
Abstract:

Intravascular catheters are indispensable tools in acute care, but with the benefits come the risk of local or systemic Healthcare Acquired Infections (HAIs). In fact, more than 250,000-500,000 intravascular-related bloodstream infections occur in the United States each year with resulting mortality rates of 12%-25%. (Maki, Kluger and Crnich, 2006; CDC, 2002). While bloodstream infections related to the use of peripheral lines may not occur as often as they do with central lines, they do occur.

Although most studies focus on central catheter-related bloodstream infections due to their greater documented prevalence and severity, some studies have evaluated the prevalence of peripheral intravenous catheter-associated bloodstream infections. In 2006 Maki reviewed 200 studies that prospectively examined the risk of Bloodstream Infections (BSIs) associated with intravascular devices over a forty year period. The infection rate with peripheral intravenous catheters was 0.5 per 1000 catheter days.

Though the frequency of peripheral intravenous catheter-associated infections is lower than with other intravascular devices, absolute numbers of patients affected can be significant with more than 330 million peripheral catheters sold each year in the United States (Millennium Research Group, 2006). Some doctors are stressing the need to use a peripheral line versus early placement of a central line with the rationale to reduce infection rates.

Multiple national and international guidelines advocate a number of simple, yet highly effective procedures to reduce risk of central venous catheter infections. Some of these same guidelines should be applied as standards for peripheral catheters. By standardizing protocols across all types of catheter insertions, safety is ensured in reducing infections and ultimately improving patient care.