NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Antibiotic therapy following 4 days IV Gentamicin

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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Approval Group:	Antimicrobial Utilisation Committee

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.

Advice on Antibiotic Therapy following 4 days IV Gentamicin (Adults)

1. **IVOST.** The need for IV antibiotic therapy should be reviewed daily
   - Has the patient clinically improved? Is the patient's temperature ≤ 37.9ºC?
   - Is there a reduction in NEWS score?
   - Is the patient taking oral medication? Is the oral route reliably available?
   - If so, then change to oral antibiotic. See IVOST policy.
2. **Culture Results.** If the patient still needs IV therapy, change therapy based on culture results. Discuss antibiotic choice and duration with microbiology
3. **Undrainable Deep abscess**, discuss antibiotic choice and duration with microbiology / ID

Patient not suitable for IVOST following 4 days of IV Gentamicin

Confirmed Gram negative infection

Use narrowest spectrum IV possible depending on sensitivity and microbiology advice

Suspected Gram negative infection (no current positive cultures/culture negative)

Improving and no previous Co-amoxiclav resistance or ESBL colonisation

IV Co-amoxiclav 1.2g 8 hourly (assuming normal renal function) **monotherapy.**
(If HAP and not improving contact microbiology)

Non Severe Penicillin allergy
IV Ceftriaxone□ (2g once daily, assuming normal renal and hepatic function)
+/- Oral Metronidazole*

Severe Penicillin allergy and If no previous resistance to Co-trimoxazole/ Trimethoprim
Oral /IV co-trimoxazole (~100% bioavailable)
+/- Oral Metronidazole*

*Metronidazole if intra-abdominal infection. Not required for biliary tract infections
Discuss IVOST options & duration with

Failure to improve OR previous Co-amoxiclav resistance

Contact microbiology

If previous Ceftriaxone sensitive organism or no previous microbiology
IV Ceftriaxone□ (2g once daily, assuming normal renal and hepatic function)
+/- Oral Metronidazole*

Severe Penicillin allergy or previous multi-drug resistant organism (e.g. ESBL)
Discuss with Microbiology/ID

*Metronidazole if intra-abdominal infection. Not required for biliary tract infections
Discuss IVOST options and duration of therapy with Microbiology/ID

Ensure source of infection identified and source controlled Review daily for IVOST

Duration: **Uncomplicated infection with source control: 5 days (IV and ORAL)**
Gram-negative bacteraemia with source control: 7 days (IV and ORAL)
Uncontrolled source/ prolonged therapy required: Discuss with Micro/ID and consider OPAT referral

Ceftriaxone□ **Avoid ceftriaxone if high *C. difficile risk* (eg frail elderly) and discuss with Micro/ ID. If previous *C. difficile* infection discuss with microbiology/ID Ceftriaxone should not be mixed or simultaneously infused with calcium-containing solutions such as TPN, Hartmann's or Ringer's – risk of precipitation, see Ceftriaxone (rocephin): incompatible with solutions containing calcium - GOV.UK (www.gov.uk)**

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