diet may be able to prevent excessive glucose increase by substituting low-calorie sweetened beverages for sugar-sweetened beverages. On the other hand, some studies said that the effect of LCS on health and metabolism and the overall diet are not well known. Although LCS may be useful for reducing energy intake and weight management in the short term, long-term consumption of LCS is associated with an increased risk of chronic diseases such as cardiovascular disease and stroke. LCS can interfere with early learning processes that act to predict the natural consequences of consuming sugars, leading to overeating, reduced secretion of hormones such as GLP-۱, [illegible]ed glucose-insulin homeostasis. Furthermore, artificial sweeteners can alter the gut microbiota in rodent models and humans and can contribute to glucose dysregulation. As a result, due to the lack of studies on the effect of LCS in children with type 1 diabetes, conducting clinical trials and cohort studies to investigate the effects of this type of sweeteners on glucose-insulin homeostasis, intestinal microbiota disruption and inflammatory pathways are recommended.

سخنرانی: محققین جوان

The Role of Alpha-Synuclein in Neurodevelopmental Diseases

Sanaz Bordbar [1] ℗, Dorsa alijanzadeh [2], Noosha Samieefar [2], Elham Pournakhtyaran [3], Nima Rezaei [4] ©

[1] ۱. □□□□□□ □□ □□□□□□□□, □□□□□□ □□□□□□□□□□ □□ □□□□□□□ □□□□□□□□, □□□□□□, □□□□ ۲. □□□□□□□ □□ □□□□□□□□□□□□□□□□□□□ □□ Neonates and Infants (NINI), Universal Scientific Education and Research Network (USERN), Tehran, Iran

[2] ۲. □□□□□□□ □□ □□□□□□□□□□□□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□□□ (□□□□), □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ □□□ □□□□□□□□ Network (USERN), Tehran, Iran 3. School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran 4. USERN Office, Shahid Beheshti University of Medical Sciences, Tehran, Iran

[3] ۲. □□□□□□□ □□ □□□□□□□□□□□□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□□□ (□□□□), □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ □□□ □□□□□□□□ Network (USERN), Tehran, Iran 3. School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran 4. 5. Department of Pediatric Neurology, Pediatrics Center of Excellence, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Iran

[4] ۲. □□□□□□□ □□ □□□□□□□□□□□□□□□□□□□ □□ □□□□□□□□ □□□ □□□□□□□ (□□□□), □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□ □□□ □□□□□□□□ Network (USERN), Tehran, Iran 3. School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Abstract: Neurodevelopmental disorders are a group of diseases with cognitive, motor impairment, and emotional development deficits. Alpha-synuclein (α-syn) is a synaptic protein involved in transmission and neurodevelopment. This protein is previously shown to be associated with several disorders, including Parkinson's disease. Furthermore, a close link between neurodevelopmental disorders and Parkinson's has also been found. Changes in synaptic function have been noticed in neurodevelopmental disorders, including autism. Impaired neurogenesis and related cognitive problems have been associated with altered expression of α-syn. Various studies reported α-syn in different body fluids and tissues such as blood and serum. Alpha-synucleinn can help in better understanding the pathogenesis of neurodevelopmental diseases and early diagnosis. This review aims to go over the recent advances in the role of α-syn in the pathophysiology of neurodevelopmental disorders and its value as a diagnostic biomarker. Keywords: neurodevelopmental disorder, autism, ADHD, alpha-synuclein.

سخنرانی: محققین جوان

Using types of artificial intelligence to reduce anxiety in children

© Ⓟ [1] سید علی موسوی

[1] دانشجوی کارشناسی پرستاری،کمیته تحقیقات دانشجویی دانشکده پرستاری، دانشگاه علوم پزشکی آجا، تهران، ایران

