Gentamicin Dosing Guideline
Refer to Therapeutic Guidelines (Antibiotic) 2010 for full details

What are you treating?
- Empirical or Directed therapy that is not endocarditis or severe sepsis
  - **How old is your patient?**
    - 10-29 years
    - 30-60 years
    - > 60 years
      - 6mg/kg stat (up to 560mg)
      - 5mg/kg stat (up to 480mg)
      - 4mg/kg stat (up to 400mg)
  - Severe Sepsis
    - 7mg/kg stat (up to 640mg)
  - Endocarditis
    - 1mg/kg Q8H

Note: Renal function does not influence initial dose. If Creatinine Clearance is < 20ml/min give STAT dose only and discuss alternatives with Micro.

Use Ideal Body Weight [Ideal weight Calculator](#)

Does your patient require more than one dose?
- Yes
  - If no, then no monitoring is required

What is the patient’s renal function?
- < 30ml/min
- 30-40 ml/min
- 40-60ml/min
- > 60ml/min
  - Seek expert advice if appropriate choice
  - Monitor trough levels and repeat same dose once level < 1mg/ml
  - Repeat same dose in 48 hours
  - Repeat same dose in 36 hours
  - Repeat same dose in 24 hours

Does treatment need to go for longer than 72 hours?
- No
  - No monitoring required
- Yes
  - Empirical therapy should not be continued longer than 72 hours without microbiology input and approval
  - Contact Clinical Pharmacology or pharmacy to discuss monitoring requirements (require two levels; peak and 6-14 hours post dose level)
  - Ensure peak level is taken 30 minutes after the infusion has finished.
  - Request RN to alert MO when infusion is running.
  - Record exact time infusion commenced and levels taken
  - Monitor gentamicin levels every 3 days if renal function is stable.
  - Monitor creatinine daily (esp. if changes to renal function are anticipated)
  - Alternatively trough levels could be used instead the 6-14 hour level – discuss with John Ray (to be taken at least 6 hours post dose)

Provide John Ray the following
- Patient Demographics (Name, Gender, Height, Weight, Age)
- Dosing History (Dose, Dose Interval, Date/Time last dose, Infusion Time)
- Drug Concentrations (Date, time and level for both samples)
- Serum Creatinine (Level, date and time)

Reference:
- Therapeutic Guidelines – Antibiotic
- Cervelli M Ed. The renal drug reference guide

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