

Medical News

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Additional news items in this issue: *Nosocomial Infections in a Neurosurgery ICU*, page 259; *Bacterial Contamination of Tube Feedings*, page 269; *Surgical-Site Infections in Mexico*, page 277; *Antibiotic and Biocide Resistance in MRSA and VRE*, page 284.

Povidone Iodine Versus Chlorhexidine for Insertion of Peripheral Catheters

Traore and coinvestigators recently reported on a randomized study performed in two groups of 22 volunteers to compare the in vivo bactericidal effect of two rapid disinfection procedures, using povidone iodine (PVP-I) in scrub formulation followed by alcoholic PVP-I or chlorhexidine in scrub formulation followed by alcoholic chlorhexidine. The products were tolerated well in both groups. The two procedures had comparable rapid bactericidal activity in vivo. Bacteria were recovered using the cylinder scrub method.

Comparison of reductions in the aerobic and anaerobic flora from baseline levels to each of the three sampling times (30 seconds, 3 minutes, 2 hours) showed no significant difference between the two procedures (log₁₀ reduction after 30 seconds was approximately 1.5 for the aerobic flora and 1.1 for the anaerobic flora). After 3 minutes, the corresponding values were 2.1 and 1.8; after 2 hours, 2.0 and 1.3.

FROM: Traore O, Allaert FA, Fournet-Fayard S, Verriere JL, Laveran H. Comparison of in-vivo antibacterial activity of two skin disinfection procedures for insertion of peripheral catheters: povidone iodine versus chlorhexidine. *J Hosp Infect* 2000;44:147-150.

Implications of Vancomycin-Resistant *Staphylococcus aureus*

Dr. Fred Tenover from the CDC's Hospital Infections Program indicates that strains of *Staphylococcus aureus* with reduced susceptibility to glycopeptides have been reported from Japan (multiple strains), Hong Kong, Korea, the United States (four strains), France, the United Kingdom, and Spain. The isolates from the United States and France, and strain Mu50 from Japan, demonstrate vancomycin minimum inhibitory concentrations (MICs) of 8 µg/mL by broth microdilution testing and appear to have developed from preexisting methicillin-resistant *S aureus* infections. The strain from the United Kingdom and other parts of Europe appears heteroresistant to vancomycin and has MICs in the 1 to 2 µg/mL range. Many of the isolates with reduced susceptibility to glycopep-

tides have been associated with therapeutic failures with vancomycin. Although nosocomial spread of the glycopeptide-intermediate *S aureus* (GISA) strains has not been observed in US hospitals or in Europe, spread of GISA strains has apparently occurred in Japan.

Laboratory studies have indicated that the disk-diffusion test, the Stoke's method, and several automated methods of antimicrobial susceptibility testing do not detect GISA strains. The requirement to choose from a relatively small number of acceptable techniques for screening may influence the ability of laboratories to conduct surveillance for these organisms. Finally, the isolation of such strains in three geographically distinct regions suggests that this phenomenon will continue to occur worldwide.

FROM: Tenover FC. Implications of vancomycin-resistant *Staphylococcus aureus*. *J Hosp Infect* 1999;43 (suppl):S3-S7.

Residential Care and the Elderly: The Burden of Infection

Dr. Richard Garibaldi from the University of Connecticut Health Center, Department of Medicine, Farmington, Connecticut, recently reviewed the epidemiology of infections in long-term-care facilities. Included were different types of healthcare settings, each with their own unique infectious disease problems. The article focuses on the epidemiological considerations, risk factors, and types of infections that occur in elderly patients institutionalized in nursing home settings. Nursing home patients are uniquely susceptible to infections because of the physiological changes that occur with aging, the underlying chronic diseases of the patients, and the institutional environment within which residents socialize and live. Patients in nursing homes have more complicated medical conditions than they did 5 years ago, as they become even more elderly, and the trend continues toward shorter hospital stays in acute-care facilities.

In nursing home settings, problems with infections may be more difficult to diagnose because of their subtle presentations, the presence of co-morbid illnesses that obscure the symptoms of infection, and the lack of on-site diagnostic facilities. Delays in diagnosing and treating