Clinical outcomes in patients with negative peripheral and positive central blood culture with coagulase negative staphylococci (CoNS) based on different treatment approach such as intravenous antibiotics, removal of CVC, combined approach or just observation are not known.” Shahani and Darouiche (2016).

Abstract:

OBJECTIVES: Clinical outcomes in patients with negative peripheral and positive central blood culture with coagulase negative staphylococci (CoNS) based on different treatment approach such as intravenous antibiotics, removal of CVC, combined approach or just observation are not known.

METHODS: We conducted a retrospective review of patients with negative peripheral and paired positive central blood culture with CoNS admitted at our affiliated hospital between 2008 to 2013. We compared clinical outcomes such as bacteremia, catheter related blood stream infection (CRBSI), mortality and Intensive care unit (ICU) admission over the next 90 days between the 4 groups based on the treatment approach: (1) No treatment received, 2) catheter removed, no antibiotics administered, 3) antibiotics administered, catheter not removed and 4) antibiotics administered, catheter removed). Logistic regression was used to assess the association between treatment approach and outcomes after adjusting for confounding variables.
RESULTS: 181 patients were included in the study and followed for 90 days after their initial positive blood cultures. 25 patients (14%) had bacteremia, 4 patients (2%) had CRBSI, 40 patients (22%) died and 10 patients (6%) had an ICU admission in the next 90 days. None of the outcomes differed statistically between the 4 groups.

CONCLUSION: Our study is the first to report no difference in the clinical outcomes in patients with negative peripheral and positive central blood culture with CoNS when compared based on treatment approach. Our study provides initial evidence that treating patients with an isolated central blood culture with CoNS does not change short term clinical outcomes.

Reference: