

Letter to the Editor

Point-Prevalence of Contamination of Healthcare Workers' Stethoscopes With Vancomycin-Resistant Enterococci at Two Teaching Hospitals in Cleveland, Ohio

To the Editor:

Vancomycin-resistant enterococci (VRE) have been isolated from a variety of surfaces in the hospital environment, including gowns, call buttons, bed rails, blood pressure cuffs, and stethoscopes.^{1,2} Contaminated electronic rectal thermometers³ and ear-probe thermometers⁴ have been implicated as possible sources for transmission of VRE. High rates of contamination of stethoscopes with bacteria, particularly coagulase-negative staphylococci and *Staphylococcus aureus*, have been documented.⁵

We examined the point-prevalence of contamination of stethoscope diaphragms with VRE at two teaching hospitals in Cleveland, Ohio, with high rates of endemic VRE stool colonization. We hypothesized that contamination of healthcare workers' stethoscopes might occur after contact with as-yet-unidentified VRE-colonized patients. For one of the hospitals, we also examined the point-prevalence of contamination of shared blood pressure cuffs

and electronic ear-probe thermometers.

We performed cultures on 71 healthcare workers' stethoscopes (physicians, nurses, or medical students) at the two teaching hospitals on a single day. Both hospitals perform active surveillance for VRE stool colonization and isolate patients with known colonization. Eleven stethoscopes that were dedicated to VRE-colonized patients' rooms also had cultures obtained. Premoistened cotton-tipped swabs were applied to the stethoscope diaphragm for at least 5 seconds and immediately plated on Enterococcosel (Becton-Dickinson, Cockeysville, MD) agar containing 6 µg/mL of vancomycin. These plates were incubated at 37°C and read after 72 hours. All colonies present were further identified by the automated Microscan (Dade-Behring, Sacramento, CA) system. At one of the hospitals on a different day, 16 ear-probe thermometers and 13 blood pressure cuffs were assessed in a similar fashion.

Two (3.4%) of 71 stethoscopes were contaminated with *Enterococcus faecium* strains with intermediate or high-level vancomycin resistance (minimum inhibitory concentrations, 16 and 32 µg/mL). VRE also was recovered from 1 (9%) of 11 stethoscopes dedicated to the rooms of VRE-colonized patients. No VRE were recovered from the ear-probe thermometers or blood pressure cuffs.

The point-prevalence of contamination of stethoscope diaphragms with VRE was low in the two hospitals

studied. None of the ear-probe thermometers or blood pressure cuffs tested were contaminated with VRE. These findings suggest that these items are not likely to be significant foci for spread of VRE in our institutions. Higher rates of contamination of these items may occur in hospitals with less stringent policies for VRE surveillance and isolation.

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Vancomycin-Intermediate *S aureus* in Korea

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Recent reports on some methicillin-resistant *Staphylococcus aureus* (MRSA) with reduced susceptibility to vancomycin have been a major concern in Korea because of the widespread use of vancomycin due to a high prevalence of

MRSA in the country. Kim and coinvestigators from the Department of Clinical Pathology, University of Ulsan College of Medicine and Asan Medical Center, Seoul, Korea, describe a 45-year-old man with long-standing pelvic abscess due to MRSA. In spite of vancomycin and teicoplanin treatment for a long period of time, the patient died from MRSA sepsis. The blood

culture isolate of MRSA exhibited reduced susceptibility to vancomycin (minimum inhibitory concentration, 8 µg/mL). This is the first report of a vancomycin-intermediate *S aureus* case from Korea.

FROM: Kim MN, Pai CH, Woo JH, Ryu JS, Hiramatsu K. Vancomycin-intermediate *Staphylococcus aureus* in Korea. *J Clin Microbiol* 2000;38:3879-3881.