CLINICAL CAPSULES

Reasons for Vaccine Refusal

Approximately 69% of 277 parents of nonvaccinated children cited concerns that vaccines might cause harm, said Daniel A. Salmon, Ph.D., of Johns Hopkins University, and his colleagues (Arch. Pediatr. Adolesc. Med. 2005;159:470-6). In a case-control study, the investigators reviewed data from surveys of 976 parents of vaccinated children and 277 parents of children who received nonmedical exemptions to school vaccination requirements.

Varicella was the most often refused vaccine and was not given to 147 (53%) of the 277 exempt children. Polio was the least often refused vaccine and was not given to 45 (16%) children. Other reasons for refusing vaccination included concerns that the vaccines might overload the immune system (49%), belief that the child was not at risk for the disease (37%), that the disease was not dangerous (20%), and that that vaccines might not work (13%).

Parents of exempt children were less likely to report that their child's primary health provider was a physician, compared with parents of vaccinated children (76% vs. 94%) and more likely to report that the primary health provider was a nurse practitioner or alternative medicine professional. In general, parents of exempt children were more likely to be older than the median age of 36-40 years and to have a higher level of education compared with parents of vaccinated children. The parents of exempt and vaccinated children were similar in terms of family income and race.

One Swab Is Enough

Use of two throat swabs did not significantly improve the sensitivity of the OIA MAX test for group A streptococcus in a randomized study of 363 children aged 5-18 years with acute pharyngitis, said Elias N. Ezike, M.D., of the Children's Hospital of Michigan, Detroit, and his associates (Arch. Pediatr. Adolesc. Med. 2005;159:486-90). One throat swab was obtained from a group of 117 children (group 1), and two swabs were obtained from a group of 186 children (group 2). The sensitivity was 94.7% and 100% for groups 1 and 2, respectively, and the specificity was 92.4% and 96.3% for groups 1 and 2, respectively. Overall, the OIA MAX test identified group A streptococcus in 148 of the 363 (40.8%) patients, including 71 in group 1 (40.1%) and 77 in group 2 (41.4%). Clinical presentations were not significantly different between children with and without group A streptococcus, and there was no association between the severity of pharyngitis and the sensitivity of the OIA MAX test.

Group B Strep Poorly Diagnosed

A differential diagnosis in adolescents with purulent vaginal discharge should include group B streptococci, said Liana R. Clark, M.D., and Marisa Atendido of the Children's Hospital of Philadelphia (J. Adolesc. Health 2005;36:437-40). The investigators conducted a retrospective analysis of 13 adolescents (mean age 16 years) who showed clinical signs of infection and tested positive for group B streptococci. Of these, 12 of 13 had a purulent cervicovaginal discharge. In addition, of the 12 whose examinations indicated cervical findings, 3 had cervicitis, 3 had inflamed vaginal mucosa, 2 had vaginal erythema, and 1 had vaginal bleeding. Only one girl was accurately diagnosed with group B streptococci at the time of her visit, and she was treated with cefuroxime axetil. Three of the girls were misdiagnosed with STDs, and such misdiagnosis might create unnecessary stigma, the investigators noted. Small numbers and lack of asymptomatic controls limited the study.

Pocket Pets May Pack *Salmonella*

The Centers for Disease Control and Prevention identified 28 cases of *Salmonella enteritidis* serotype *typhimurium* associated with pet rodents including hamsters, mice, and rats between December 2003 and October 2004 (MMWR 2005;54:429-32). The mean age of those affected was 16 years, and seven cases occurred in children younger than 7 years.

Particularly severe cases occurred in two 5-year-old boys. The first occurred in June 2004 in Minnesota, when a boy became ill 4 days after he received a pet mouse. The second case occurred in August 2004 in South Carolina, when a boy became ill 9 days after he received a pet hamster. In both cases, the children developed fevers, diarrhea, and abdominal cramping, and stool cultures yielded *S. typhimurium*. Both pet rodents died within a week of their purchase; a culture from the mouse also yielded *S. typhimurium*. Rodents linked to all 28 cases were purchased from multiple retail pet store chains and distributors, and *S. typhimurium* was recovered from pet transport containers and from bins containing rodent droppings.

Consequently, consumers, pet store employees, and others who work with and transport pet rodents should recognize the possibility for disease transmission and wash their hands thoroughly after handling the animals.

—Heidi Splete