Experience from a nationwide taskforce for promoting quality assurance and competence in clinical microbiology laboratories, guidelines on blood culture” Lamy et al (2018).

Abstract:

Background: Quality assurance and quality management are driving forces for controlling blood culture best practices but should not be disconnected from the end-point target, i.e., patient value.

Aims: This article is intended to help microbiologists implement blood culture accreditation that is actually beneficial to patient management.

Sources: Experience from a nationwide taskforce for promoting quality assurance and competence in clinical microbiology laboratories, guidelines on blood culture.

Content: Experience in blood culture accreditation according to International standard ISO 15189 standards is provided in this review, with a particular focus on critical points that are specific to blood culture (e.g., excluding strain identification or antimicrobial susceptibility testing). Blood culture test method verification is based on risk analysis, and evaluation of the test method’s performance is based on the literature review and suppliers’ data. In addition, blood culture performance relies largely on the quality of its pre-analytical phase, and the test method should be monitored based on key performance indicators such as the volume of blood cultured, the contamination rate, and time to transportation. Other critical key indicators include the rate of false-positive signals, the rate of positive blood cultures, the ecology associated with positive results, and the timely communication of the results to the ward during the post-analytic phase. Finally, a critical analysis of quality controls and of the tools needed to improve blood culture monitoring in the future is provided.

Implication: Appropriate quality assurance should focus on patient value rather than technical
details in order to provide an appropriate clinical service.

Reference:


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