خلاصه مقاله :مقدمه :اضطراب ازجمله مشکلاتی است که علاوه بر تحمیل رنج به مددجویان باعث کندی روند درمان آنان می شود .کودکان نیز به علت ویژگی های روانی دوران کودکی و تاب آوری کمترنسبت به بزرگسالان متاثرتر هستند.طبق مطالعات بهره گیری از تصاویرواقعیت مجازی و همچنین بازی درمانی می تواند از میزان اضطراب کودکان بکاهد و همکاری آنان را بیشتر کند .روش: این مطالعه به روش مرور نظام مند متون و مقالات معتبر موجود انجام شده است.معیارهای ورود مطالعات شامل: مقالات اصیل پژوهشی،کارآزمایی های بالینی شاهد دار،مقالات مروری،مقالات به زبان انگلیسی و فارسی وتمامی مقالات منتشر شده مرتبط طی سالهای ۱۳۹۰ الی۱۴۰۱ بوده ومعیار های خروج مطالعات شامل: عدم دسترسی به متن کامل، گزارش سردبیر بوده است. جستجو در پایگاه های اطلاعاتیPubMed ، Scopus، SIDو Magiran و موتور جستجوی Google Scholar با استفاده از کلمات کلیدی انجام شد. در مجموع، ۶۵ مقاله بازیابی شد. پس از حذف مقالات تکراری و غربالگری براساس هدف مطالعه، تعداد ۱۲ مقاله وارد مطالعه شده و مورد تجزیه و تحلیل قرار گرفتند .یافته ها:گوگل یک پروژه به نام آزمایش با گوگل را راه‌اندازی کرده است که به کودکان اجازه می‌دهد تا با کمک هوش مصنوعی ، بازی‌بسازند. چنین بازی‌هایی می‌توانند خلاقیت کودکان را بالا ببرندو اضطراب شان را نیزکاهش دهند.یادگیری ماشینی شاخه دیگری از هوش مصنوعی است که به کامپیوترها قابلیت یادگیری از داده‌ها را می‌دهد. چنین فناوری‌ای می‌تواند در تشخیص و پاسخ به نیازهای روانشناختی کودکان به کار گرفته شود. برای مثال، Cognimatesیک پلتفرم آموزش هوش مصنوعی برای کودکان است که به آن‌ها اجازه می‌دهد تا با استفاده از بلوک‌های برنامه‌نویسی، پروژه‌های هوش مصنوعی خود را بسازند Cognimates به کودکان کمک می‌کند تا در حالی که با هوش مصنوعی آشنا می‌شوند، تفکر منطقی، حل مسئله و همکاری را نیز یاد بگیرند .Tensor flow- یک نرم‌افزار است که توسط شرکت گوگل طراحی شده است .Tensor flow می‌تواند در توسعه و بهبود سیستم‌های هوش مصنوعی که برای کاهش اضطراب کودکان طراحی شده‌اند، مفید باشد. برای مثال، Teachable Machineمی‌تواند بدون نیاز به هیچ کدنویسی به کودکان کمک کند تا با استفاده از دوربین وب، صدا یا داده‌های دستی، بازی‌های سرگرم‌کننده و خلاقانه را مبتنی برسلایق و ویژگی های شخصیتی با هوش مصنوعی بسازند . نتیجه گیری: درصورت تعامل دوجانبه بین متخصصان علوم پزشکی وهوش مصنوعی وبهره گیری از هوش مصنوعی در درمان ومراقبت از کودکان بتواندعلاوه برتوجیه اقتصادی، تاثیر اضطراب بر روند درمانی را نیز مدیریت کرد و تکنیک ها موثرتر وخلاقانه تر درمانی را مبتنی برویژگی های شخصیتی کودکان ابدا کرد .کلمات کلیدی:هوش مصنوعی،کودکان،اضطراب،درمان

پوستر: نورولوژی روانپزشکی و تکامل و خواب

STATINs: Golden Members of Multipurpose Drugs Box

Sima Binaafar [1] © ℗

[1] [illegible]

Abstract: Since April 16, 1999, that the idea of "New Era of Personalized Medicine," appeared, a new road was opened to the effective therapy. At the same time, progress in the study of pathomechanisms of diseases and its advances bring a revolution to this term. It is widely believed that the mechanism of a disease not only does not limit to a pathway but also are mostly responsible for a variety of pleiotropic phenotypes. The "INFLAMMATION" is a shining paradigm, while its trace is observable in different diseases, from neurodegenerative diseases alike multiple sclerosis and epilepsy to cancers. Today, inflammation, its signaling pathway network and mechanism of effect, proposes a thought-provoking hypothesis in the coronavirus disease 2019 (COVID-۱۹) management. The global COVID-۱۹ pandemic defined an urgency of condition that there no proven drugs and no immunisations are yet available. In other hand, "The worldwide population is aging", illustrates a challenging health care scenario: coexistence of several diseases in an individual and polytherapy. Multiple drug therapy (polytherapy) is known to be accompanied by the risk of drug interactions and increased unwanted side effects. Here, is a locus that a brilliant chance arises, Statins as multipurpose drugs. It is not surprising. The well-established pleiotropic action of Statins includes properties such as anti-inflammatory, immunosuppressant and antioxidant actions on the endothelium, inflammatory response or free radical production. Please conserve your pessimistic attitude. The Statins are not a completely safe drug, their side effects include myopathy, peripheral neuropathy, hepatotoxicity, increased risk for development of diabetes mellitus and etc. Today, network attitude to the disease mechanisms and identification of target specific aetiologies therapies is a golden progress in the understanding of diseases and their management. It seems, now is the time for a revolution attitude to the medicine box. keywords: Inflammation, Personalized Medicine, Multipurpose Drugs, Multiple Drug Therapy, Coronavirus Disease 2019, COVID-19 Pandemic

