

INTRAVENOUS GENTAMICIN DOSING ADVICE FOR PATIENTS HAEMODIALYSIS

Ref. No:

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Comments:

- In patients receiving dialysis, the dose of gentamicin administered intravenously in the management of patients with sepsis should not exceed 1-2mg/kg¹.
- In patients receiving Haemodialysis it should be noted that Gentamicin is dialysed out (serum half-life reduces ten-fold in dialysis compared to inter-dialytic period²) therefore timing of administration should be considered. Ideally should be given immediately after dialysis providing patient does not require immediately for treatment of sepsis.
- Patients receiving Peritoneal Dialysis who are administered IV Gentamicin should have levels monitored regularly as clearance is uncertain. In all cases intraperitoneal Gentamicin should be considered ³ (must be given IP in cases of Peritonitis – see guidelines).
- Rate of Administration: IV bolus over no less than 3 minutes
Short Infusion: In no more than 100ml saline over 20-30 minutes

References:

- 1 Renal Drug Handbook Fourth Edition
- 2 Herrero A, Rius Alarco F, Garcia Diez JM, Mahiques E, Domingo JV. Pharmacokinetics of netilmicin in renal insufficiency and hemodialysis. Int J Clin Pharmacol Ther Toxicol. 1988;26:84–7
- 3 Baker RJ, Senior H, Clemenger M, Brown EA. Empirical aminoglycosides for peritonitis do not affect residual renal function. Am J Kidney Dis. 2003;41:670–5