Acute otitis media: do the current guidelines work? ▶ Concerns about resistant Streptococcus pneumoniae, frequent treatment failures and relapses, and lack of specific bacteriologic information for individual patients make the treatment of acute otitis media (AOM) one of the most frustrating issues in daily practice. The CDC and the AAP recommend that high-dose amoxicillin be used to treat AOM in areas with high levels of S. pneumoniae resistance. These researchers used tympanocentesis to evaluate this recommendation and to examine treatment failures.

Fifty patients with AOM and tympanocentesis-proven bacterial disease (age range, 3 months to 36 months) were treated with 80 mg/kg/day of amoxicillin for 10 days. Each patient underwent a second tympanocentesis between days 3 and 5. The overall bacterial eradication rate was 82%, and most failures involved betalactamase-positive Haemophilus influenzae. Only 3 patients (6%) experienced clinical failure. Seven of 35 children who were followed for 1 month (20%) experienced relapse; the middle ear fluid in these patients contained both old and new pathogens.

Comment ▶ These authors provide excellent bacteriologic evidence that our current strategy for AOM is working. For the few patients who don’t respond to high-dose amoxicillin, the logical next step is to add a beta-lactamase inhibitor to the regimen. Although S. pneumonia resistance continues to be worrisome, the bacteriologic evidence shows that most failures can be treated with amoxicillin-clavulanate and that the need to resort to ceftriaxone therapy is rare.

Peggy Sue Weintrob, MD

Bigger is definitely not better! ▶ Macrosomia, usually defined as birth weight >4000 g, is believed to be associated with increased perinatal morbidity and mortality, and its incidence may be increasing. Using linked birth and death files from the U.S. National Center for Health Statistics for 1995–1997, these investigators grouped singleton, term, macrosomic infants by birth weight (grade I, 4000-4499 g; grade II, 4500-4999 g; grade III, >5000 g) and compared their outcomes with outcomes among normal-weight infants (3000-3999 g). Macrosomic infants made up 10.5% of reported births.

Higher macrosomia grade was associated with having mothers who were white, Samoan, or American Indian; who were married, older (35), diabetic, hypertensive, or nonsmokers; and who had higher levels of education, high parity for age, previous pregnancy loss, or a previous macrosomic infant. Mothers of macrosomic infants were significantly less likely than mothers of normal-weight infants to be primiparous or younger than 18. Very few macrosomic infants had any adverse outcome, but the rates of cephalopelvic disproportion, dysfunctional labor, cesarean delivery, Apgar score 4, and birth injuries increased with each macrosomia grade. Mortality rates were significantly elevated in grade III infants only. The authors conclude that grading macrosomic infants by size can facilitate the assessment of the risk for adverse outcomes.

Developmental outcomes of children with prenatal exposure to SSRIs ▶ The known risk for major depressive disorder (MDD) among women of childbearing age and the availability of relatively safe selective serotonin reuptake inhibitors (SSRIs) have raised concerns about how prenatal SSRI exposure affects children. Although no increases in major congenital malformations or cognitive and neurobehavioral functions have been found in studies of children with such exposure, controls in those studies were children of nondepressed mothers. In this nonrandomized study, 31 children whose mothers were diagnosed with MDD and treated with an SSRI during pregnancy were compared with 13 children whose mothers had MDD but did not take SSRIs during pregnancy.

All women received supportive psychotherapy. Of the women receiving SSRIs, 48% took sertraline, 23% paroxetine, 23% fluoxetine, and 3% fluvoxamine. There were no significant differences in scores on the Mental Developmental Index between exposed and unexposed children. However, exposed children had significantly lower mean scores than unexposed children on a psychomotor index (98.2 vs. 90.0; P=0.03) and a behavior-rating scale (89.6 vs. 76.0; P=0.04).

Comment ▶ This study is strengthened by the inclusion of a control group of women with MDD, but is limited by the small number of subjects. Nevertheless, pediatricians can counsel parents that prenatal exposure to SSRIs does not adversely affect cognitive development or emotional regulation, although psychomotor development and the quality of motor skills may be affected.

Martin T. Stein, MD

CT or MRI screening for head injury in high-risk abused infants ▶ The American Academy of Pediatrics recommends that young children (age, <2 years) who have injuries that are consistent with child abuse receive skeletal surveys. Neuroimaging generally is reserved for children with abnormal neurologic exams. To examine the prevalence of occult head injury among abused children, investigators in Philadelphia reviewed computed tomography or magnetic resonance imaging screening results for children younger than 2 years with injuries that were suggestive of abuse (multiple fractures, rib fractures, facial injury) and with normal neurologic exams on admission.

Comment ▶ Although, as the authors point out, most macrosomic infants do well, they also use more resources [e.g., 50% of grade III births required cesarean delivery]. Even greater concerns are the current epidemic of obesity in schoolchildren and the potential impact on neonatal morbidity and mortality when these children become parents.

William P. Kanto, Jr., MD
Of 65 infants who were referred to a child-abuse team, 51 underwent head CT or MRI. Of these, 19 (37%) had evidence of occult head injury (scalp injury, skull fracture, intracranial injury), including 9 children with subdural hemorrhage or hemorrhagic contusion and 3 with subcortical white-matter shear injuries. Skeletal survey alone missed occult head injuries in 5 of the 19 injured children (3 with scalp swelling and 2 with subdural hematomas). Infants with head injuries were significantly younger than were infants without head injuries (median age, 2.5 vs. 5.1 months).

Comment ➤ Case series often are “methodologically challenged.” Not all infants in this report underwent CT or MRI, and neurologic status is difficult to derive from chart review. Nevertheless, in very young children with injuries that suggest abuse, CT or MRI might help to make or to confirm the diagnosis and could help ensure the safety of the child.

Howard Bauchner, MD
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Reducing the dose of inhaled steroids in asthma ➤ Although inhaled steroids are effective in treating asthma, they are not problem-free. Thus, most guidelines recommend reducing steroid doses once control is established. This approach works for the short term for patients with mild asthma, but no long-term data have been collected in patients with moderate-to-severe disease. In this randomized trial, investigators explored step-down dosing for such patients.

The study involved 259 asthmatic Scottish adults who received daily high-dose inhaled steroids (800 µg beclomethasone or equivalent). Participants were assigned to 1 of 2 groups: The control group continued with their initial inhaler doses; the intervention group received dose variations based on symptom control, with the goal of reducing their doses by 50%. Patients were followed for 1 year.

Among the intervention group, 49% were able to achieve a 50% reduction in their inhaled steroid doses. Asthma exacerbations occurred with the same frequency in the 2 groups (about 30%). Numbers of physician visits and hospital visits also were similar in the 2 groups, as were measures of disease and health status. On average, the intervention group received a 25% lower daily dose of steroids than did the control group.

Comment ➤ These results show that some patients with controlled moderate-to-severe asthma can reduce their doses of inhaled steroids without compromising their asthma control. At the time of publication, the full text of the original article was available at http://bmj.com/cgi/content/full/326/7399/1115 free of charge.

Keith I. Marton, MD
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