پوستر: نوزادان

Association between maternal exposure to air pollution and intrapartum fetal distress: a retrospective cohort study

Alireza Khajavi1 [1] ℗, Amir Hussein Noohi2 [2], Laily Najafi3 [3] ©

[1] □□□□□□□□ □□□□□□□□ □□□□□□□□□□, □□□□□□ □□ □□□□□□ □□□□□□□□ □□□□□□□□□, □□□□□□ □□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, Tehran, Iran.
[2] □□□□□□□□□□ □□□□□□□□□□ □□□□□ □□□□□, □□□□□□ □□ □□□□□□□□□, □□□□□ □□□□ □□□□□□□□□, □□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, Karaj, Iran.
[3] □□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□□ □□ □□□□□□□□□□□□□□□ □□□□ □□□□□□□□□□□, □□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, Tehran, Iran.

Abstract: This study was conducted to investigate the relationship between maternal exposure to environmental air pollution (PM10, SO2) and fetal distress during childbirth. Retrospective data were obtained for 150 deliveries aged 19-۴۵ □□□□□□□□□□ □o Kamali Teaching Hospital, Karaj, Iran, in 2015. The effect of particulate matter ≤10 micrometers (PM10) and sulfur dioxide (SO2) on the incidence of fetal distress were assessed by logistic regression models, crude and adjusted for maternal covariates. The exposure windows of 2, 4, and 8 weeks before delivery were analyzed. The average age of deliveries was 30.4 (5.4) years old. In addition, seventeen cases of fetal distress were identified, indicating higher proportions of cousin marriage and family history of diabetes than the non-fetal distress group. Adjusted for BMI, cousin marriage, miscarriage, and family history of diabetes, and over eight weeks of exposure, a five microgram/m3 increase in SO2 and PM10 had an odds ratio of 2.12 (95% CI: 1.04-۴.۳۰) □□□ ۱.۶۱. (۹۵٪ □□: ۱.۰۸-۲.۴۰), □□□□□□tively, for fetal distress and non-reassuring status. As a final point, we found the long-term effects of SO2 and PM10 on the incidence of non-reassuring fetal status and fetal distress based on exposure levels during the last eight weeks of pregnancy. keywords: Maternal, Exposure, Ambient air pollution, Intrapartum fetal distress, SO2.

پوستر: نوزادان

Evaluation of Pain Intensity in Heel Stick and Related Factors using Premature Infant Pain Profile- Revised

© [2] زینب همتی ,℗ [1] سحر غلامی دهکردی

دانشجو [1]
استادیار [2]

Abstract: Introduction: Preterm infants spend the early days of their lives in the Neonatal Intensive Care Units (NICU) in order to survive and receive intensive care, and during hospitalization they may undergo various painful procedures. Among these, the most important thing that is the right of the neonates is the effective management of pain, and the first step in the efficient management of pain, correct assessment with a reliable tool. Therefore, the present study aimed to evaluation of pain intensity in heel stick and related factors using premature infant pain profile- revised in selected hospitals of Esfahan University of Medical Sciences in 2022. Methods: The present study is a cross-sectional (descriptive-analytical) study, which was conducted on preterm infant's ≤37 weeks of gestational age admitted to the NICU of Al-Zahra, Shahid Beheshti and Amin hospitals and their mothers. selection of samples in each hospital was done by simple random in daily time blocks. In order to start sampling, written informed consent was first obtained from the parents, then the infant's pain 12 hours after hospitalization and according to the inclusion criteria, using the Premature Infant Pain Profile-Revised (PIPP-R) during the heel stick procedure during routine thyroid screening test. Also, the parent's stress questionnaire in the neonatal intensive care unit was completed through the researcher's interview with the mother. Data analysis was done using SPSS version 23 and Mplus version 8. Results: The results showed that the mean score of pain severity was higher in neonates with a gestational age more than 32 weeks (10.79±2.58). The gender of the majority infants was female (50.7%) and the procedure of venipuncture and heel stick was the most frequent procedure, which had a frequency of 167 and 201, respectively. The results of linear regression showed a direct and significant relationship between the mother's stress score and the overall score of the tool (p=0.01, Beta=0.02). Exploratory Factor Analysis (EFA) using the Principal Components Analysis (PCA) based on correlation matrix and varimax rotation showed two factors; "Behavioral" (eye squeeze, bro bulge, Nazo-labial furrow, gestational age) and "Physiological" (increased heart rate, decreased O2Sat and baseline behavioral) describes nearly 65% of the variance in the data. Conclusion: Results of the present study show that PIPP-R includes two behavioral and physiological factors. Therefore treatment team especially nurses, should use both dimensions to evaluate pain intensity in NICU, because using one factor alone especially the behavioral factor, leads to incorrect evaluate of pain intensity in preterm infant. Also, since there is

