**OBSTETRICS GENTAMICIN GUIDELINE**

**IMPORTANT NOTES:**
- Exclusion Criteria: Myasthenia gravis, Renal transplant, Acute Kidney Injury (AKI3) on dialysis or eGFR<20ml/min, Child <16years
- **DO NOT USE ONLINE CALCULATOR** for dosing

**STEP 1: IS THE PATIENT SUITABLE FOR THIS DOSING GUIDELINE?**

- **Is the patient getting gentamicin for surgical prophylaxis?**
  - **YES**
    - See dosing guidance in Obstetric Surgical Prophylaxis Guideline
    - The dose for this indication is based on 4mg/kg x pregnancy booking weight (max 400mg)
  - **NO**

- **Is the patient post partum?**
  - **NO**
    - **NO**
      - Rarely gentamicin may be recommended to treat an infection during pregnancy where there are no other suitable treatment options.
    - **YES**
      - Refer to maternal sepsis policy, discuss with senior Obstetrics Staff and complete maternal sepsis bundle within 1 hour. If patient has septic shock also discuss with Microbiology.

- **Does the patient have maternal sepsis?**
  - **NO**
  - **YES**
    - Has the gentamicin been recommended by ID or Microbiology?
      - **NO**
      - **NO**
      - **YES**
        - Does the patient have any exclusion criteria? If yes seek advice
          - Myasthenia gravis, Renal transplant, Acute Kidney Injury (AKI3) on dialysis or eGFR<20ml/min, Child <16years

- **Does the patient have?**
  - Chronic Kidney Disease CKD (eGFR 20-29ml/min) OR
  - Acute Kidney Injury (AKI1 or 2) in previous 48 hours (>50% increase in baseline serum creatinine or oliguria (<0.5ml/kg/hr > 6 urs))
  - **NO**
  - **YES**
    - Calculate and give first dose as detailed below then refer to Microbiology to continue gentamicin therapy or to advise on alternative

**STEP 2: CALCULATE, PRESCRIBE and ADMINISTER ANTEnatal DOSE**

1. **DO NOT USE ONLINE GENTAMICIN CALCULATOR**
2. Find out the pregnancy booking weight
3. Dose = 5mg/kg x pregnancy booking weight (maximum dose 500mg)
4. Dose accuracy should be to the nearest 20mg of gentamicin or use table
5. Prescribe in ‘once only’ section of medicine chart
6. Inform midwife/nurse of prescription
7. Administer dose in 100mls of 0.9% sodium chloride or 5% glucose over 1 hour

**STEP 3: MONITOR GENTAMICIN LEVELS**

**MONITOR RENAL FUNCTION**

1. Check gentamicin level between 20 – 24 hours after start of treatment
2. Monitor renal function daily

- **Is the Genticamin level <1mg/L**
  - **NO**
    - Do NOT give another dose and recheck level in 12 hours
  - **YES**
    - **YES**
      - Follow NHS Tayside Adult Gentamicin Guideline to recalculate dose and monitor levels using nomogram. Assess daily ongoing need for gentamicin and monitor renal/oto toxicity. If >72 hours gentamicin required this must be discussed with ID or Microbiology and seek advice on monitoring from pharmacist. If >7 days treatment required consider referral to audiology.
  - **NO**
    - **YES**
      - Give another antenatal dose of gentamicin. Review by senior Obstetric Staff daily with Microbiology advice. Monitor renal/oto toxicity daily. If >7 days treatment required consider referral to audiology.

**Advises:**
- Microbiology Bleep: 4039
- Infectious Diseases Email: Tay.id@nhs.scot
- Infectious Diseases Bleep: 5075
- Clinical Pharmacist: bleep number on ward
- Antimicrobial Pharmacist: bleep 4732

**Developed by:** K Hill/P Lynch/C O’Brien
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**Dosing Ref:** RCOG Green Top Guideline 64 a/b 2012