CLINICAL CAPSULES

Oseltamivir in Pneumonia

Oseltamivir's (Tamiflu) benefits aren't limited to treating and preventing influenza, Beth L. Nordstrom, Ph.D., reported in a poster presentation at the 44th Interscience Conference on Antimicrobial Agents and Chemotherapy.

In a retrospective cohort study of a U.S. insurer's claim data, sponsored by Hoffmann-La Roche Ltd, patients of all ages who had received oseltamivir were at significantly lower risk for pneumonia, particularly the oldest and youngest age groups.

Among children aged 1-12, the proportion with a diagnosis of pneumonia was 0.7% among the 586 for whom oseltamivir was dispensed on the day of influenza diagnosis, compared with 2.5% of the 17,886 who did not receive oseltamivir, a 66% risk reduction.

In patients aged 13-59, pneumonia was diagnosed in 1.3% of the 10,649 who received the drug, compared with 2.1% of the 41,007 who did not—a reduction of 19%. In adults aged 60 and above, the difference was 1.7% of 463 with oseltamivir versus 8.8% of 3,298 without, a 59% drop.

The impact of oseltamivir on antibiotic dispensing and hospitalization was also greater in the youngest and oldest age groups. Antibiotic use dropped with oseltamivir by 30% in the 1-12 year olds, by 9% in the 13-59 year olds, and 14% in the 60-plus group. Hospitalizations were reduced by 71% with oseltamivir in the 1-12 year olds, by 25% in the 13-59 age group and 45% in the 60-plus patients, Dr. Nordstrom reported.

Teen With Rabies Recovers

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 last September. 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 October 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 have been withheld pending publication.

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 (401-1000 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.

—From staff reports