The end point of this investigation was S. aureus on the wound wall; surgical-site infection as an end point would be preferable but would have required too large of a study population to accomplish the investigation in a single center.

In summary, bacterial air counts were reduced by the use of tightly woven reusable special scrub suits, as were the number of operations in which S. aureus were recovered from the air. By use of PFGE, it was possible to identify two cases of probable airborne transmission of S. aureus when wearing conventional scrub suits, whereas no such case was found when wearing special scrub suits. Neither skin carriage of S. aureus nor exposure to S. aureus in the air were risk factors for recovery of S. aureus on the wound wall at the end of the operation. When exposed to airborne S. aureus, the concomitant sternal carriage of S. aureus was a risk factor for having S. aureus on the wound wall. This shows the importance of careful preoperative disinfection of the patient's skin.

REFERENCES


Intra-abdominal VRE Infections: The New Threat

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Poduval and coinvestigators from Our Lady of Mercy Medical Center, Bronx, New York, conducted a study to determine the clinical course and outcome in patients with intra-abdominal vancomycin-resistant Enterococcus infections (VRE-A) and to identify probable risk factors for VRE-A. The incidence of VRE in the abdominal surgery setting is increasing. A comparative study was performed on patients with VRE-A and VRE infection in other sites (VRE-O) who were hospitalized for over 1 year. Of 89 nine patients with VRE, 6 had VRE-A, 24 had VRE-O, and 59 had VRE colonization. The VRE-A group was comprised of 1 patient with an inoperable Klatskin tumor and biliary sepsis, one AIDS and an infected pancreatic pseudocyst, 2 with fecal peritonitis, and 2 with biliary sepsis after surgery for common bile duct stones. All 6 patients with VRE-A had recent surgery before VRE isolation, as compared with 3 in the VRE-O group. Despite adequate treatment with intravenous chloramphenicol, resulting in eradication of VRE in all 6 VRE-A cases, the mortality rate remained high at 50%.

The authors conclude that VRE should be recognized as an emerging nosocomial pathogen that causes potentially fatal intra-abdominal infections in the postsurgical setting. The impact of treatment on ultimate outcome needs further evaluation.