Tamiflu Dosing Errors Possible in Young Children

BY HEIDI SPLETE

It's important to be aware of the possibility of dosing errors in young children who receive oseltamivir in oral suspension, physicians warned in a letter in the New England Journal of Medicine.

The letter describes the case of a 6-year-old diagnosed with pandemic influenza A(H1N1) and given a prescription for oseltamivir (Tamiflu). An oral dosing dispenser that accompanied the drug's package was marked in 30-, 45-, and 60-mg increments, but the label from the pharmacy listed the child's dose in volume — 3/4 teaspoon by mouth twice daily.

HIV Vaccine Regimen Cuts Infections 31%

An investigational HIV vaccine regimen tested in Thailand has been shown to reduce new infections by 31%.

The placebo-controlled study, consisting of a prime vaccine and three booster shots, was conducted in more than 16,000 Thai citizens who were HIV-negative at baseline. After a 3-year follow-up period, infections occurred in 74 of those who received placebo and 51 of those who received the active vaccine—a 31% rate reduction, according to a statement issued by Global Solutions for Infectious Diseases, the South San Francisco-based company that produces the booster dose.

There were no significant safety concerns noted at any of the six safety monitoring points during the trial. The RV144 trial is the first HIV vaccine study to show significant disease reduction, Dr. Anthony S. Fauci said in a statement issued by the National Institutes of Health.

The vaccine and booster were based on the subtype B and E HIV strains, which commonly circulate in Thailand.

The trial comprised noninfected volunteers aged 18-30 years who were considered at risk of contracting HIV; 40% of the population were women.

Participants received HIV protection counseling. They then received the active vaccine or placebo; these were administered again at months 1, 3, and 6. The booster or placebo was also give at months 3 and 6. Subjects were tested for HIV infection every 6 months for 3 years.

The vaccine did not meet its secondary end point, failing to reduce the amount of HIV circulating in those who became infected during the trial. But because of its success in reducing incident infections, investigation into the prime-boost regimen will continue, the U.S. Military HIV Research Program said in a statement.

The cosponsors of the RV144 trial are the United States Army Medical Research and Material Command, the National Institutes of Allergy and Infectious Diseases, and the Thailand Ministry of Public Health.

-Michele G. Sullivan

The child's parents—one a primary care physician, the other one of the letter's authors—were able to determine the correct dose only after solving an equation to determine the milligram equivalent of a ¾-tsp dose (N. Engl. J. Med. 2009 Sept. 23 [doi: 10.1056/c0908840]).

"Most families and caregivers would not be able to identify or perform the cumbersome calculations required to administer Tamiflu safely to children," wrote Dr. Ruth M. Parker of Emory University in Atlanta, and her colleagues.

This disparity in units of measure could lead to dosing errors, compromised treatment, or toxic effects, they wrote. "In the future, all measuring devices for use in children should be marked with volumetric doses (milliliters or teaspoons)," the authors stated.

The coauthors of the letter were Michael S. Wolf, Ph.D., MPH, of the

Feinberg School of Medicine in Chicago; Kara L. Jacobson, MPH, of Emory University, and Dr. Alastair J.J. Wood of Symphony Capital in New York.

Dr. Wolf has received consulting fees from Abbott and Pfizer, and grant support from Ortho-McNeil Pharmaceuticals. Dr. Wood has served as a director of Oxigene Inc., and he has served as a consultant for international reinsurance companies.

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