CLINICAL CAPSULES

FluMist Found Safe and Effective

The live, attenuated, cold-adapted influenza vaccine, also known as CAIV-T (FluMist), was safe and effective in children aged 60 months to 17 years in the second year of its use for prevention of flu. The CAIV-T vaccine was first available for use during the 2003-2004 season and was designed to contain three flu strains that matched those recommended by the FDA for the annual trivalent inactivated vaccine. Robert B. Belshe, M.D., of St. Louis University and colleagues reviewed a safety trial that included 6,657 children aged 5-17 years and an efficacy trial including 312 children aged 60-71 months. (Clin. Infect. Dis. 2004;39;920-7). The safety trial evaluated medically attended events within 42 days of vaccine administration. Overall, the frequency of events in four categories—acute respiratory events, acute gastrointestinal events, systemic bacterial infections, and rare events possibly associated with wild-type influenza—was not significantly different between the 4,452 children in the vaccine group and the 2,205 children in a placebo group. Results from the efficacy study showed an efficacy rate of 87% for children aged 60 months and older and no significant increase in the frequency of fevers greater than 37.8° C. In addition, no significant increase in frequencies of runny nose, nasal congestion, vomiting, or muscle aches was noted among the vaccine recipients compared with the placebo group. The data confirm that the efficacy of CAIV-T extends to the youngest children in the age range for which it is currently recommended, Peter F. Wright, M.D., of Vanderbilt University, Nashville, Tenn., said in an accompanying editorial (Clin. Infect. Dis. 2004;39:928-9).

Teen With Rabies Recovering

A teenaged girl who contracted rabies from a bat and received an experimental treatment has been upgraded to fair condition at the Children's Hospital of Wisconsin (Wauwatosa), a hospital spokesperson said in an interview at press time. The girl is the first known person to survive rabies without receiving a vaccine. The bat bit the girl on Sept. 12, 2004. She reportedly thought that the bite was just a scratch, and she and those with her assumed, incorrectly, that only healthy bats could fly, so she did not see a doctor for a vaccine. She presented to Children's Hospital on Oct. 18 with symptoms of rabies, including slurred speech and fluctuating consciousness. The doctors induced a temporary coma and treated her with antiviral drugs to boost her immune system and allow her natural immunity to fight the virus. The details of the treatment and the specifics of the drugs used are under wraps until the doctors publish their findings in a medical journal. A rabies vaccine will prevent the disease only if given within days of exposure; it is useless in saving the patient's life in advanced cases.

Neonatal Infections Limit Growth

Extremely low-birth-weight infants (401-1,000 g) who developed neonatal infections were significantly more likely to have neurodevelopmental problems in early childhood, compared with noninfected infants in a cohort study of 6,093 children, said Barbara J. Stoll, M.D., of Emory University, Atlanta, and her colleagues. The infants were assessed at 18-22 months' corrected gestational age and classified as uninfected (2,161 infants), clinical infection only (1,538 infants), sepsis (1,922 infants), sepsis and necrotizing enterocolitis (279 infants), or meningitis, either with or without sepsis (193 infants). At follow-up, 41% of the children had at least one neurodevelopmental problem (JAMA 2004; 292:2357-65). Scores of less than 70 on the Mental Development Index and the Psychomotor Development Index were significantly more common among children with any of the previously mentioned infections, compared with uninfected children. In addition, children in any of the infection groups were significantly more likely to have cerebral palsy, vision impairment, and neurodevelopmental impairment, and to have a head circumference in less than the 10th percentile, compared with uninfected children.

11-Valent Vaccine Shows Promise

A new 11-valent pneumococcal conjugate vaccine (Pn-PD) was safe and effective in a randomized, single-blind study of 154 infants who received the vaccine at ages 2, 4, 6, and 12-15 months, reported Anu Nurkka of the National Public Health Institute in Helsinki, Finland, and colleagues. The vaccine used *Haemophilus influenzae* protein D as a carrier and contained pneumococcal capsular polysaccharides of serotypes 1, 3, 4, 5, 6B, 7F, 9V, 14, 18C, 19F, and 23F. Overall, three doses of Pn-PD provoked a strong antibody response, compared with a control vaccine, with a significant booster response after the fourth dose (Pediatr. Infect. Dis. J. 2004;23:1008-14). Mild local skin reactions were common.

—Heidi Splete

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