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Enterococci Intrinsically Resistant to Vancomycin

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Investigators from Ottawa General Hospital, University of Ottawa, Ontario, Canada, conducted a prospective study of intrinsically vancomycin-resistant enterococci (VanC VRE). Constitutive low-level vancomycin resistance is found intrinsically in certain enterococcal species and is encoded by vanC ligase genes. VanC VRE were recovered from the stools of 34 (5.7%) of 601 patients, a rate similar to that obtained from the stools of 100 outpatients in the community (5%). VanC VRE also were isolated from the non-stool specimens of

9 (1.7%) of 538 patients, including two patients with bacteremia. No VRE of the vanA or vanB genotypes were detected in non-stool specimens. Eighty-two hospital contacts of the first 23 patients found to be colonized or infected with VanC VRE were screened, and 6 contacts were found to be gastrointestinal carriers of VanC VRE. However, typing of isolates by pulsed-field gel electrophoresis from these 6 contacts showed the isolates to be unique and different from those recovered from the index patients. In fact, all VanC VRE isolates from different patients in this study were unique.

A case-control study with patients who were negative when

screened for VanC VRE as controls failed to identify any risk factor associated with colonization or infection with this organism. VanC VRE were recovered infrequently from clinical specimens, but occasionally were found as part of the normal stool flora. Because no transmission between patients was documented, additional isolation procedures may not be necessary for patients colonized or infected with VanC VRE.

FROM: Toye B, Shymanski J, Bobrowska M, Woods W, Ramotar KJ. Clinical and epidemiological significance of enterococci intrinsically resistant to vancomycin. *J Clin Microbiol* 1997;35:3166-3170.