JOURNAL WATCH
PEDIATRICS & ADOLESCENT MEDICINE

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Educational intervention increases condom use among black girls ▶

Black adolescent girls are at higher risk for sexually transmitted HIV infection than are most other adolescents. These researchers assessed the efficacy of an educational intervention that emphasized ethnic and gender pride, HIV risk factors and their prevention, condom use, and relationship issues. A total of 522 sexually experienced black girls (age range, 14–18) were recruited from community health agencies and randomized to four group sessions featuring either the intervention program or general exercise and nutrition counseling. The intervention sessions involved an average of 10 to 12 participants each and were led by black female health educators.

At 12-month follow-up, self-reports of consistent condom use in the prior 30 days were significantly more common in the intervention group than in the control group (73% vs. 57%), and number of episodes of unprotected vaginal intercourse in the prior 30 days was significantly lower in the intervention group (1 vs. 2). A variety of psychosocial mediators of HIV prevention (e.g., HIV knowledge, efficacy of condom use, attitudes toward condom use) were all significantly improved in the intervention group.

Comment ▶ This intervention is not immediately reproducible in primary care practice, and self-reports of condom use cannot be confirmed objectively, but the data are encouraging. The results indicate that group educational sessions might affect sexual behavior in a high-risk adolescent group.

Thomas L. Schwenk, MD
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▲ **DiClemente RJ** *et al.* Efficacy of an HIV prevention intervention for African American adolescent girls: A randomized controlled trial. *JAMA* 2004;**292**:171–9.

Intracranial trauma in young children who are physically abused ▶

Clinicians are keenly aware that failing to recognize physical abuse could end up costing a child's life: Abused children who sustain head injuries, however, can be asymptomatic. But how aggressive are doctors, and how aggressive should they be, in evaluating young children for occult head trauma when physical abuse is suspected?

In this retrospective U.S. study, charts of children (age, <48 months) from two tertiary medical centers were reviewed. Fifty-one children (mean age, 15 months) were identified who had undergone skeletal surveys for suspected physical abuse but who had no neurologic symptoms; 24 of these children (47%) had fractures. Seventy-five percent of children had undergone head computed tomography scans, magnetic resonance imaging, or both; 69% had undergone ophthalmologic evaluations. Intracranial lesions were found in 11 children (29%), and retinal hemorrhage was seen in 1 child. No association was found between injuries (intracranial lesions and bone fractures) and children's ethnicity. Whether neuroimaging was performed was not dependent on sex, ethnicity, insurance coverage, fracture status, or the presence of unrelated male caregivers.

Comment ▶ These findings are important for acute management and safety of children in their home settings, as well as to prevent subsequent inflicted injuries. An editorialist agrees with the authors' conclusion that ''clinicians should have a low threshold for neuroimaging when physical abuse is suspected in a young child'' because, often, a physical exam alone is not sufficiently reliable.

Robert A. Dershewitz, MD, MSc
Published in *Journal Watch* July 20, 2004

▲ **Laskey AL** *et al.* Occult head trauma in young suspected victims of physical abuse. *J Pediatr* 2004;**144**:719–22.

▲ **Hymel KP**. Traumatic intracranial injuries can be clinically silent. *J Pediatr* 2004;**144**:701–2.

MMR and febrile seizures ▶

Public support for immunizations depends on careful examination of their safety. Investigators from Denmark studied risk for febrile seizures following measles-mumps-rubella vaccination in a cohort of 537,171 children who were born from 1991 through 1998; 439,251 children (82%) received the vaccine.

Person-years at risk were 1,151,661 for vaccinated children and 793,568 for unvaccinated children. The rate of first febrile seizures was significantly higher among vaccinated children than among unvaccinated children during the study period (rate ratio, 1.10). The rate of febrile seizure was significantly higher in the 2 weeks after MMR was administered than was the corresponding 2-week rate in unvaccinated children (RR, 2.75); thereafter, no increased risk was noted.

