

EVALUATION OF ANTIBIOTIC LOCK TREATMENT FOR *ENTEROCOCCUS* CATHETER RELATED BACTEREMIA IN HEMODIALYSIS PATIENTS.

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Dialysis catheter-related bacteremia (CRB) is a frequent complication of tunneled HD catheters. Instillation of an antibiotic (abx) lock into the catheter lumen, in conjunction with systemic abx therapy, may permit successful treatment of CRB, while salvaging the catheter. It is unknown whether *Enterococcus* CRB can be treated successfully with an abx lock.

Using a prospective, computerized, vascular access database, we retrospectively identified 68 patients with a first episode of CRB due to *Enterococcus species* during a 3-year period (8/1/04 – 7/31/07). We excluded patients with VRE inf or with concurrent *Staph aureus* inf. All episodes were treated with IV vancomycin + vancomycin lock for 3 weeks. Treatment failure was defined prospectively as persistent fever 48-72 hours after initiation of abx OR positive surveillance cultures 1 week after completing Abx. A cure was defined as resolution of fever AND negative surveillance cultures. The catheter was replaced in treatment failures, and retained in treatment successes.

Treatment failure occurred in 27 patients (40%), due to persistent fever in 11, and pos. surveillance cultures in 16. Two of 68 patients (3%) had surveillance cultures positive for *Candida*. Treatment success occurred in 41 patients (60%). Patients with treatment failure were comparable to those with successful treatment in terms of age, sex, race, diabetes, HTN, PVD, CAD and CVA. A serious complication of *Enterococcus* CRB occurred in 9 of 68 patients (13%), including endocarditis (3 pts), osteomyelitis (3), and septic shock (3). Serious complications occurred in 26% (7/27) of patients with treatment failure, as compared with 5% (2/41) of those with treatment success (P=0.01).

In conclusion, Abx lock treatment permits catheter salvage in 60% of patients with *Enterococcus* CRB. Serious complications occurred in 13% of patients, and was much more common in those with treatment failure.