Cefotaxime-heparin lock prophylaxis against central line associated bloodstream infection (CLABSI) | 1


Abstract:

Staphylococcus aureus nasal carriers undergoing hemodialysis (HD) through tunneled cuffed catheters (TCCs) form a high-risk group for the development of catheter-related bloodstream infections (CRBSI) and ensuing morbidity. The efficacy of antibiotic-locks on the outcomes of TCCs among S. aureus nasal carriers has not been studied earlier. Persistent nasal carriage was defined by two or more positive cultures for methicillin-susceptible (MSSA) or methicillin-resistant (MRSA) S. aureus of five standardized nasal swabs taken from all the participants dialyzed at a large out-patient HD center affiliated to a tertiary care hospital. Of 218 participants, 82 S. aureus nasal carriers dialyzed through TCCs (n = 88) were identified through April 2005 to March 2006 and randomized to two groups. Group I comprised of 39 nasal carriers who had TCCs (n = 41) “locked” with cefotaxime/heparin while group II included 43 patients with TCCs (n = 47) filled with standard heparin. The CRBSI incidence and TCC survival at 365 days were statistically compared between the two groups. A significantly lower CRBSI incidence (1.47 vs. 3.44/1000 catheter-days, P
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