Compared with risk among the entire cohort for a 2-week period, risk for febrile seizure within 2 weeks of MMR vaccination was significantly higher for children with family histories of febrile seizure (an additional 3.97 per 1000) and those with personal histories of febrile seizure (an additional 19.47 per 1000). However, within subgroups of children with certain characteristics (family histories of seizure; perinatal factors, such as low or high birth weight; and high or low socioeconomic status), recent vaccination was not related to risk for febrile seizure. Most important, children who developed febrile seizures following MMR vaccination did not have higher risk for later epilepsy than did unvaccinated children.

Comment ▶ Because many children develop fever after MMR immunization, it is not surprising that risk for febrile seizure is elevated among recently vaccinated children. Nor should we be surprised that children with histories of febrile seizure are more likely to seize again after MMR vaccination. What is most gratifying is that risk for later epilepsy is not related to febrile seizures associated with MMR vaccination.

Howard Bauchner, MD
Published in *Journal Watch* July 27, 2004

▲ **Vestergaard M** *et al.* MMR vaccination and febrile seizures: Evaluation of susceptible subgroups and long-term prognosis. *JAMA* 2004;**292**:351–7.

Snoring, sleep apnea, and surgery in children ▶

Obstructive sleep apnea (OSA) has emerged as an important new disease in pediatrics. Whether children with snoring and other related symptoms, but negative polysomnograms, benefit from tonsillectomy and adenoidectomy (T/A) is uncertain. In a randomized clinical trial, 20 children (age range, 2 to 14 years) with high scores on a valid and reliable scale of OSA-related symptoms (including nighttime and daytime symptoms and findings on physical examination) but negative polysomnograms were assigned to either observation or T/A.

After 6 months, no differences were found between the two groups on objective measures of OSA, including an apnea index and a respiratory-disturbance index. However, children who underwent T/A had significantly improved clinical scores. For example, 9 of 11

children (82%) in the treatment group were asymptomatic at 6 months, compared with 2 of 9 (22%) in the observation group.

Comment ► Some experts have questioned the need for a positive polysomnogram prior to tonsillectomy and adenoidectomy for symptoms of obstructive sleep apnea. These findings suggest that surgery is an option for children with substantial symptoms consistent with OSA. But whether surgery is necessary to prevent future complications, or even to decrease symptoms in the long term, remains unknown.

Howard Bauchner, MD
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▲ **Goldstein NA** *et al.* Clinical assessment of pediatric obstructive sleep apnea. *Pediatrics* 2004;**114**:33–43.

Pneumococcal conjugate vaccine: broad benefits ►

The 7-valent pneumococcal conjugate vaccine (PCV7) was introduced in February 2000. These investigators in California have monitored its effect on incidences of invasive pneumococcal disease (IPD) and pneumococcal antibiotic resistance in a health care system of 3.1 million people.

By December 2002, 74% of 1-year-olds and 31% of 2-year-olds had been fully vaccinated. From April 2002 through March 2003, no cases of IPD from vaccine serotypes were documented in children younger than 2 years. From the 5-year prevaccine period to the 2-year postvaccine period, IPD incidence declined significantly among people older than 5 years (from 11.4 to 9.3 cases per 100,000 person-years) and especially among those 60 or older. The level of penicillin resistance in pneumococci, which peaked at 15% in 2000, dropped to 5% by 2003.

Among children younger than 5 years, IPD incidence from nonvaccine serotypes was 6.2 cases per 100,000 person-years in the year ending in March 2003, up from 3.9 the previous year. However, this recent higher incidence roughly matches the incidence from 1996 to 1998.

Comment ► Overall, these are gratifying results: PCV7 is a highly effective vaccine that seems to protect nearly everyone. Even a decline in penicillin-resistant pneumococci has been documented since the vaccine was introduced, although the authors acknowledge that this relation might not be causal. The recent increase in IPD incidence from nonvaccine serotypes, although similar to prevaccine incidence, must be monitored carefully.

Howard Bauchner, MD
Published in *Journal Watch* July 9, 2004

▲ **Black S** *et al.* Postlicensure surveillance for pneumococcal invasive disease after use of heptavalent pneumococcal conjugate vaccine in Northern California Kaiser Permanente. *Pediatr Infect Dis J* 2004;**23**:485–9.