پوستر: نوزادان

Mothers' experiences of the factors affecting their sleep in the neonatal intensive care unit: a phenomenological study

Saideh Sada T Mortazavi [1] © Ⓟ, Elham Khadem Hamzei [2]

[1] □□.□. □□□□□□□□□□□□□ □□□□□□□□. □□□□□□□□□□□□ □□ □□□□□□□ □□□□□□□□ □□□□ □□□□□□□□□□□□□□□□ □□□□□□□□□, □□□□□□□, □□□□□ □□□□□□□□
Impairment Research Center, Hamadan University of Medical Sciences, Hamadan, Iran
[2] □□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□□□□□ □□□□□□□□, □□□□□□□□ □□□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□□□□□, □□□□.

Abstract: The neonatal intensive care unit (NICU) can potentially exacerbate anxiety and stress for mothers of hospitalized infants, who sometimes spend hours a day around the infant's bed. This research was conducted to explain the lived experiences of mothers in the neonatal intensive care unit of the effective factors. This qualitative study was conducted with the Directed Content Analysis method, with the participation of 16 mothers in the Neonatal Intensive Care Unit, Fatemiyeh Hospital, and Hamadan University of Medical Sciences 2023. Sampling was targeted. Data were collected through semi-structured interviews. Interviews were taped and transcribed and were analyzed based on the Colaizzi approach. The results of the present study included 168 primary codes, 19 subcategories, and 8 main categories. The main concepts extracted from the sleep experience of mothers in this study are in the individual theme: somatic, mental, and psychological factors, and adaptation to conditions. In the environmental field: physical, social, and economic factors. In the theme of occupation: daily activities, activities, and tasks. Individual and environmental factors and occupation are effective in the sleep of mothers in the neonatal intensive care unit. These findings increase our understanding of mothers' sleep experiences and highlight the importance of paying attention to these factors in the prevention and treatment of sleep quality disorders in mothers of newborns in research and clinical practice. keywords:Mother of Sleep, Lived Experiences, Neonatal Intensive Care Unit, Qualitative Study

پوستر: عفونی

A Case of Mis-C with Cervical Lymphadenitis and Retropharyngeal Edema

Mohammad Reza abdolsalehi [1] © ℗

هیات علمی [1]

Abstract: 1- INTRODUCTION A novel syndrome named MIS-C (Multisystem Inflammatory Syndrome) was described during the COVID-۱۹ □□□□□□□□, □irstly, in April 2020. MIS-C is a severe inflammatory syndrome in children similar to Kawasaki with multisystem organ involvement including the respiratory system, gastrointestinal, cardiac and mucocutaneous (1). In clinical practice, cervical lymphadenopathy is a common problem in children. COVID-۱۹ □□ □□□ considered one of the causes of lymphadenitis. Acute lymphadenitis lasts two weeks and is caused by viral or bacterial infections. In chronic lymphadenitis, an opportunistic organism, and a neoplastic process often co-exist (2). Herein, an unusual case of MIS-C manifestations has been reported in a 12- year-old boy who had enlarged lymphadenitis in the cervical chain and retropharyngeal edema. The patient's neck mass improved with corticosteroid. 2- CASE PRESENTATION A 12-year-old boy was admitted to our hospital after complaining of fever for one week. Dysphagia and six centimeters of mass occurred over the left side of his neck in the following days. On clinical examination, there was erythema and tenderness. He could not turn his head without pain. The patient had no history of cough, respiratory distress, diarrhea, vomiting, weight loss, night sweats, or any recent travel. Past medical history was negative. His medication history was co- amoxiclav and azithromycin. On arrival at the hospital, his vital signs were as follows: blood pressure of 90/60 mmHg, heart rate of 105 /min, temperature of 38.5 Celsius degrees and respiratory rate of 17 /min. Oximetry showed 97% saturation on room air. Initial lab test showed: a white blood cell count of (WBC)15×103 /µl with lymphocyte count of 740/µl, c-reactive protein (CRP) 35 mg/l, hemoglobin(HB) 12 g/dl, platelets 209×103 /µl, erythrocyte sedimentation rate (ESR) 75 mm/hr., aspartate aminotransferase(AST) :47 IU/L, and alanine aminotransferase (ALT): 159 IU/L. CT scan reported multiple lymphadenopathies in the left anterior and posterior chain with maximum a diameter of about 15×. 11 mm (Fig. 1). The fluid track with 4 mm depth without rim enhancement is noted in retropharyngeal space in favor of inflammation and edema of retropharyngeal and left para pharyngeal space without abscess formation. Sonography and a spiral computed tomography scan (CT scan) of the neck with contrast were performed. In Ultrasound of the left neck, several enlarged nodes, some of which were hypo echo and lacked hilum, were seen on the left side of the jugular in the conglomerate chain (Fig. 2). Since admission, the patient received clindamycin concomitantly with cefotaxime. Four days later, he was still febrile.

