# CLINICAL CAPSULES

#### More Options for HIV

#### combination of atovaquone-А azithromycin (AT-AZ) is as effective as trimethoprim-sulfamethoxazole (TMP-SMZ) for the prevention of serious bacterial infections in children with HIV aged 3 months to 19 years, said Walter T. Hughes, M.D., of St. Jude Children's Research Hospital, Memphis, and his colleagues. TMP-SMZ is widely used against bacterial infections in children with and without AIDS. But some children experience adverse reactions and need an alternative treatment. In a randomized, double-blind, placebo-controlled study, 366 children were followed for an average of 3 years (Clin. Infect. Dis. 2005;40:136-45). Serious bacterial infections were 12.9/100 person-years in the AT-AZ group, compared with 18.5/100 person-years in the TMP-SMZ group. Hematologic problems were the most common adverse events, occurring in 39% of the AT-AZ children and 37% of the TMP-SMZ children. While the high cost of atovaquone-azithromycin prevents its use in most cases, it presents a viable alternative for children who experience adverse effects from TMP-SMZ, they said.

### **Tularemia From Hamster Bite**

A 3-year-old boy who was bitten by a hamster was diagnosed with tularemia, reported the Colorado Department of Public Health and the Centers for Disease Control and Prevention (MMWR 2005;53:1202-3). The boy recovered after an excisional biopsy of a left axillary lymph node to relieve lymphadenopathy and intermittent fever; he was also treated with ciprofloxacin. The boy was exposed to six hamsters purchased from a pet store, each of which died from diarrhea within a week of purchase. One hamster bit the boy shortly before it died, and 7 days later, the child developed fever, malaise, painful left axillary lymphadenopathy, and skin sloughing at the bite site on the finger. No other exposures to tularemia risk factors were identified, so the hamster was presumed to be the cause, although the delay between the child's onset of illness and final diagnosis meant that the implicated hamsters were not available for testing. An adult customer and a pet store employee who developed fevers after being bitten by hamsters from the store tested negative for Francisella tularensis. However, a cat in the store tested positive for F. tularensis, which suggested that other animals in the store might have been exposed to infection.

## Sepsis in VLBW Infants Surveyed

Klebsiella species and Pseudomonas species accounted for 42% of early deaths linked to late-onset sepsis of 2,644 very-lowbirth-weight infants in a national survey between 1995 and 2001. Imad R. Makhoul, M.D., of Meyer Children's Hospital, Rambam Medical Center, Haifa, Israel, and his colleagues assessed the adjusted risk of mortality from each of 10 groups of pathogens. Although coagulase-negative staphylococci (CoNS) caused approximately half of the 3,462 late-onset sepsis events, they accounted for only 17.3% of all early deaths (Clin. Infect. Dis. 2005;40:218-24). Overall, Klebsiella species caused 12.9% of sepsis events and was associated with 25% of early deaths. *Pseudomonas* species caused only 3.8% of sepsis events but was associated with 16.8% of early deaths. In an adjusted logistic regression analysis, infants with sepsis due to *Pseudomonas, Klebsiella, Serratia, Escherichia, Enterobacter*, and *Candida* species were at increased risk for early mortality, compared with those who had sepsis due to CoNS. The researchers suggested that a modified empiric antimicrobial protocol might reduce mortality in this high-risk population.

#### **Multiple HPV Types Found in Teens**

Infections with multiple types of genital human papillomavirus (HPV) infection were common among 60 sexually active teens aged 14-17 years enrolled in a 27month longitudinal study, reported Darron R. Brown, M.D., and his associates at Indiana University, Indianapolis (J. Infect. Dis. 2005;191:182-92). Approximately 85% of the girls were black, 12% were white, and 3% were Hispanic; 57 of 60 reported being sexually active. The girls visited their local clinics every 3 months, where they participated in interviews and underwent pelvic exams that included screening for sexually transmitted infections and testing for HPV. The mean number of HPV types per HPV-positive teen was 4.9, and over the study period, more than 80% of the girls had evidence of HPV infection. High-risk HPV types were detected in 38.6% of the specimens, and low-risk HPV types were detected in 19.6%. In addition, 37% of the girls had abnormal cervical cytology that was significantly associated with high-risk HPV. An important etiologic question that remains unanswered is whether HPV infections at a very young age are ones that resurge and are detected later in life or whether the infections are newly acquired, the investigators said.

-Heidi Splete

