

中文題目：去移生政策對於血液透析病患金黄色葡萄球菌零感染之成效

英文題目：The efficacy of decolonization policy - Zero infection of staphylococcus aureus in the patients with regular hemodialysis

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**Background:** *Staphylococcus aureus* is a major health care pathogen especially in the patients with regular hemodialysis because it could make serious infections like bloodstream infection, septic arthritis, endocarditis and osteomyelitis. Previous studies showed colonization with *S. aureus* would follow bloodstream infection with the same strain up to 90% of cases. Patients on hemodialysis are particularly vulnerable to colonization and subsequent infection with *S. aureus*, with colonization rates of up to 17-50% reported. Decolonization method of Mupirocin nasal cream and chlorhexidine body wash is widely applied in the general population to clear MRSA and is a cost-effective measure to reduce the incidence of *S. aureus* bacteremia in hemodialysis patients. Series studies showed most staphylococcus aureus nasal carrier was MSSA. In 2016, we started a policy with regular nasal carrier screening on our hemodialysis patients, both MRSA (methicillin-resistant *S. aureus*) and MSSA (methicillin-sensitive *S. aureus*) and followed decolonization if positive. The aims of this study were to confirm the carrier rate of MRSA and MSSA in our hemodialysis population, to determine the efficacy of decolonization and the incidence rate of bloodstream infection with *S. aureus*. Successful decolonization was defined as those patients who remained decolonized with repeated negative swabs after 1-month follow-up period after decolonization.

**Methods:** During May to December 2016, we started a policy with regular nasal carrier screening on our hemodialysis patients, both MRSA and MSSA and followed decolonization if positive every 3 months. Repeated nasal carrier screening was performed one month after decolonization.

**Result:** In 3 sequencing screening, we found the decrease of *S. aureus* nasal carrier rate from 21% to 12% and the incidence of bloodstream infection as following up for one year from 5.3-7.8% to 0.7%.

**Conclusion:** This study displayed the successful policy to make the possibility of zero infection of staphylococcus aureus bacteremia in the patients with hemodialysis.