

Gentamicin in Haemodialysis

Indication	<ul style="list-style-type: none"> Empirical antibiotic with vancomycin for line sepsis (review ongoing need when culture results are available) All other indications as per NHS Lothian Antimicrobial guideline 				
Dosage and administration	<p>2mg/kg (Please use dry weight. This is particularly important in patients with oedema) **Do NOT use Gentamicin Calculator on the Intranet**</p> <p>Please administer via a central venous catheter or a large vein if only peripheral access is available.</p>				
Concentration/strength	80mg/2ml or diluted for infusion				
Stability	Please use reconstituted solution as soon as possible.				
Reconstitution instructions	<p>IV injection - to be administered over 5 minutes Can be given undiluted (40mg/ml) or diluted in 10-20ml of sodium chloride 0.9% or glucose 5% to aid slow bolus injection.</p> <p>IV infusion - to be infused over 20 minutes Dilute in 100ml of sodium chloride 0.9% or glucose 5%</p>				
Additional information	<ul style="list-style-type: none"> Haemodialysis (HD) removal: Yes Haemodiafiltration (HDF) removal: Yes Dose should be administered after dialysis Monitoring: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Inpatients</th> <th style="width: 50%; text-align: center;">Outpatients</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p><u>Dialysis days</u></p> <ul style="list-style-type: none"> Take a level pre-dialysis Dose to be administered if level is <3mg/l <p><u>Non-dialysis days</u></p> <ul style="list-style-type: none"> Please take a level before the expected dosing time Dose to be administered if level is <2mg/l <p><u>Peak level after dose administration</u></p> <ul style="list-style-type: none"> Take a peak level ONE HOUR AFTER the end of dose administration Target peak is 8 to 12mg/l. Please discuss dose adjustment with Renal pharmacist if target not achieved No further dose change is required when two therapeutic peak levels are achieved unless clinically indicated. </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> Take a level pre-dialysis Dose to be administered if level is <3mg/l </td> </tr> </tbody> </table>	Inpatients	Outpatients	<p><u>Dialysis days</u></p> <ul style="list-style-type: none"> Take a level pre-dialysis Dose to be administered if level is <3mg/l <p><u>Non-dialysis days</u></p> <ul style="list-style-type: none"> Please take a level before the expected dosing time Dose to be administered if level is <2mg/l <p><u>Peak level after dose administration</u></p> <ul style="list-style-type: none"> Take a peak level ONE HOUR AFTER the end of dose administration Target peak is 8 to 12mg/l. Please discuss dose adjustment with Renal pharmacist if target not achieved No further dose change is required when two therapeutic peak levels are achieved unless clinically indicated. 	<ul style="list-style-type: none"> Take a level pre-dialysis Dose to be administered if level is <3mg/l
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	<ul style="list-style-type: none"> For NEW patients starting on gentamicin, a pre-dialysis level is <u>not</u> required prior to the first dose 				

Written by: Dr Ailish Nimmo, Specialist Registrar; Jin Hah, Renal Pharmacist

Reviewed by: Dr Iain MacIntyre, Consultant Nephrologist

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