
Abstract:

Vascular and nonvascular percutaneous medical devices are widely used in modern day medical practice. Annually more than 20 million patients in hospitals in the U.S. receive intravenous (IV) therapy and almost 5 million require central venous catheterization. Catheter-related bloodstream infection (CR-BSI) is the third most common health care-acquired infection in the US with over 80,000 CR-BSIs estimated to occur annually. A number of different strategies have been employed to help reduce the incidence of CR-BSIs including the use of insertion site dressings impregnated with antimicrobial agents. Mechanical complications such as hemorrhage and thrombosis are also associated with catheterization.