

Clippings

□ To prevent later developmental impairments, myringotomy with the insertion of tympanostomy tubes has often been undertaken in young children who have persistent otitis media with effusion. Before three years of age, 429 children with persistent middle-ear effusion were randomly assigned to have tympanostomy tubes inserted either promptly or up to nine months later if effusion persisted. The authors assessed developmental outcomes in 395 of these children at six years of age. At six years of age, 85 percent of children in the early-treatment group and 41 percent in the delayed-treatment group had received tympanostomy tubes. There were no significant differences in mean scores favoring early versus delayed treatment on any of 30 measures, including the Wechsler Full-Scale Intelligence Quotient; the SCAN test, a measure of central auditory processing; and several measures of behavior and emotion. In otherwise healthy children younger than three years of age who have persistent middle-ear effusion, prompt insertion of tympanostomy tubes does not improve developmental outcomes at six years of age. *NEJM* 2005; 353: 576.

□ Can Waist Circumference Identify Children With the Metabolic Syndrome? To determine in children the association between waist circumference and insulin resistance, eighty-four students (40 boys) aged 6 to 13 years and matched for sex and age underwent anthropometric measurements. Body mass index (BMI), WC, BP, and Tanner stage were determined. An oral glucose tolerance test, lipid profile, and insulin and proinsulin assays were performed. Multiple linear regression analysis waist circumference and systolic BP were

significant independent predictors for insulin resistance adjusted for diastolic BP, height, BMI, acanthosis nigricans, and high-density lipoprotein cholesterol level. *Arch Pediatr Adolesc Med* 2005; 159: 740.

□ Despite concerns about arthrototoxicity, pooled data from clinical trials indicate that gatifloxacin is safe and effective in children with recurrent otitis media or acute otitis media treatment failure. The team concentrated on findings in the 867 children, ages 6 months to 7 years, who had experienced previous treatment failure or recurrent disease. Gatifloxacin dosage was 10 mg/kg once daily for 10 days. The cure rate for recurrent disease was 89%. There was no evidence of arthrototoxicity, hepatotoxicity or other serious untoward events either acutely or during 1 year of follow-up. *Clin Infect Dis* 2005; 41: 470.

□ *Are Child Eating Patterns Being Transformed Globally?* Diets of children 2 to 19 years of age were studied with nationally representative data from Russia and the United States, nationwide data from China, and regional data from Philippines. Twenty-four-hour dietary recalls were examined at several points in time to examine trends in calories consumed away from home, snacking behavior, and soft drink and modern fast food consumption. This research suggests that globalization of the fast food and other modern food sector is beginning to affect child eating patterns in several countries undergoing nutrition transition. However, the contribution of fast food and soft drinks to the diet of children remains relatively small in China, Russia, and Cebu, Philippines, relative to the United States. *Obesity Research* 2005; 13: 1281.

□ It has been hypothesized that multiple-antigen vaccines, such as measles-mumps-rubella vaccine, or aggregated vaccine exposure could lead to immune dysfunction, resulting in non-targeted infectious diseases as a result of an “overload” mechanism. Population-based cohort comprising all children born in Denmark from 1990 through 2001 (N = 805,206) was tested. Longitudinal information was collected on type and number of vaccine doses received and hospitalization with infectious diseases, specifically acute upper respiratory tract infection, viral and bacterial pneumonia, septicemia, viral central nervous system infection, bacterial meningitis, and diarrhea. Rate ratios for each type of infectious disease according to vaccination status were calculated. These results do not support the hypotheses that multiple-antigen vaccines or aggregated vaccine exposure increase the risk of non-targeted infectious disease hospitalization. *JAMA* 2005; 294; 699.

□ Continuous feeding is better than intermittent feeding in terms of gastrointestinal tolerance and growth in very low birth weight (VLBW) infants, researcher in Sweden report. Researchers compared the effects of continuous versus intermittent feeding on gastrointestinal tolerance and growth in 70 VLBW infants with a gestational age of 24 to 29 weeks and birth weight less than 1200 g. The primary outcome was time to achieve full enteral feeding. Infants in the continuous nasogastric-feeding group achieved full enteral feeding significantly faster than intermittently fed infants. Infants in all groups had similar energy and protein intakes during the intervention phase. Time to regain birth weight was also similar between the groups. Continuously fed infants had a significantly faster growth rate than the other infants. No significant differences in the mortality rate were observed among the groups. *J Pediatr* 2005; 147: 43.

