



The main objective of this study was to elucidate the role of systemic antibiotic therapy in the setting of catheter removal in adult patients with CoNS-CRBSI” Hebeisen et al (2019).

Abstract:

Background: Catheter-related bloodstream infections (CRBSI) with coagulase-negative Staphylococci (CoNS) are a common source of hospital-acquired bloodstream infections. The main objective of this study was to elucidate the role of systemic antibiotic therapy in the setting of catheter removal in adult patients with CoNS-CRBSI.

Methods: We conducted a retrospective cohort study on patients with CoNS-CRBSI diagnosed between 2008 and 2016 with follow-up for up to 12 months. The main inclusion criterion was a removed intravascular catheter with quantitative catheter tip culture growing CoNS and the same CoNS identified in the blood culture of a given patient. Outcomes were non-resolved infection (i.e. either presence of prolonged bacteremia or symptoms attributed to CoNS-CRBSI > 2 days after catheter removal), recurrence, mortality and length of hospitalization after catheter removal. We compared outcomes between a group with antibiotic treatment prescribed according to current IDSA guidelines (≥ 5 days, “treatment” group) and a “no-treatment” group.

Results: Our study population comprised 184 CoNS-CRBSI episodes. Seventy-six percent received antibiotic treatment ≥ 5 days, while 17% did not receive therapy. Non-resolved

infections were absent from the patients who did not receive antibiotics. Severe neutropenia, hematologic cancer and immunosuppression were significantly more frequent in the treatment group. The subgroup analysis with 32 matched pairs showed no significant difference in frequency of non-resolved infection (0% in the no-treatment vs 15.6% in the ≥ 5 days treatment group, $p = 0.06$). The remaining outcomes were similar in the two groups.

Conclusions: Our findings indicate that withholding antimicrobial therapy in CoNS-CRBSI is neither associated with short-term complications nor with long-term recurrences.

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Reference:

Hebeisen, U.P., Atkinson, A., Marschall, J. and Buetti, N. (2019) Catheter-related bloodstream infections with coagulase-negative staphylococci: are antibiotics necessary if the catheter is removed? *Antimicrobial Resistance & Infection Control*. January 21st. .

<https://doi.org/10.1186/s13756-019-0474-x>