پوستر: عفونی

Child Mortality Causes and Rates, the Importance of Pneumonia and its Prevention

Jafar Soltani [1] © ℗

[1] [illegible]

Abstract: Under-۵ [illegible] in children has decreased significantly since 2000, mainly due to reductions in deaths from lower respiratory infections, diarrhea, complications of preterm birth, birth-related incidents, malaria and measles. In 2019, vaccine-preventable deaths, such as lower respiratory infections, meningitis and measles, accounted for 21.7% of under-۵ [illegible]. [illegible]y causes of mortality, such as diarrhea, were preventable with low-cost methods. Pneumonia is the most important infectious cause of mortality and morbidity in children under 5 years of age. In ۲۰۱۹, [illegible] ۱۳.۹٪ [illegible] ۵ [illegible] [illegible], [illegible] to 740,180 deaths. The risk of at least one major long-term complication is 5.5% in non-severe pneumonia and 13.6% in severe pneumonia. The main complications are decreased lung volume and bronchiectasis (0.9% in severe cases). The risk of sequelae is higher in children younger than ۲ [illegible] (۱۳.۴٪). [illegible]-preventable pathogen, accounting for 18.3% of severe cases and 32.7% of deaths. Haemophilus influenzae b accounts for ۴.۱٪ [illegible] ۱۵.۷٪ [illegible]. [illegible], [illegible] gone down. The most important reason for this decrease in mortality was due to public vaccination against Haemophilus influenzae and Streptococcus pneumoniae. General vaccination in children against Haemophilus influenzae started in 1993 and general vaccination against Streptococcus pneumoniae started in 2000 in Western countries. Routine vaccination against Haemophilus influenzae was started in 2004, however, vaccination against streptococcus pneumoniae has not been implemented in Iran yet. In this presentation, we will discuss the infectious causes of children's mortality, the burden of pneumonia and methods of preventing pneumonia in children.

پوستر: عفونی

Evaluation of Covid-19 anti-spike IgG antibody five months after the second Covid-19 vaccination

© ℗ [1] ریحانه علی پور رفیع

[1] Pediatric Infections Research Center, Research Institute for Children's Health, Shahid Beheshti University of Medical Sciences, Tehran, IranI'm

Abstract: Background: Evaluating the trend of changes in the antibody titer released against Covid-19 caused by vaccination against this disease. Studies in different communities have shown significant differences in IgG antibody titers in the days, weeks, and months after the first and second doses of the vaccine. We evaluated IgG anti-spike antibody titer after at least five months after inoculation of the second dose of anti-Covid-19 and the determination of related factors among the hospital staff. Methods: This cross-sectional study was performed on the health care personnel (HCP) that at least 5 months had passed since the second dose of their anti-Covid-19. The titer of anti-spike IgG antibody against Covid-19 spike protein was measured using Euroimmune kit. Results: The mean titer of anti-spike IgG antibody during the five months after evaluation was 4.33±2.29 units. The percentage of positive cases of the antibody titer was estimated to be 96.4%. The titer of anti-spike IgG antibody was dependent to occupational field (the highest titer was revealed among physicians, paramedics, and nurses) as well as to positive history of Covid- 19 disease. Conclusion: About 96.4% of the staff vaccinated against Covid-19 a titer of anti-spike IgG antibody even five months after inoculation of the second dose which is especially pronounced among physicians and paramedics as well as people with a previous history of Covid-19 infection.

