

Valuable Tools for Reduction of MRSA-Induced Surgical Site Infection (SSI)

Nosocomial infections cause significant morbidity, mortality, and prolonged hospital stay and costs. Methicillin resistant *Staphylococcus aureus* (MRSA) is a major hospital acquired pathogen worldwide, and SSIs are the most frequent among MRSA- induced infections. Identification of MRSA carriers and their treatment before surgery might play a role in reducing the rate of MRSA related SSIs. In this cohort interventional prospective study, 514 cases of newly admitted surgical patients were divided into two groups. Group I (the non-intervention group) and group II (the intervention group- in which the positive nasal carriers for MRSA underwent nasal decolonization using sodium Fucidate 2% ointment). Nasal carrier rate were 11.3% in group I and 11.2%in group II. There was no statistically significant difference among MRSA carriers as regard age, gender, presence of chronic illness, previous hospitalization within the last year, or smoking. The carrier state was higher in patients with moderate or high risks (referred from ICU, receiving renal dialysis..., etc). Significant difference was observed in the length of hospital stay (LOS) being higher in cases with MRSA carrier state. SSI rate among MRSA carriers was 26% in group I, while it significantly decreased to 15.8% in group II after application of sodium Fucidate 2% ointment.