
Summary:

Intravascular devices (IVDs) are essential in the management of critically ill patients; however, IVD-related sepsis remains a major complication. Arterial catheters (ACs) are one of the most manipulated IVDs in critically ill patients. When bloodstream infection (BSI) is suspected in a patient with an IVD in situ, clinicians have focused their attention on the central venous catheter (CVC) while largely ignoring the AC. Although it would be routine for the CVC to be cultured and replaced if necessary for suspected IVD or catheter-related sepsis, the AC may not be treated in the same manner. The reasons for this may in part relate to the patient groups studied. In lower acuity patients with short dwell times, AC sepsis rates are indeed low. In the higher acuity patient, earlier studies suggested that ACs had an infective potential at least equal to short term CVCs, a finding that has translated poorly into clinical practice. It has been estimated that there may be up to 48 000 BSIs per year arising from ACs in the USA alone, suggesting a significant clinical problem. Recent evidence now shows that the infective potential of the AC is comparable with that in short term CVCs regarding both colonisation (which precedes BSI) and BSI, consolidating earlier studies. In critically ill patients suspected of catheter-related bloodstream infection it is suggested that both the AC and CVC must now be assessed together.