

#19 MRSA INFECTION DOES NOT ADVERSELY AFFECT CLINICAL OUTCOME OF LOWER EXTREMITY AMPUTATIONS

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Objectives: Although previous investigations suggest that methicillin-resistant *Staphylococcus aureus* (MRSA) infection increases patient morbidity and mortality, its influence on amputation level, number of revisions, and time to heal is unknown. The aim of this study is to determine the influence of MRSA infection on these clinical outcomes in patients undergoing amputation for lower extremity gangrene.

Methods: Between January 1998 and December 2001, 165 patients underwent lower extremity amputation for SVS/AAVS Category III limb ischemia; 102 had documented bacterial wound and/or blood cultures. Patients were stratified into two groups: Group 1 (n=45) was MRSA positive, while Group 2 (n=57) grew other bacterial flora. Clinical characteristics, in-hospital outcome, and success of amputation were compared between the two groups.

Results: No statistically significant differences in age, sex, and medical co-morbidities were present between groups. No significant differences were noted in the level of primary amputation required by the two groups. Similarly, no differences were noted in either number of revisions or revisions to higher-level amputation, wound healing time, or mortality (Table 1).

Table 1. Clinical outcomes of 102 patients with bacterial infection undergoing lower extremity amputation

| | MRSA + (n=45) | MRSA - (n=57) |
|--|---------------|---------------|
| Mean revisions (n) | 1.44 ± 1.6 | 0.90 ± 1.2 |
| Revisions to higher-level amputation (n/%) | 24/34.8 | 25/47.2 |
| Mean time to heal (days) | 137.3 ± 82.3 | 142.2 ± 128.9 |
| Mortality (n/%) | 4/8.9 | 8/14.0 |

p < 0.05

Conclusions: Despite the virulence commonly associated with MRSA, there were no adverse consequences in the clinical outcomes of patients infected with MRSA and requiring lower limb amputation. We recommend that common strategies such as optimal administration of antibiotics, thorough wound debridement, and constant and careful surveillance be applied to all patients, regardless of bacterial flora.