Medical News

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Serratia marcescens-Contaminated Chlorhexidine

An investigation was conducted by researchers at the Royal Victoria Hospital and McGill University in Montreal, Quebec, Canada, and the University of Iowa College of Medicine to determine the source of an increase in the incidence of *Serratia marcescens* isolates, from a baseline in March 1992 of 2.7 per 1,000 admissions to 8.6 isolates per 1,000 admissions in November 1992.

One hundred fifty-one patients located in many different areas of the hospital acquired infection (101) or colonization (50). The steep increase in isolates was related temporally to the introduction of a new chlorhexidine handwashing preparation, which did not contain isopropyl alcohol and which was distributed widely throughout the hospital.

S marcescens was isolated from the chlorhexidine solution. Pulse-field gel electrophoresis performed on 25 patient isolates and 10 chlorhexidine isolates demonstrated a common DNA profile in 18 of 25 patient isolates and 7 of 10 chlorhexidine isolates.

After recall of the solution, the incidence of *S marcescens* isolated from clinical specimens returned to the baseline rate.

FROM: Vigeant P, Hollis R, Pfaller M, et al. An outbreak of *Serratia marcescens* associated with contaminated chlorhexidine. Presented at the 35th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, September 17-20, 1995. Abstract J56.

First Human Rabies Case in 1995

The CDC recently reported the first case of rabies documented in a human in 1995 in the United States—a four-year-old girl from Lewis County, Washington, died from rabies after exposure to a bat. Since the 1950s, bats increasingly have been implicated as wildlife reservoirs for variants of rabies virus transmitted to humans; bat-associated virus has been identified in 12 of the 15 cases of human rabies diagnosed in the United States since 1980. However, a history of animal-bite exposure was documented for only six of the 25 cases.

This patient presented to a local hospital with a 2-day history of drowsiness, listlessness, abdominal pain, anorexia, sore throat, neck pain, drooling, and nasal congestion. Rhinitis and bilateral conjunctivitis were diagnosed, and antibiotic and symptomatic treatment were prescribed. The following day, she was readmitted with seizures and respiratory distress; she deteriorated rapidly and died within a week. A nuchal skin biopsy taken prior to her death was positive for rabies by direct fluorescent antibody (DFA), and an autopsy specimen of the brain tissue also was positive by DFA.

During the child's hospitalization, the family reported that 2 weeks prior to admission a bat was found in the child's bedroom, but the child had no evidence of a bite. The bat was destroyed and buried. The bat was exhumed and its brain was positive for rabies by DFA. Rabies prophylaxis was administered to 72 contacts, including healthcare workers, family, and daycare-center contacts.

This case highlights the inability of healthcare providers to elicit information from patients about potential exposures to bats, which may reflect circumstances that hinder recall or the limited injury inflicted by a bat bite. The case also underscores that, in situations in which a bat is physically present and the person cannot exclude the possibility of a bite, postexposure treatment should be considered unless prompt testing of the bat has ruled out rabies infection.

FROM: Centers for Disease Control and Prevention. Human rabies—Washington, 1995. *MMWR* 1995;44(34):625-627.

Isoniazid Preventive Therapy Revisited

Previous decision analyses of isoniazid preventive therapy for low-risk tuberculin reactors aged 20 to 34 years have not accounted for the recently increased isoniazid (INH) resistance rate. Further, drug resistance trends also could affect the decision to use INH preventive therapy for patients with recent conversion of tuberculin skin test (TST) who are seronegative for HIV.

Researchers from Keesler Medical Center, New York City Department of Health, and the CDC performed a decision analysis to assess the difference in life expectancy between those who receive INH preventive therapy and those who do not. From the decision analysis and a review of the literature, the authors concluded that, for tuberculin reactors aged 20 to 34 years who are seronegative for HIV and living in areas with high INH resistance, there is minimal net benefit of INH preventive therapy (a net 2-day increase in survival). The authors suggest that the current recommendations from the CDC and the American Thoracic Society to provide INH preventive therapy to this patient population should be reexamined.

For patients in areas of high INH resistance, but without a known source, whose results of TST tests have converted recently, the appropriate regimen is not known. The authors believe that the small increase in survival suggests

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