

Value of positive blood culture for *Staphylococcus pettenkoferi* - how not to make a mistake while interpreting the microbiological test results

Kinga Markowska¹ and Anna Majewska¹

¹Medical University in Warsaw

June 1, 2021

Abstract

Staphylococcus pettenkoferi is a coagulase negative staphylococcus (CoNS) whose clinical relevance is not fully understood. Hitherto, there are several reports describing the participation of this species in human infections; in most cases *S. pettenkoferi* was isolated from blood cultures. The purpose of this work is to summarize knowledge about *S. pettenkoferi* especially in terms of biochemical properties, types of infections caused, factors predisposing to bacteremia and susceptibility to antibiotics. Particular attention was paid to the difficulties in identifying this CoNS bacterium and limitations of microbiological tests. The principles of microbiological bloodstream infection diagnostics and criteria for interpreting test results are summarized, as well. The analysis of published reports and opinions resulted in better characterization of infections in which *S. pettenkoferi* is the etiological agent. From a clinical point of view, presented knowledge allows to assess the risk of bloodstream infection or sample contamination, help physician to implement the appropriate procedures and making decisions concerning inter alia empirical treatment.

Hosted file

Main text_bloodstream_ *S. pettenkoferi*.docx available at <https://authorea.com/users/417387/articles/524518-value-of-positive-blood-culture-for-staphylococcus-pettenkoferi-how-not-to-make-a-mistake-while-interpreting-the-microbiological-test-results>

Hosted file

Figure. 1 CDC diagnostic criteria for bloodstream infections.docx available at <https://authorea.com/users/417387/articles/524518-value-of-positive-blood-culture-for-staphylococcus-pettenkoferi-how-not-to-make-a-mistake-while-interpreting-the-microbiological-test-results>