

We assessed the efficacy of systemic daptomycin (DPT) plus DPT antibiotic lock therapy (DPT-ALT) for catheter salvage in patients with Gram-positive CRBSIs” Yen et al (2015).

Abstract:

Catheter-related blood stream infection (CRBSI) is a major complication in hemodialysis patients. We assessed the efficacy of systemic daptomycin (DPT) plus DPT antibiotic lock therapy (DPT-ALT) for catheter salvage in patients with Gram-positive CRBSIs. This is a retrospective study of hemodialysis patients with tunneled and cuffed hemodialysis catheters.

All patients were from a single institution in Taipei and received systemic DPT plus DPT-ALT for the treatment of Gram-positive CRBSI. Successful resolution of CRBSI was implemented. Resolution of fever within 48 hours, negative result of repeated blood cultures after resolution of fever, no clinical evidence of CRBSI relapse and no need for catheter removal were measured. Fifteen hemodialysis patients received DPT-ALT for CRBSI, nine with coagulase-negative Staphylococcus (CONS), two with methicillin-resistant Staphylococcus aureus (MRSA), three with methicillin-sensitive Staphylococcus aureus (MSSA) and one with polymicrobial infections. Systemic DPT plus DPT-ALT cured 11 patients (73.3%). Treatment failed in all three MRSA cases (two with MRSA and one with MRSA + Enterococcus faecalis). Retrospective design and small sample size were the limitations of this study. Systemic DPT plus DPT-ALT appears to be a promising treatment for CRBSI from CONS and MSSA, but not for MRSA CRBSI. Systemic DPT plus DPT-ALT should be considered for patients with CRBSIs caused by certain species.

Reference:

Yen, H.W., Yang, W.C., Tarng, D.C., Yang, C.Y., Chuang, C.L., Huang, L.J., Lin, P.Y., Wang, C.C. and Li, S.Y. (2015) Daptomycin antibiotic lock therapy for hemodialysis patients with Gram-positive bloodstream infections following use of tunneled, cuffed hemodialysis catheters: retrospective single center analysis. Hemodialysis International. November 9th. DOI: 10.1111/hdi.12378. .

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