Postexposure HIV Regimens in Kids Reviewed

BY BRUCE JANCIN

FROM AN ANNUAL CONFERENCE ON PEDIATRIC INFECTIOUS DISEASES

VAIL, COLO. — A 5-year-old boy finds a used condom in the park. He decides that it would be a really cool balloon, so he puts it in his mouth and tries to blow it up.

Should he receive HIV postexposure prophylaxis or not?

How about prophylaxis for a 3-year-old girl with an accidental fingerstick from a needle she found while playing in a park? Or for an 18-month-old girl in a homeless shelter who reached under a sofa cushion and discovered treasure in the form of an old tampon with dried blood on it, which she promptly put in her mouth? Or a 3-year-old boy who cut himself on the cheek while pretending to shave with a used razor belonging to his HIV-positive uncle?

In a recent study of 274 pediatric patients with community-acquired needlestick injuries, 82 received postexposure prophylaxis, but no seroconversions occurred in any of the 274 patients.

The pediatric infectious diseases staff at the Children's Hospital, Denver, has encountered all of these situations. Those clinicians recommended HIV postexposure prophylaxis in only one of these four situations: the boy who sustained a large laceration while he was playing with his HIV-positive uncle's razor, Heather R. Heizer said at the conference, which was sponsored by the hospital.

That is consistent with a generally conservative approach to postexposure prophylaxis that prevails among the hospital's infectious diseases staff. That stance is based upon the intervention's substantial financial cost, significant toxicities, and a complete absence of pediatric clinical trials data that might help guide clinical decision making, explained Ms. Heizer, who is a physician assistant and instructor in pediatrics at the hospital and the University of Colorado, Denver.

When the Denver pediatric infectious diseases staff does offer HIV postexposure prophylaxis following nonsexual, nonoccupational exposures, the favored approach—based largely upon studies done in animals—is a triple-drug antiviral regimen that is prescribed for 28 days, but only if it can be started within 72 hours of the exposure, she continued.

In children younger than age 13 years who may have difficulty swallowing pills, the staff generally uses 28 days of zidovudine (Retrovir), lamivudine (Epivir), and Kaletra (a combination of lopinavir plus ritonavir), because all are available in liquid formulations.

Older children receive Combivir (zidovudine plus lamivudine) and Truvada (tenofovir plus emtricitabine), or Combivir plus Kaletra.

HIV transmission requires exposure to an infectious body fluid (defined as blood, breast milk, semen, or vaginal secretions) through broken skin or mucous membranes. Saliva, tears, and urine are considered noninfectious unless blood is visibly present.

The half-life of HIV in serum is about 1.2 days; the virus can survive only for about 6 hours extracellularly.

Returning to her specific case exam-

Spanish-Language Shingles Fact Sheet

The National Institute on Aging's newest Spanish-language fact sheet, "Vivir Mejor la Tercera Edad: La culebrilla," describes shingles, risk factors for the disease, prevention tips, and treatment to relieve symptoms. It also offers a list of resources. For information call 800-222-2225 or visit www.nia.nih.gov/healthinformation/publications/spanish/shingles-sp.htm, which offers an option for English. ■