



MEASURING ONCOLOGY NURSING-SENSITIVE PATIENT OUTCOMES: MEASUREMENT SUMMARY

PREVENTION OF INFECTION

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Tools to measure oncology nursing sensitive patient outcome: prevention of infection.

Protocol for the Diagnosis of Catheter-Related Infections (Blot, Nitenberg, & Brun-Buisson, 2000).

This article reviews the literature and summarizes a study conducted to compare various diagnostic tools for catheter-related infections. Briefly summarized, the authors suggest

- 1) Paired blood cultures: one obtained peripherally, the second set obtained from the distal port of the catheter
- 2) The peripheral culture should be obtained first. Both sets should contain the same volume of blood for comparison.
- 3) The time to positivity (the time between obtaining culture and a positive result) should be compared for set obtained by the catheter versus peripherally. If the culture obtained by the catheter is positive first, the difference between the two is greater than 120 minutes, and colonization is focused within the catheter, catheter related infection should be strongly suspected.

Protocol for Obtaining Blood Cultures from Central Venous Catheters and Peripheral Sites (Penwarden & Montgomery, 2002)

This article documents a literature-based protocol which was reviewed and endorsed by clinicians to standardize blood culture procedures in a single institution. The highlights include

- 1) Obtaining cultures within 30 minutes of the order
- 2) One peripheral set of blood cultures obtained at the first fever
- 3) One set of cultures from each lumen of a central venous catheter, with no blood discarded
- 4) Subsequent cultures drawn from central lines only. Only one set of central line cultures are obtained once the fever has occurred outside the initial 48-hour period



References related to instruments to measure outcome

- Blot, F., Nitenberg, G., (2000). New tools in diagnosing catheter-related infections. *Supportive Care in Cancer*, 8, 287–292. [PubMed Abstract](#)
- Penwarden, L. M., & Montgomery, P. G. (2002). Developing a protocol for obtaining blood cultures from central venous catheters and peripheral sites. *Clinical Journal of Oncology Nursing*, 6, 268–270. [PubMed Abstract](#)
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