CLIPPINGS

Hypothermia for perinatal asphyxia *(N Engl J Med. 2014;371:140-9).*

In the Total body hypothermia for neonatal encephalopathy trial (TOBY), newborns who received hypothermic therapy had improved neurologic outcomes at 18 months of age, but it is uncertain whether such therapy results in long-term neurocognitive benefits. In this study, 325 newborns with asphyxial encephalopathy who were born at a gestational age of 36 weeks or more were randomized to receive standard care alone (control) or standard care with hypothermia (rectal temperature of 33 to 34°C) for 72 hours within 6 hours after birth. The neurocognitive function of these children at 6 to 7 years of age was evaluated. The primary outcome of this analysis was the frequency of survival with an IQ score of 85 or higher. A total of 52% in the hypothermia group *versus* 39% in the control group survived with an IQ score of 85 or more (RR, 1.31; *P*=0.04). The proportions of children who died were similar in the two groups. More children in the hypothermia group than in the control group survived without neurologic abnormalities. Among survivors, children in the hypothermia group, as compared with those in the control group, had significant reductions in the risk of cerebral palsy and the risk of moderate or severe disability. There was no significant difference in parental assessments of children's health status, and in results on 10 of 11 psychometric tests.

Fine needle aspiration cytology for lymphadenopathy. *(Pediatr Med Chir. 2014;36:80-2)*

In pediatric population, Fine needle aspiration cytology (FNAC) is slowly gaining acceptance in clinical management of superficial lymphadenopathy. This experience adds some data about the usefulness of this technique in diagnosing its cause, and guiding further treatment. During 2002 to 2006, 238 FNAC procedures were performed in 217 patients with superficial lymphadenopathy; the neck was the most frequent site. The results were available within few hours. In cases of granulomatous findings, the samples were processed for microbiological and PCR test, in order to identify Mycobacteria. Thirty-eight patients had granulomatous lymphadenopathies. Among the 174 reactive lesions, 22 required an incisional biopsy after 1 month follow-up. For 24 malignant lesions, the diagnosis was confirmed by further biopsy. Two false negative and no false positive were detected (sensitivity 92%, specificity 100%). No complications were encountered. The study reiterates that FNAC, performed by experienced cytopathologist, is a fast, safe, non invasive and inexpensive method to achieve diagnosis in persistent superficial lymphadenopathy.

Celiac disease and haplotype (*N Engl J Med. 2014;371:42-9).*

The presence of HLA haplotype DR3-DQ2 or DR4-DQ8 is associated with an increased risk of celiac disease. In addition, nearly all children with celiac disease have serum antibodies against tissue transglutaminase (tTG). In this study, 6403 children with HLA haplotype DR3-DQ2 or DR4-DQ8 were prospectively followed from birth in the United States, Finland, Germany, and Sweden. The primary end point was the development of celiac disease autoimmunity, which was defined as the presence of tTG antibodies on two consecutive tests at least 3 months apart. The secondary end point was the development of celiac disease, which was defined for the purpose of this study as either a diagnosis on biopsy or persistently high levels of tTG antibodies. The median follow-up was 60 months. Celiac disease autoimmunity developed in 786 children (12%). The risks of celiac disease autoimmunity and celiac disease by the age of 5 years were 11% and 3%, respectively, among children with a single DR3-DQ2 haplotype, and 26% and 11%, respectively, among those with two copies (DR3-DQ2 homozygosity). Residence in Sweden was also independently associated with an increased risk of celiac disease autoimmunity.

Etiology of empyema in children *(Southeast Asian J Trop Med Public Health. 2014;45:442-54).*

This study aimed to identify the bacterial etiology of empyema thoracis or parapneumonic pleural effusions in Thai children, with a focus on pneumococcus. This hospital-based, descriptive study included children aged ≤ 16 years, diagnosed with empyema thoracis or parapneumonic pleural effusion. Pleural fluid and blood samples were cultured; pleural fluid samples were also tested by polymerase chain reaction (PCR). Serotyping of *Streptococcus pneumoniae*-positive samples was performed by molecular techniques and Quellung reaction. In this study, 29 children with empyema thoracis and 42 children with parapneumonic pleural effusion were enrolled. Potentially pathogenic bacteria were cultured in 13 samples at local or central laboratories; the most common bacteria were *Staphylococcus aureus* and *S. pneumoniae*. Molecular techniques detected one or more targeted respiratory pathogens in 18 samples. *S. pneumoniae* and *Haemophilus influenzae* were identified by PCR in 13 and 6 children, respectively. The pneumococcal serotypes identified were 1, 3, 5, 6A/B, 9A/V, 14, 15A, 19F and 23A.

K RAJESHWARI
drkrajeshwari@hotmail.com