"We assessed the success rate of vancomycin catheter lock therapy (VLT) in combination with systemic antimicrobials in patients with staphylococcal catheter-related bloodstream infection (C-RBSI)" Alonso et al (2020).

Abstract:

We assessed the success rate of vancomycin catheter lock therapy (VLT) in combination with systemic antimicrobials in patients with staphylococcal catheter-related bloodstream infection (C-RBSI). Over a 6-year period, we retrospectively collected clinical and microbiological data from patients with long-term central venous catheters and staphylococcal C-RBSI who were treated with systemic antimicrobials and VLT. We then assessed the success rate of VLT based on two criteria: 1) catheter retention time > 3 months and 2) catheter in place until end of use. We found 217 staphylococcal C-RBSI episodes, 115 (53.0%) of which were managed with conservative therapy. Of these, 76 (66.1%) were treated with VLT (85.5% coagulase negative staphylococci and 14.5% Staphylococcus aureus). The success rate of VLT was 42.1% with criterion 1 and 71.1% with criterion 2. We did not find statistically significant differences between success and failure in the majority of the clinical data recorded. We only found differences for crude mortality in criterion 1 and for parenteral nutrition in criterion 2. The success of catheter retention using VLT was moderate, reaching slightly more than 70% when the catheter was kept in place until the end of use.

Ethanol lock therapy for CLABSI prevention
CLABSI treated with antibiotic-lock rescue therapy

Ethanol lock therapy an important CLABSI treatment strategy

Reference:

Alonso, B., Fernández-Cruz, A., Díaz, M., Sánchez-Carrillo, C., Martín-Rabadán, P., Bouza, E., Muñoz, P. and Guembe, M. (2020) Can vancomycin lock therapy extend the retention time of infected long-term catheters? APMIS. February 3rd. doi: 10.1111/apm.13033. .

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