



CLINICAL GUIDELINE

Antibiotic Surgical Prophylaxis, HNS GGC, Obstetric Procedures

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

NHS Greater Glasgow and Clyde recommendations for antibiotic prophylaxis in Obstetric Procedures

Single dose, IV prophylaxis \leq 60 minutes prior to skin incision/ intervention

For information on antibiotic dosing in Surgery, including information for antibiotic re-dosing in long operations, for blood loss and for gentamicin dosing see [Principles of Surgical Prophylaxis \(1039\) | Right Decisions \(scot.nhs.uk\)](#)

See Appendix 1 below for teicoplanin # dosing in Group B streptococcus prophylaxis.

- Give teicoplanin by slow IV injection over 3-5 minutes.
- Teicoplanin and gentamicin are **incompatible** when mixed directly and must not be mixed before injection.

See Appendix 2 for IV gentamicin* dosing

Procedure	Recommended antibiotic regimen	Comments	
Caesarean Section	Co-amoxiclav IV 1.2g <i>or in penicillin allergy</i> Clindamycin IV 600 mg And Gentamicin* IV		> 100 Kg
		Co-amoxiclav	add 1g IV amoxicillin to 1.2 g IV co-amoxiclav
3 rd Degree Tear	Co-amoxiclav IV 1.2g <i>or in penicillin allergy</i> Clindamycin IV 600 mg And Gentamicin* IV	6 hours later second dose of IV co-amoxiclav 1.2g <i>or in penicillin allergy</i> IV clindamycin 600mg	
			> 100 Kg
		Co-amoxiclav	add 1g IV amoxicillin to 1.2 g IV co-amoxiclav
		No repeat dosing of gentamicin.	
4 th Degree Tear	Co-amoxiclav IV 1.2g <i>or in penicillin allergy</i> Clindamycin IV 600 mg And Gentamicin* IV	6 hours later second dose of IV co-amoxiclav 1.2g <i>or in penicillin allergy</i> IV clindamycin 600mg	
		Then Oral Co-amoxiclav 625mg 8 hourly for total duration (IV/oral) 5 days <i>or in penicillin allergy</i> oral clindamycin 600mg 8 hourly for total duration (IV/oral) 5 days	
			> 100 Kg
		Co-amoxiclav	add 1 g IV amoxicillin to 1.2 g IV co-amoxiclav

Procedure	Recommended antibiotic regimen	Comments
Manual removal of Placenta	Co-amoxiclav IV 1.2g <i>or in penicillin allergy</i> Clindamycin IV 600 mg And Gentamicin* IV	Specific antibiotic prophylaxis recommended for patients with proven Chlamydia or gonorrhoea
		> 100 Kg
		Co-amoxiclav add 1 g IV amoxicillin to 1.2 g IV co-amoxiclav
Pre-term, pre-labour rupture of membranes.	Erythromycin oral 250mg 6 hourly for 10 days	Prophylaxis only required if no evidence of chorioamnionitis Erythromycin serious drug interactions (see BNF Appendix1) and QTc prolongation
Group B streptococcus prophylaxis (specific)	Benzylpenicillin IV 3g Then Benzylpenicillin IV 1.8g every 4 hours until delivery <i>or in penicillin allergy</i> Teicoplanin # 12mg/Kg 12 hourly for 3 doses then 24 hourly until delivery	Always give IAP however soon the woman is likely to deliver. Know that it is more effective the earlier it is started (at least > 2-4 hours before delivery) and if it is continued without interruption until delivery. For benzylpenicillin given > 1 hour late a further loading dose of 3g is required. Teicoplanin# based on most recent body weight – round to nearest 100mg (max dose 800mg) See Dosing table, Appendix 1
Operative Vaginal Births (To be given as soon as possible after delivery, and no more than 6 hours after delivery)	Co-amoxiclav IV 1.2g <i>or in penicillin allergy</i> Clindamycin IV 600 mg And Gentamicin* IV	> 100 Kg
		Co-amoxiclav add 1g IV amoxicillin to 1.2g IV co-amoxiclav

Appendix 1 Teicoplanin # Dose Banding for GBS Prophylaxis

Most recent weight	Dose (mg)
Less than 36kg	400mg
36 - 45.9 kg	500mg
46 - 53.9 kg	600mg
54 - 61.9 kg	700mg
62kg or above	800mg

Appendix 2 IV Gentamicin* dosing for surgical prophylaxis in adult male and female patient

- In obstetric patients use the patients booking weight and height
- Avoid gentamicin if CrCl < 20 ml/min: seek advice on alternative from microbiology.
- In renal transplant patients avoid gentamicin and seek advice from microbiology or renal team.
- Use GGC CrCl calculator to assess renal function. Do not use eGFR in patients at extremes of body weight.
- Use the patient's actual body weight and height to calculate the gentamicin dose, using table below. This prophylactic gentamicin dosing table is based on approximately 5 mg/kg actual body weight/ adjusted body weight.⁵
- Doses of up to 600 mg gentamicin can be given undiluted by slow IV injection over 3 – 5 minutes, or diluted to 20 ml with 0.9 % saline and given slowly over 3-5 minutes, administer via large peripheral vein or central line.¹⁻⁴
- Monitor for signs of extravasation or infiltration e.g. swelling, redness, coolness or blanching at the cannula insertion site.

BOOKING WEIGHT HEIGHT	30 – 39.9 kg	40 – 49.9 kg	50 – 59.9 kg	60 – 69.9 kg	70 – 79.9 kg	80 – 89.9 kg	90 – 99.9 kg	100 – 109.9 kg	110 - 119.9 kg	120 - 129.9 kg	130 - 139.9 kg	140 - 149.9 kg	150 - 159.9 kg	160 - 169.9 kg	170 - 179.9 kg	180 - 189.9 kg	≥190 kg
142 - 146 cm 4'8" - 4'9"	180 mg	200 mg	220 mg	240 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg							
147 - 154 cm 4'10" - 5'0"	180 mg	200 mg	240 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg						
155 - 164 cm 5'1" - 5'4"	180 mg	200 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg	420 mg	440 mg	480 mg				
165 - 174 cm 5'5" - 5'8"		200 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg	420 mg	460 mg	480 mg	480 mg	520 mg	540 mg		
175 - 184 cm 5'9" - 6'0"		200 mg	280 mg	320 mg	360 mg	380 mg	400 mg	420 mg	440 mg	460 mg	480 mg	500 mg	520 mg	540 mg	560 mg	580 mg	600 mg
185 - 194 cm 6'1" - 6'4"			280 mg	320 mg	360 mg	400 mg	420 mg	440 mg	460 mg	480 mg	500 mg	540 mg	560 mg	580 mg	600 mg	600 mg	600 mg
≥195 cm ≥6'5"				320 mg	360 mg	420 mg	460 mg	480 mg	500 mg	520 mg	540 mg	560 mg	580 mg	600 mg	600 mg	600 mg	600 mg

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4. Bratzler DW *et al*, Clinical Practice Guidelines for Antimicrobial Prophylaxis in Surgery, Am J Health-Sys Pharmacy 2013; 70:195-283