پوستر: عفونی

Global prevalence status of enterobiasis among young children in the last 20 years: A systematic review with meta-analysis

Samira Dodangeh [1] © ℗, Elham Kia Lashaki [2]

[1] □□□□□□□□ □□□□□□ □□□□□□□□ □□□□□□, □□□□□□□□ □□□□□□□□□ □□□ □□□□□□□□□□ □□ □□□-□□□□□□□□□□□□□ □□□□□□□□, □□□□□□
University of Medical Sciences, Qazvin, Iran
[2] □□□□□□□□□□ □□ □□□□□□□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□□□□ □□□□ □□□□□□□□□□, □□□□□□□□□ □□□□□□, □□□□□□□□□, □□□□

Abstract: Objectives: Parasitic infections are the most common diseases worldwide, and enterobiasis is a well-known type of parasitic infections in children. Various studies have been performed regarding prevalence of Enterobius vermicularis in different regions of the world. So far, no study has gathered and analyzed this data systematically. The aim of this systematic review and meta-analysis study was to investigate the overall prevalence of Enterobius vermicularis among children globally. Methods: Data were extracted from four available databases for studies published from January 2002 to April 2022. The quality of the included studies was scored based on the standard Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). The random-effect model was chosen according to the degree of heterogeneity in the included studies to calculate the pooled prevalence and the corresponding 95% confidence intervals (CI). Results: Forty-two publications including 3279 children with enterobiasis had all criteria and were suitable for inclusion in the analyses. The results of the meta-analysis showed that the heterogeneity between the included studies was very high (Q= 4399.35, I2= 99.96%, df= ۴۱, □۰.۰۰۱). □□ □□□□□□□□, □□□ □□□□□□□ □□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□□□□□□ □□□□□ □□□ □□□□□□□□ children was 12.9% (95% CI: 8.2% to 17.7%). Conclusion: Our systematic review and meta-analysis, estimated that 12.9 % of children around the world were infected with E. vermicularis in the Last 20 Years. keywords:Enterobius vermicularis, Enterobiasis, Prevalence, Children

پوستر: گوارش

Evaluation of relative frequency of food allergens based on perik test in children with a diagnosis of lymphoid nodular hyperplasia referred to Shahid Rahimi Hospital in Khorramabad in the year 2021

[3] سیده فاطمه قاسمی ,[4] خاطره عنبری ,[2] اعظم محسن زاده ,[3] علی فولادوند ,© [2] شکوفه احمدی پور ,℗ [1] مریم رهنمازاده

[۱] دکتری تخصصی ،تامین اجتماعی استان لرستان
[۲] دانشیار دانشگاه علوم پزشکی لرستان
[۳] استادیار دانشگاه علوم پزشکی لرستان
[۴] استاد دانشگاه علوم پزشکی لرستان