To identify specific features during the process of involution of ROP (retinopathy of prematurity) after treatment that are associated with development of a retinal detachment. The evolution of retinal detachments over time was analyzed retrospectively in 262 treated eyes of 138 infants. Specific features hypothesized to be associated with development of a retinal detachment were analyzed. A retinal detachment developed in 36 (13.7%) of 262 eyes. Clinically important vitreous organization and vitreous hemorrhage were predictive for development of a retinal detachment. Evaluation of preemptive re-intervention strategies for eyes at highest risk for developing a retinal detachment may be reasonable. *Amer J Ophth* 2005; 140: 214.

□ Researchers investigated neurologic and cognitive sequelae at a mean of 5 years after traumatic brain injury in 25 infants. About two thirds (68%) of the survivors had abnormal cognitive or neurologic findings at follow-up, the authors report, with 36% having severe difficulties and being totally dependent, 16% having moderate difficulties, and 16% having mild difficulties. Significant percentages of survivors had neurological deficits, nearly half had abnormalities of visual function, and almost two thirds had abnormal speech and language function, the researchers note. Cognitive development was significantly below normal in 8 of 14 children tested, and the median behavior rating was at the 7th percentile among the 14 children tested. Children with lower (more severe) Pediatric Trauma Scores showed worse outcomes, the investigators report, and their Glasgow Coma Scores correlated significantly with outcomes. Follow-up protocols are needed so that at discharge from hospital a care plan for the future can be given to the families and provided to the child protection and child welfare services. *Pediatrics* 2005; 116; 174.

□ Plasmapheresis is a treatment that could be considered for children with severe ADEM who do not respond to conventional therapy with steroids or immune globulin. After a retrospective review of the records of 13 children with ADEM, one child recovered spontaneously and the others were initially treated with methylprednisolone and immunoglobulin. Six children did not respond to corticosteroid therapy and had an acute progressive course neurologically. Five also showed a delay in the onset of neuroimaging changes and eventually developed lesions in the deep gray matter and brainstem. These children underwent five sessions of plasmapheresis. Over the course of several months they recovered but with various degrees of residual neurological deficit. The researchers suggest that plasmapheresis be considered as ADEM treatment for patients who do not respond to other therapy. *Pediatrics* 2005; 116; 431.

□ Recurrent epistaxis is a common pediatric problem with uncertain etiology in most cases. The authors observed frequent complaints, or history of epistaxis in children with migraine. The aim of this study was to determine whether there is an association between epistaxis and migraine in children. A detailed questionnaire was used to conduct a study of 45 consecutive patients, ages 6-11 years, with migraine, diagnosed according to the 1997 proposed pediatric revisions to the International Headache Society criteria. Sixteen (36%) of 45 patients with migraine had epistaxis as compared with 7 (11%) of 64 control subjects. Epistaxis began an average of 3 years before migraine with similar characteristics to idiopathic epistaxis in habitual nose-bleeders, such as onset in early childhood, high incidence in sleep, and family history of epistaxis. This study demonstrates a significant association between migraine and recurrent epistaxis in children. Recurrent

epistaxis increased the odds of migraine more than fourfold. Moreover, these data raise the question of whether epistaxis may represent a precursor to childhood migraine. The two disorders may share a common pathogenesis, and a prospective, longitudinal study is required to define further the relationship between them. *Pediatr Neurol* 2005; .33; 94.

□ The objective of this study was to determine whether maternal fish oil supplementation during 0-4 mo of lactation influences growth in infancy and early childhood. In a randomized, blinded intervention trial, lactating Danish mothers with a fish intake below the population median were randomized to 4.5 g/d fish oil or olive oil. Head circumference, weight, length, skinfold thickness, and waist circumference of children were measured at 2, 4, and 9 mo and at 2.5 y. One hundred children completed the intervention trial, and 72 were followed up at 2.5 y together with 29 from the reference group. Growth in weight, length, and head circumference did not differ between the randomized groups up to 9 mo, but at 2.5 y, body composition differed significantly. Children in the fish oil group had larger waist circumference body mass index (BMI 0.6 kg/m²; $p = 0.022$), and head circumference compared with those in the olive oil group. Adjusted for sex, ponderal index at birth and current energy intake, BMI at 2.5 years was associated with docosahexaenoic acid in maternal erythrocytes after the intervention. In conclusion, the n-3LCPUFA intake of lactating mothers may be important for growth of young children. The long-term effect on weight and BMI remains to be investigated. *Pediatric Research* 2005; 58: 235.

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