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?
  - NO
  - 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)

- Is the patient post partum?
  - NO
  - YES
    - See dosing and monitoring guidance in NHS Tayside Adult Gentamicin Guideline

- Does the patient have maternal sepsis?
  - 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.
  - NO

- Has the gentamicin been recommended by ID or Microbiology?
  - YES
    - Rarely gentamicin may be recommended to treat an infection during pregnancy where there are no other suitable treatment options.
  - NO

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

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

<table>
<thead>
<tr>
<th>Booking Weight (kg)</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 50 to 54</td>
<td>260mg</td>
</tr>
<tr>
<td>55 to 58</td>
<td>280mg</td>
</tr>
<tr>
<td>59 to 62</td>
<td>300mg</td>
</tr>
<tr>
<td>63 to 66</td>
<td>320mg</td>
</tr>
<tr>
<td>67 to 70</td>
<td>340mg</td>
</tr>
<tr>
<td>71 to 74</td>
<td>360mg</td>
</tr>
<tr>
<td>75 to 78</td>
<td>380mg</td>
</tr>
<tr>
<td>79 to 82</td>
<td>400mg</td>
</tr>
<tr>
<td>83 to 86</td>
<td>420mg</td>
</tr>
<tr>
<td>87 to 90</td>
<td>440mg</td>
</tr>
<tr>
<td>91 to 94</td>
<td>460mg</td>
</tr>
<tr>
<td>≥ 95</td>
<td>500mg</td>
</tr>
</tbody>
</table>

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 Gentamicin level <1mg/L
  - NO
    - Do NOT give another dose and recheck level in 12 hours
  - 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.

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.

Advice: Microbiology Bleep: 4039 (5315 for PRI)
Infectious Diseases Email: Tay-UHB.id@nhs.net
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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