

Use of a gentamicin-citrate lock leads to lower catheter-related bloodstream infection rates and reduced cost of care in hemodialysis patients

Questions written by Ruchee Pant and Prabhulal Pillai

1. Despite several studies that demonstrate benefit with the use of gentamicin-citrate (GC) lock, what are the reasons why wide scale use has not taken place in the dialysis community?
2. According to the study, what percentage reduction was seen in the rate of CVC-related bloodstream infections with the use of GC lock period than the heparin lock period?
3. According to the study, the concentration of gentamicin used in different observational studies has no role in contributing to gentamicin resistance. True or false?
4. In one study, use of high concentration of gentamicin (40mg/ml) in catheter lock solutions was associated with high pre-dialysis gentamicin levels, suggesting risk for toxicity of which organ?
5. What are the major disadvantages of heparin as interdialytic lock for CVCs?
6. What are the major adverse effects seen with the use of gentamycin as interdialytic lock for CVCs?
7. According to the study what concentration of gentamicin is effective in decreasing the rate of bacteraemia without significant systemic delivery of gentamicin?
8. According to this study how much gentamycin is introduced into the catheter after each dialysis treatment?
9. How much is the dialytic clearance of gentamicin?
10. The infection rate in the treatment group was significantly lower than in the control group of this study. True or false?
11. Which ointment was applied to the exit site at each dressing change in both the control and treatment groups?

NZASRDП would like to thank Brigitte SCHILLER and all the authors for giving the permission to use this article for journal club