CLINICAL GUIDELINE

Antibiotic Prophylaxis for Endoscopic 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

NHS Greater Glasgow and Clyde Recommendations for Antibiotic Prophylaxis in Endoscopic Procedures

Single dose, IV prophylaxis ≤ 60mins prior to skin incision/ intervention. For advice on repeat dosing of antibiotics, in operations > 4 hours of > 1500 ml blood loss see principles-of-surgical-prophylaxis-1039.pdf (scot.nhs.uk)

Gentamicin[#]

- For IV gentamicin dose, see appendix 1 for prophylactic dosing table
- If subsequent treatment using gentamicin is required, measure gentamicin concentration 6-14 hours post theatre gentamicin dose, and follow GGC guidance on staffnet for gentamicin dosing. Calculate the subsequent gentamicin dose using the online calculator. Discuss with pharmacy if further advice is required (or if out of hours, the on call pharmacist)
- Gentamicin is contraindicated in decompensated liver disease (jaundice, ascites, encephalopathy, variceal bleeding or hepatorenal syndrome).
- Teicoplanin and gentamicin are incompatible when mixed directly and must not be mixed before injection.

Teicoplanin

- Give 400 mg **teicoplanin** by slow intravenous injection over 3-5 minutes.
- Teicoplanin and gentamicin are incompatible when mixed directly and must not be mixed before injection.

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Weight > 100 Kg Increase the dose of co-amoxiclav as below:

	> 100 Kg
Co-amoxiclav	add 1g IV amoxicillin to 1.2g IV co-amoxiclav

Adapted from British Society of Gastroenterology Guidance:
GUT 2009; 58: 869-880
Antimicrobial Utilisation Committee / Endoscopy Users Group
Feb 2024, Review Feb 2027

Procedure	**Antibiotic and comments**
Upper or lower diagnostic GI endoscopy	**Not recommended**
Endoscopic mucosal resection	**Not routinely recommended** If severe profound immunosupression (e.g. neutropenia < 0.5 x 10^9/L and/or advanced haematological malignancy) use: **Gentamicin[#] IV** (see prophylaxis dosing table) **+ Metronidazole 500mg IV**
ERCP in the following: 1) Biliary disorders where complete biliary drainage will be difficult/ impossible to achieve during one procedure Patients with pancreatic pseudocyst Patients with severe profound immunosupression~ 2) Patients with biliary complications following liver transplant* 3) Ongoing cholangitis or sepsis elsewhere** **ERCP with anticipated complete drainage and none of the above.**	**Gentamicin[#] IV** (see prophylaxis dosing table, Appendix 1) ~ neutropenia < 0.5 x 10^9/ L and/or advanced haematological malignancy) *In liver transplant patients add **Amoxicillin 1g IV** or if penicillin allergy add **Teicoplanin 400mg IV** ** Ongoing cholangitis /sepsis: Be guided by recent culture results. Patients should already have been established on antibiotics. Seek advice from microbiology. **Not routinely recommended** If adequate biliary decompression is not achieved during the procedure antibiotic therapy is required (as per infection management guidelines)
PEG or PEJ tube insertion	Co-trimoxazole 960mg, 10mls oral suspension (480 mg/ 5 ml) administer via the PEG/PEJ tube immediately post insertion. (See Appendix 2 below re administration of co-trimoxazole suspension via PEG/PEJ tube) *or in co-trimoxazole allergy* Co-amoxiclav 1.2g IV
Endoscopic ultrasound intervention for the following: 1) Fine needle aspiration of solid lesions 2) Drainage of cystic cavity 3) Fine needle aspiration of cystic lesions in or near pancreas	 **Not recommended** **Not recommended** **Gentamicin IV** (see prophylaxis dosing table)
Acute Upper GI Haemorrhage in Cirrhotic patients	**Co-amoxiclav 1.2 g IV 8 hourly** *or if penicillin allergy.* **Co-trimoxazole 960 mg IV 12 hourly** Continue antibiotics for 48 hours after cessation of bleeding **(observe IV to oral switch)**
Elective sclerotherapy/banding or oesophageal dilatation	**Not routinely indicated** unless severe profound immunosupression (eg. neutropenia < 0.5 x 10^9/L and/or advanced haematological malignancy): **Co-amoxiclav 1.2g IV** *or if penicillin allergy* **Co-trimoxazole 960 mg IV**

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Appendix 1

Gentamicin# Surgical Prophylaxis Dosing Guidelines

- **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.
- 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.
- Monitor for signs of extravasation or infiltration e.g. swelling, redness, coolness or blanching at the cannula insertion site.

HEIGHT \ WEIGHT	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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Appendix 2 Administration of Co-trimoxazole Suspension via PEG/PEJ tube

1. Using an ENfit enteral syringe flush the PEG/PEJ tube with 30mls of sterile water.
2. Measure 10ml (960mg) dose of co-trimoxazole suspension in a medicine cup.
3. Add 10mls of sterile water to the same medicine cup and mix.
4. Draw up and administer the co-trimoxazole suspension using an ENfit enteral syringe (50 or 60ml) via the PEG/PEJ tube.
5. Draw up 30mls of sterile water using the same ENfit enteral syringe
6. Flush the PEG/PEJ tube.
7. Close port on feeding tube

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