

Catheter –related BSI- Prevention:

Central venous catheter infections are common. In the United States, approximately 80,000 central venous catheter–related bloodstream infections occur in intensive care units each year. In general, treatment of systemic intravenous catheter–related infection requires determination regarding catheter management (eg, salvage, exchange, or removal) and antibiotic therapy (e.g. selection of empiric therapy with subsequent tailoring to culture and sensitivity data).

Infection rate: **femoral > IJ > subclavian**

Recommendations:

1. Vigilant clinical evaluation and assessment of the catheter site should be performed at least every other day
2. Avoid guidewire techniques to exchange catheters
3. Use antimicrobial-impregnated catheters
4. Avoid heparin-bonded catheters
5. Hand washing with antiseptic-containing soap or alcohol-based gels or foams; the use of gloves does not obviate the need for hand hygiene
6. Full barrier precautions during insertion of central venous catheters
7. Use of chlorhexidine-alcohol for skin disinfection; the antiseptic should air dry before catheter insertion
8. Avoid femoral site
9. Prompt removal
10. Daily chlorhexidine bathing can reduce the incidence of catheter-associated bloodstream infections
11. Gauze rather than transparent dressings
12. Except for central venous catheters used for hemodialysis, we suggest NOT using topical antibiotic ointment or cream on the insertion site because of lack of proven benefit and the potential to promote antimicrobial resistance and fungal colonization
13. Cleaning the points of access before accessing the system (70% alcohol is preferred)

14. We suggest exchanging catheter administration sets every 96 hours when the fluids administered do not contain lipids, blood, or blood products; we suggest exchanging catheter administration sets every 24 hours when the fluids administered do contain lipids, blood, or blood products (since these fluids enhance microbial growth)

Question:

In order to minimize Central catheter related bloodstream infections it is best to:

- a. Administer broad spectrum antibiotics prior to insertion
- b. Use a femoral access point
- c. Wash hands before insertion
- d. Change catheter administration sets every 96 hours if blood products are used

Answer: C - Hand washing with antiseptic-containing soap or alcohol-based gels or foams reduces the risk of infection; the use of gloves does not obviate the need for hand hygiene