



Intravenous literature: Gros, H., Aslangul, E., Lesprit, P. and Mainardi, J.L. (2011) Positive blood culture in hospital: Notification methods and impact of recommendations by an infectious disease specialist. *Medecine et Maladies Infectieuses*. Dec 27. .

Abstract:

OBJECTIVE: The study's objective was to describe the notification methods of positive blood cultures and analyse the impact of recommendations made by an infectious disease specialist on the appropriateness of antibiotherapy.

METHOD: We included all patients with positive blood cultures, from 12 different hospitals (including six with mobile infectious disease teams: MIDT) during a seven-day period. Medical records were retrospectively analysed to determine the delivered antibiotic treatment and the notification method of positive blood culture. We considered that the antibiotic treatment was appropriate if the antibiotic was effective on the isolated bacterium, whatever its spectrum. We assessed the impact of recommendations on appropriateness of antibiotherapy.

RESULTS: One hundred and eighty-six patients were included. 44% (n=86) were considered as contamination cases. In true infections (n=104), *Staphylococcus aureus* and enterobacteria accounted for 51% of isolated bacteria. The Medical Unit was notified of blood culture positivity the day of positivity in 98% of cases (n=182). Antibiotic recommendations were given on the same day in 71% of cases. The antibiotic treatment was appropriate if

recommendations were given in 92% of bacteremia, and only in 79% in without any recommendations (P=0.1).

CONCLUSION: Antibiotic treatment seems to be more appropriate when antibiotic recommendations are given. This suggests that the MIDT has a key role in improving antibiotic prescriptions, whether for effectiveness, cost, or bacterial ecology.



