Central Vascular Access Device Infection Rates for Home Parenteral Nutrition Patients

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Study Statistics

- Parenteral Nutrition (PN) CVADs experience higher infection rates than non-parenteral CVADs
  - 2 to 2 ½ times greater
- PN CVADs have long dwell times
  - Average 286 days
- PN CVADs have a higher rate of multiple lumens
  - 50%
PN CVAD Infection Rates

- 1.01/1,000 catheter days
- 0.39/1,000 catheter days for non-PN catheters

- Why?
PN CVAD Dwell Times

- Averaged 286 days
- Non-PN CVADs averaged 311 days
- Length of dwell time did not play a role in the higher infection rate
Number of CVAD Lumens

- 50% of PN CVADs had multiple lumens or were femoral catheters
- 33% of the non-PN CVADs had multiple lumens or were femoral catheters
- Increased lumens provides more access to bloodstream
Conclusion

- Higher PN CVAD infection rates may be related to higher incidence of multiple lumens
- Greater attention to the prevention of bacterial entry into the lumens should have a larger impact on the reduction of PN CVAD infection rates than other strategies
What Can You Do?

- Avoid multiple lumen CVAD if not indicated
- Scrub injection cap with antiseptic for 10-15 seconds before EVERY access
- Consider protecting injection cap with an antiseptic-soaked cap between accesses
- Change injection cap every 7 days, or more often if indicated