

CORR Insights®: Impact of Preoperative MRSA Screening and Decolonization on Hospital-acquired MRSA Burden

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Where Are We Now?

I along with my coauthors previously reported our experience with institutional prescreening for detection and eradication of methicillin-resistant *Staphylococcus aureus* (MRSA) in the setting of a large orthopaedic specialty hospital with a predominantly elective patient population [1]. At that time we reported our ability to reduce our surgical site infection rate from 0.45% in the control period to 0.19% during the screening period. Our study has not been replicated elsewhere, and with the high pressure to reduce infection rates, it makes great sense to have corroborating evidence presented. The current article clearly recognizes that MRSA and methicillin-sensitive *S aureus*

(MSSA) are major problems. They, too, have shown that an institutional screening program is possible, but they did not report a reduction in infection rates with their program.

Where Do We Need to Go?

We need to determine the best method for institutions to use in terms of institutional prescreening and eradication of MRSA for patients undergoing elective orthopaedic procedures. We clearly need additional data from other large orthopaedic specialty institutions corroborating success in terms of infection reduction and of screening and eradication. Our audacious goal should be the reduction of our surgical infection rates to zero.

How Do We Get There?

Reducing infection in elective orthopaedic surgery requires some small steps by surgeons and surgical teams, and a large institutional commitment. Commitment to prescreening and eradication programs will identify patients at risk for MRSA or MSSA infection (as evidenced by their carrier state). Appropriate prophylaxis before the day of surgery with nasal mupirocin and chlorhexidine showers is appropriate for patients whose screening identifies MRSA, as is more aggressive antibiotic prophylaxis (perhaps with vancomycin) for patients who screened positive for MRSA, even after eradication. Frequent hand sanitation around the hospital, among other smaller steps, will speed us toward our shared goal. I encourage major orthopaedic specialty institutions to push their envelopes in designing programs to reduce infections.

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