خلاصه مقاله :هیپرپلازی لنفوئید ندولار یک بیماری خوش خیم و نادر در کودکان است شیوع آن در کودکان دقیق مشخص نیست. مطالعات نشان می دهد که بیماری با افزایش حساسیت غذایی همراه است. با توجه به افزایش شیوع آلرژن های غذایی و اهمیت و تاثیر آن بر تغذیه و رشد کودکان، مطالعه حاضر با هدف بررسی فراوانی نسبی آلرژن های غذایی بر اساس تست پریک در کودکان مبتلا NLH مراجعه کننده به بیمارستان شهید رحیمی در شهرستان خرم. آباد در سال۱۴۰۱ انجام شد .این مطالعه یک مطالعه توصیفی- تحلیلی مقطعی بود که در سال ۱۳۹۰ در بیمارستان شهید رحیمی خرم‌آباد طراحی و انجام شد. ابزار گردآوری داده ها شامل چک لیست تهیه شده توسط محقق شامل اطلاعات و مشخصات دموگرافیک (سن و جنس)، نوع علائم بالینی، نتایج کولونوسکوپی و نتایج تست پریک بود. در این مطالعه پس از تشخیص قطعی هیپرپلازی لنفوئید ندولار توسط متخصص گوارش کودکان، کودکان برای انجام تست پریک به متخصص آلرژی ارجاع و نتایج ثبت شد. در نهایت پس از جمع آوری اطلاعات و تماس با خانواده ها در صورت نیاز، داده های به دست آمده وارد نرم افزار SPSS نسخه ۲۲ شده و توسط مشاور محترم آماری مورد تجزیه و تحلیل آماری قرار گرفت ۳۵ .کودک مبتلا به NLHاز نظر نتیجه تست پریک و ارتباط آن با علائم بالینی و مشخصات دموگرافیک مورد بررسی قرار گرفتند. میانگین سنی کودکان ۴/۱۷ ± ۷/۱ سال که ۵۷/۱ درصد دختر و ۹۴,۳ درصدشهری بودند. ۸۸/۶ درصد والدین غیر قابل انتساب بودند. ۴۲,۹ درصد از کودکان مورد مطالعه سابقه آلرژی در خانواده را ذکر نکرده اند. سابقه مواجهه با دود سیگار در ۲۲/۹ درصد مثبت و ۶۸,۶ درصد ندولری خفیف تا متوسط و ۳۱,۴ درصد ندولریت متوسط تا شدید داشتند. تست پریک در ۶/۸۸ درصدمثبت و بیشترین فراوانی آلرژن ها بر اساس تست پریک ماهی۳۱,۴٪، آجیل، اسفناج و تخم مرغ (۲۸.۶٪) و کمترین فراوانی مربوط به پرتقال،خربزه و سبزیجات خورشتی (۲,۹٪) بود. بین مصرف سیب زمینی ودردهای شکمی، ترشحات خونی و یبوست و همچنین مصرف اسفناج و کنجد و بروز اگزمای پوستی رابطه معنی داری وجود داشت .(PV0.05) آلرژی غذایی در سراسر جهان رو به افزایش است و ترکیب هیپرپلازی ندولر لنفاوی و آلرژی غذایی منجر به کنترل نامطلوب این بیماری می شود، بنابراین آگاهی و پرهیز از مصرف غذاهای آلرژی زا در کودکان با تشخیص هیپرپلازی ندولر لنفاوی منجر به کنترل بهتر این بیماری در آنها. آن کمک می کند .آلرژی غذایی، تست پریک، اندوسکوپی، هیپرپلازی ندولر لنفاوی

پوستر: گوارش

The Beneficial Role of probiotic in growth parameters of cystic fibrosis patients aged 6-20 years old

Seyedeh Zalfa Modarresi [1] ℗, Seyed Ahmad Tabatabaii [2] ©, Ghamartaj Khanbabaee [2], Saeed Sadr [2], Nazanin Farahbakhsh [2], Mahmoud Hajipour [3]

[1] □□□□□□□□□ □□□□□□□ □□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□ □□□□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, □□□□, □□□□.

[2] □□□□□□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□□□□□, □□□□□ □□□□□□□□'□ □□□□□□□□□, □□□□□□□ □□□□□□□□□ □□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□□, Tehran, Iran.

[3] □□□□□□□□□□ □□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□ □□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□, □□□□□□□□□ □□□□□□□□□□ □□□□ □□□□□□□□□'□ Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Abstract: Cystic fibrosis (CF) is a genetic disorder that affects multiple organs, particularly the respiratory system and gastrointestinal tract. Gut dysbiosis is a recognized complication in Cf patients, which may contribute to systemic inflammation and worsen organ disfunction. Probiotic supplementation has been proposed to modify gut microbiota, reduce intestinal inflammation and improve CF management. The aim of this study was to determine the effect of probiotic supplementation on weight, height and BMI z-score in CF patients. This study was a randomized triple blind clinical trial. 40 patients with CF (mean age 12 years, range 6 to 20) were enrolled. Participants were randomly divided into two groups to receive either probiotic supplementation (Lactobacillus Reuteri) or placebo, 1 sachet daily for 4 months. Demographic data, and clinical characteristics of the patient were recorded in a questionnaire. The mean weight, height and BMI for age z-scores before and after the treatment period were measured and compared. Of the forty patients (17 female; 23 male) enrolled, 38 completed the study. The mean weight, height and BMI at baseline in participants were 38.5 kg, 144.5 cm, and 17.37kg/m2. The mean weight, height and BMI z-score before treatment in the intervention group were -.۹۱□.۴۶, -.۷۴□.۳۱, -۱.۲۳□.۶ □□□ □n placebo group were -۱.۰۴□.۴۴, -.۸۹□.۳۳, -.۷۸□.۳۶. □□□ □eight, height and BMI z-score differences after and before treatment in the intervention group were 0.18, 0.37, and 2.09 and in the placebo group were 0.01, 0.11 and 0.09 respectively. Paired sample t-test showed a significant difference in term of BMI z-score in the intervention group.(p:.034) There were no significant difference for weight and height z-score in both groups.(p.05) Constipation, diarrhea and abdominal pain during the study period were observed in 5(25%), 2(10%) and 0 patients in the intervention group and in ۶ (۳۱.۶٪), ۱ (۵.۳٪) □□□ ۱(۵.۳٪) □□□□□□□□□ □□ □□□□□□□□ □□□□□□ □□□□□□□□□□□□□.(□.۰۵) □□□□□□□□□□□ □□□ have a beneficial effect on nutritional status of malnourished CF patients. Further studies with larger sample sizes or different probiotic strains should be designed to assess whether manipulating the intestinal microbiome could potentially optimize the health of CF patients. Cystic Fibrosis, probiotics, Weight Z-score, Height Z-score, BMI Z-score

