
Graves disease is the most common cause of hyperthyroidism in children. Inorganic iodide has been used in combination with antithyroid drugs for more effective normalization of thyroid hormones in some cases of severe thyrotoxicosis. This study aimed to investigate clinical characteristics of childhood thyrotoxicosis and efficacy of inorganic iodide in the early phase of treatment. Sixty-seven pediatric patients with newly diagnosed thyrotoxicosis due to Graves disease were recruited. Forty-nine patients were treated with antithyroid drugs alone, while 18 patients were treated with combination of antithyroid drugs and potassium iodide. Initial thyroid function tests and levels of thyroid antibodies were recorded for all patients. Thyroid function tests were repeated 2 and 8 weeks after the initiation of treatment. After two weeks of treatment, mean triiodothyronine and free thyroxine levels were significantly lower in the group receiving combined therapy of antithyroid drugs and potassium iodide compared to the patients receiving antithyroid drugs alone. Eight weeks after the initiation of treatment, thyroid function tests in the two groups did not show significant differences. Results from this study suggest that the use of potassium iodide in combination with antithyroid drug is effective for more rapid normalization of thyroid hormones in the early phase treatment of childhood thyrotoxicosis.

Pregabalin for childhood epilepsy. (Iran J Child Neurol. 2014;8:62-5)

The prevalence of active epilepsy is about 0.5-1%, and approximately 70% of patients are cured with first anti-epileptic drugs; remaining need multiple drugs. Pregabalin as an add-on therapy that has a positive effect on control of refractory seizures in adults. The objective of this study was to evaluate the effects of pregabalin in the reduction of seizures for refractory epilepsy. Forty patients with refractory seizures were included in this study. A questionnaire based on type of seizure, clinical signs, EEG record, imaging report, drugs that had been used, drugs currently being used, and the number of seizures before and after Pregabalin treatment was recorded. The number of seizures after one and four months was noted. After one month, 26.8% of patients had more than a 50% reduction in seizures and 14.6% of these patients were seizure-free; 12.2% had a 25-50% reduction; and approximately 61% had less than a 25% reduction or no change in seizures. After the fourth month, 34.1% of patients had more than a 50% reduction in seizures and 24.4% of these patients were seizure-free. Additionally, 65.9% of patients had less than 50% reduction in seizures.

Presepsin to predict bacterial meningitis. (J Clin Microbiol. 2015;Feb 4:pii:JCM.03052-14)

Children with temporary external ventricular drains (EVD) are prone to nosocomial infections. Diagnosis of bacterial meningitis/ventriculitis in these children is challenging due to frequent blood contamination of cerebrospinal fluid (CSF) and the presence of chemical ventriculitis. The aim of the study was to compare diagnostic accuracy of presepsin, a novel biomarker of bacterial infection in CSF, to predict bacterial infection in comparison to established biomarkers like biochemical analysis of CSF. Eighteen children with suspected bacterial meningitis/ventriculitis who had 66 episodes of disease were prospectively studied. CSF samples were taken from external ventricular drainage. Infection was clinically confirmed in 57 (86%) episodes of suspected meningitis/ventriculitis. Chemical ventriculitis was diagnosed in 9 (14%) episodes of suspected meningitis/ventriculitis. Diagnostic accuracies of presepsin were superior in comparison to leucocytes or proteins in CSF. This marker seems to have the potential to be used in every day clinical practice to improve etiological diagnosis of meningitis/ventriculitis, and to prescribe more appropriate antibiotics.

Fruit and Vegetable intake during infancy. (Pediatrics 2014;134 Suppl 1:S63-9)

This study examined the association of timing of introduction and frequency of fruit and vegetable intake during infancy with frequency of fruit and vegetable intake at age 6 years, in a cohort of US children. This study analyzed data on fruit and vegetable intake during late infancy, age of fruit and vegetable introduction, and frequency of fruit and vegetable intake at 6 years. The percent of 6-year-old children consuming fruits and vegetables less than once per day was determined and associations with infant fruit and vegetable intake was studied using logistic regression modeling. Based on maternal report, 31.9% of 6-year-old children consumed fruit less than once daily, and 19.0% consumed vegetables less than once daily. In adjusted analyses, children who consumed fruits and vegetables less than once daily during late infancy had increased odds of eating fruits and vegetables less than once daily at age 6 years. This study suggests that infrequent intake of fruits and vegetables during late infancy is associated with infrequent intake of these foods at 6 years of age. These findings highlight the importance of infant feeding guidelines that encourage intake of fruits and vegetables, and the need to examine barriers to fruit and vegetable intake during infancy.

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