Intravenous literature: Rahkonen, M., Luttinen, S., Koskela, M. and Hautala, T. (2012)Â True bacteremias caused by coagulase negative Staphylococcus are difficult to distinguish from blood culture contaminants. European Journal of Clinical Microbiology & Infectious Diseases.Â Mar 31. .

Abstract:

Our aim was to test whether or not true bloodstream infections (BSI) caused by coagulase negative Staphylococci (CoNS) can be distinguished from blood culture contaminants based on simple clinical and laboratory parameters. Patients with blood cultures positive for CoNS (nâ€‰=â€‰471) were categorized into community acquired infection (CAI), hospital acquired infection (HAI), infections in patients with haematological conditions (HAEI), or culture contaminants (CON) based on the judgement of a clinician. The cases were further analyzed according to widely accepted criteria for true BSI and whether or not vancomycin treatment was initiated. Simple clinical and laboratory parameters, surgical procedures, mortality, central venous catheters, and other foreign materials were registered. Our study demonstrates that the decision about the significance of positive blood culture finding made by the clinician may differ from that indicated by accepted criteria for BSI. Simple clinical findings such as heart rate, body temperature, or systolic blood pressure may not distinguish a culture contaminant from true infections. In addition, the laboratory parameters were surprisingly similar in the different patient cohorts. A blood culture positive for CoNS remains a clinical challenge; our study demonstrates that judging the significance of the finding is difficult.