

Medical News

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Guidelines Issued for Vancomycin-Resistant Staphylococcal Infection

In the July 11, 1997, issue of the *Morbidity and Mortality Weekly Report*, the CDC summarized the first documented case of infection caused by *Staphylococcus aureus* with reduced susceptibility to vancomycin. The strain was isolated from a surgical-site infection in a pediatric patient in Japan.¹ Although no such cases have been reported in the United States, its appearance increases the likelihood that fully resistant strains may emerge.

Because the occurrence of fully vancomycin-resistant staphylococcal infection could result in serious public health consequences, the CDC and the Hospital Infection Control Practices Advisory Committee (HICPAC) have issued interim guidelines to direct medical and public health responses when isolates of staphylococci with reduced vancomycin susceptibility are identified.² The guidelines include steps to (1) decrease the likelihood that staphylococci with reduced susceptibility will emerge (eg, restriction of vancomycin use); (2) detect staphylococci with reduced susceptibility of vancomycin; (3) obtain information from the FDA's Division of Anti-Infective Drug Products (301-827-2120) about investigational antimicrobials for treating patients infected with either fully or intermediately vancomycin-resistant staphylococci for whom conventional therapy fails; and (4) implement interim infection control measures (eg, private isolation room with contact precautions, use of antimicrobial soap for hand washing, and cohorting (or use of dedicated healthcare workers) to provide one-on-one care to colonized or infected patients).

The state health department and the CDC's Hospital Infections Program (404-639-6400) should be contacted following a presumptive identification of a staphylococcal strain with reduced susceptibility to vancomycin.

FROM: 1. Centers for Disease Control and Prevention. Reduced susceptibility of *Staphylococcus aureus* to vancomycin—Japan, 1996. *MMWR* 1997;46:624-626.

2. Centers for Disease Control and Prevention. Interim guidelines for prevention and control of staphylococcal infection associated with reduced susceptibility to vancomycin. *MMWR* 1997;46:626-628,635.

Antibiotic Resistance Surveillance

Ron Jones, University of Iowa, and Jan Verhoef, University of Utrecht in The Netherlands, have announced a new program consisting of a network of 72 hospitals around the world for standardizing monitoring and testing of antibiotic resistance in bacteria. The Iowa group has data

on their assessment of resistance of more than 10,000 bacterial samples from hospitalized patients with bloodstream, urinary tract, and wound infections in the United States, Canada, and South America. In addition to the initial 72 hospitals, 100 more in Australia, Africa, the Middle East, and Asia are expected to join the program next year. The program is funded for the next 3 to 5 years by Bristol-Myers Squibb Co, which will use the data and the isolates for developing more effective antibiotics.

FROM: Holden C. Antimicrobial spy network. *Science* 1997;227:185.

HCV Transmission During Home Infusion Therapy

The CDC recently reported a case of hepatitis C virus (HCV) infection in a child with hemophilia believed to be transmitted from mother to child through percutaneous exposure to the mother's HCV-infected blood during home infusion of clotting-factor concentrate. In September 1996, a 4-year-old child with moderate factor VIII deficiency was found to have antibody to HCV (anti-HCV) after testing negative in June 1994 and August 1995. The child had received recombinant clotting-factor concentrate for the treatment of bleeding episodes. Three of the six serum samples from household members were anti-HCV positive, including the mother, an aunt who had stayed in the household for 6 weeks during September to October 1995, and an 11-year-old sibling who had a moderate factor VII deficiency and was anti-HCV positive when first tested in 1992. Both the mother and aunt had histories of having injected illicit drugs.

The patient's mother had administered clotting-factor concentrate to the patient at home and reported that the child was often combative and resistant during infusion and required three other persons to restrain him. The mother also recalled that, on at least two occasions, she pricked her finger while attempting an infusion and drew a visible quantity of blood and could not remember whether she continued to use the same needle for the infusion; she did not use gloves. No other family members assisted in the infusion. Sequence analysis of the HCV strains of the child and the HCV-infected family members indicated that the strain isolated from the mother and child were identical. Viral sequences isolated from the aunt and brother differed by 4 and 10 nucleotides from the child's strain.

The CDC noted that, among persons with hemophilia who were heavily infused with clotting-factor concentrates before the development of viral inactivation methods, the prevalence of anti-HCV exceeds 90%. Transmission of HCV and other viral agents has not been reported associated