پوستر: غددومتابولیسم

Prevalence of TNT in infants and its relationship with parameters such as gender, gestational age and birth weight and nutritional status in infants

[1] مریم خزدوز ,[1] یوسف مالکی ,[1] مریم نصری ,[1] ریحانه محسنی پور ,[1] فرزانه عباسی ,℗ © [1] سعیده عبداله پور

[1] [illegible], Tehran, Iran

Abstract: Introduction: Transient Neonatal Tyrosinemia (TNT) is a common disorder of tyrosine metabolism in neonates. Preterm birth and several factors have been linked to increased TNT incidence. This study aimed to determine the incidence of TNT among Iranian infants and the factors influencing TNT incidence. Materials and methods: This case-control study examined newborns screened at growth and development research center's metabolic laboratory from 2019 to 2022. Control group was selected from newborns with normal metabolic screening results. Result: Out of 73,349 infants screened, 345 had elevated tyrosine levels in the initial screening. The control group comprised 372 newborns with normal screening. The overall TNT incidence was 0.47% (345 out of 73,349 births). There were no significant differences in sex, maternal age, neonatal feeding, or consanguinity between groups. However, TNT infants had smaller gestational age (37.7±1.4 weeks), lower birth weight (3.35±1.6 kg), and a higher rate of cesarean deliveries (83.9%) compared to control group(P0.05). Logistic regression revealed significant associations between TNT and preterm birth (OR: 868.2, 95%CI (168.9-۴۲۱۲.۷), ۰.۰۰), [illegible] (OR: 3.5, 95%CI (2.26-5.۳), ۰.۰۰), [illegible] ([illegible]: ۰.۱۷, ۹۵٪[illegible] (۰.۱۲-۰.۲۴), ۰.۰۰). There was no significant association observed among the other parameters (P≥0.05). Conclusion: In the study reveals that preterm birth is a potent risk factor of TNT incidence. Also, a significant association between cesarean delivery and TNT was observed. The study underscores the importance of gestational age and birth weight while suggesting that promoting natural vaginal delivery may reduce TNT incidence.

پوستر: ایمونولوژی وآلرژی

Investigation of a case of amputation following penicillin injection

Dr Foroozan Faress [1] © ℗

[1] □□□□□□□□□ □□□□.□□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□, □□□□□□ □□ □□□□□□□□, □□□□ □□□□□□□□□□ □□ □□□□□□□□ □□□□□□□□, □□□□□□, Iran

خلاصه مقاله :بیمار پسر ۵ ساله که با گلودرد مراجعه به مطب پزشک نموده و پنی سیلین برای تجویز شده است .تزریق در بیمارستان انجام میشود .حین خروج از بیمارستان کودک احساس کمی خارش و سرخی صورت و تنگی نفس خفیف کرده است.مجددا به اورژانس بیمارستان مراجعه کرده و در انجا پزشک اپی نفرین برای بیمار در قسمت لترال ران تجویز کرده حال عمومی بیمار کمی بهتر شده است و بعد مدتی پای بیمار تغییر رنگ داده و در نهایت بعد گذشت زمان و عدم درمان در ۷ سالگی از بالای زانو امپوته میشود .در بررسی احتمال قصور پزشکی رخ داده در پرونده ،امکان تجویز اپی نفرین در داخل رگ مطرح می شود .اندیکاسیون تجویز پنی سیلین زیر سوال میرود .غلظت تزریق شده درج شده مناسب بوده .اندیکاسیون تجویز اپی نفرین زیر سوال میرود .محل درست تزریق باید بررسی گردد و.. در نهایت بررسی قصور پزشک و نقص عضو پای امپوته شده مطرح میباشد .